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PEDAGOGICAL CONTRABAND: A PHENOMENOLOGICAL APPROACH TO UNDERSTANDING STUDENT ENGAGEMENT DURING SIMULATIONS

An Abstract of a Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

_____
Dr. Sue Alborn-Yilek, Co-Chair

_____
Dr. Jennifer Waldron
Dean of the Graduate College

Stephen Austin Henderson

University of Northern Iowa

December 2018

ABSTRACT

The purpose of this study is to explore the lived experiences of students who are taught using simulations in survey history courses. Although simulations have been studied in a variety of domains, few studies have examined the use of simulations to teach history. Further, most of the previous research on simulations has been quantitative in nature, and one goal of the proposed study is to go into greater depth than typically allowed for by quantitative methodologies and examine the lived experiences of students in a college-level history class who are participating in simulations. Results suggest that the five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0, can be understood within the purview of the three universal themes—reluctance, novelty effect, and experiential, all of which represent the lived experiences of students during simulations in a survey history course. The experiential effect of simulations due to the emotional investment elicited from students signifies the essence of the phenomenon of engagement during simulations.

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Dr. Sue Alborn-Yilek, Co-Chair

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Dr. Shuab Meacham, Co-Chair

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Dr. Kim Huckstadt, Committee Member

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Dr. Denise Schares, Committee Member

Stephen Austin Henderson

University of Northern Iowa

December 2018

# DEDICATION

To My Wife Lacey,
I love you
You are the light that pulled me from darkness
I am always and forever yours

To the Women in My Life:

To mom, I still miss you every day. I hope I would have made you proud
To Sis, for your encouragement and meticulous, critical proofreading
(I'm officially the smarter Henderson now, and still the best looking)
To Grandma, for your endless love
To Auntie, for your support and reassurance
To Georgia, who became my mom when God called mine home

To My Former Teachers:

Mr. Vande Pol, who loved and appreciated me, even as a fifth grader
Mr. Vermeer, who motivated a lazy high school student
Dr. Fry, who inspired me

To My Life Mentor:

Dr. David DeJong, just as iron sharpens iron, so you have sharpened me
I would never have become who I am without your guidance

# ACKNOWLEDGEMENTS

My perseverance through the doctoral process would not have been possible without a community of support. Thank you, Lacey, my rock of encouragement, and my beautiful children, Elena, William, Adriana and future baby Henderson, for allowing daddy to pursue his dream. I am yours again.

I am forever indebted to my Penn students who gave me their time and allowed me to interview them. Thank you, Bob, Larry, Isaac, and John, you are extraordinary young men with bright futures ahead of you. I am also grateful for Penn's willingness to work with me as I navigated the principalship and doctoral coursework and allowed me the flexibility to come and go from campus.

This project would not have been possible without the help of my Chairs, Dr. Sue Alborn-Yilek and Dr. Shuaib Meacham. Thank you for walking alongside me as I fulfilled a life dream. A special thanks to Dr. Huckstadt and Dr. Schares for giving me your time and for serving on my Committee. I genuinely appreciate your service.

Lastly, I want to acknowledge my professional colleagues, both in higher education and in PreK-12. Each day you take up the challenge to motivate students and walk alongside them on their educational journey. Dear colleagues, keep the grammar, reading, writing, and arithmetic; 'tis easy and of course you will. But smuggle in a little contraband; wit, fancy, imagination, thought, and you will ignite in your students a fire that will never die.

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# CHAPTER 1

# INTRODUCTION

Ralph Waldo Emerson (1909) in an essay entitled "Education," implored educators to seek methods that engage and ignite students' sense of imagination. Emerson writes, "I assume that you will keep the grammar, reading, writing and arithmetic in order; 'tis easy and of course you will. But smuggle in a little contraband wit, fancy, imagination, thought" (Emerson, as cited in Suzallo, 1909, p. 33). Simulations in history education offer one type of contraband that Emerson desires.

Despite Emerson's calls for reform in the later part of the 19th century, history classrooms around the country have maintained traditional teaching practices (Cuban, 1993; Elliott & Woodward, 1990; Grant, 2003, 2006; Lesh, 2016). Furthermore, Wiggins (2015) notes in a survey of 3,400 high school seniors from around the country that history classes were the most lecture heavy. That is, during a normal class period the teacher talked for about three fourths of the time (Wiggins, 2015). Lecture heavy history classes may contribute to widespread student disengagement, an area of concern that researchers have studied for several decades (Brint & Cantwell, 2012; Rosenzweig & Thelen, 1998).

Lecture-intensive teaching led to history being taught as a series of facts, which leads to students retaining little information (Barton & Levstik, 1998; Epstein, 1998; Stahl, Hynd, Britton, McNish, & Bosquet, 1996; Van Sledright & Frankes, 2000). With students seeing history as a series of disconnected facts, engagement in the material has suffered (Rosenzweig & Thelen, 1998; Wiggins, 2015). With engagement suffering, simulations offer immersive experiences that may re-engage disinterested students.

## Statement of the Problem

Research over the last several decades cites the efficacy of simulations (Beidatsch & Broomhall, 2010; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; McCall, 2010; O'Brien & Sears, 2011; Taylor & Walford, 1972) but most of this research discusses the *impact* of simulations rather than the lived experiences of students *during* the simulation. This study gives voice to the individual student experience during a simulation. Whereas a multitude of studies have been cited, each denoting the benefits of simulations and games, there is a paucity of research examining the efficacy of simulations and games in history education.

## Purpose of the Study

The purpose of this study is to explore the "lived experiences" of students who are taught using simulations in survey history courses. More specifically, what occurs *during* a simulation that engages students.

## Conceptual Framework

The genesis of simulations as an effective pedagogy has roots in the evolution of various branches of psychology, specifically constructivism. Essential to this study is my foundational belief in constructivist pedagogy. Constructivists view learning as an active process through which the learner is constantly receiving, storing and processing new information. The interaction between the acquisition of new knowledge versus existing knowledge results in the learner's ability to make or create meaning (Kalat, 2017). The constructionist approach has led to the development of the use of simulations in education.

## Research Questions

Research Question 1: What are the lived experiences of students who are taught using simulations in a survey history course?

Research Question 2: How do students engage during simulations?

## Significance

This study is significant because findings may help teachers outside of the content area of history. If what specifically motivates students to engage during simulations can be pinpointed, then this may lead to field testing of those methodologies in other content areas. Furthermore, the purpose of the study is to determine what, specifically, is the lived experience of students during simulations? If common variables are identified in the interviews, things such as simulations being fun, the variables can be tested in other content areas outside of history to determine if they have the same impact on student engagement in those specific classes or content areas.

Further study on the impact of using games and simulations in history education is needed. While a considerable amount of research over time cites the efficacy of simulations (Bredemeier & Greenblat, 1981; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; Kee, 2014; McCall, 2010; O'Brien & Sears, 2011; Orbach, 1977; Taylor & Walford, 1972), little research has focused on history education (Carnes, 2005, 2014; Cavanagh, 1975; Corbeil & Laveault, 2011; McCall, 2010). There is a need for more research which focuses on how games and simulations can increase student engagement in history education. Perhaps simulations offer the type of

contraband called for by Emerson, in which case, simulations may be one tool to increase student engagement.

While most of the studies examined have been quantitative in nature, this study uses a qualitative approach to studying simulations. A qualitative approach was selected because the essence of qualitative research is prolonged contact with participants in their natural setting (i.e., my students in my classroom) to gain a holistic view of the phenomenon (i.e., simulations) (Miles, Huberman, & Saldana, 2014). This prolonged contact allows research to be conducted that examines the students' experiences during the simulation and build understanding of what is engaging about simulations. Whereas a multitude of studies have been cited, each denoting the benefits of simulations and games, there is a paucity of research examining the efficacy of simulations and games in history education. There is a need to give voice to the *student experience* during simulations.

## Assumptions

The assumptions for this study are as follows:

1. The participants will answer the interview questions honestly.
2. That simulations represent an effective pedagogical teaching method.

## Delimitations

The delimitations for this study are as follows:

1. Only students in my survey history course will be included.

2. Only four students who have been identified as actively-engaged will participate in the semi-structured interviews, with the possibility of additional students.
3. Data will be collected in one course during one semester.

## Limitations

The limitations of this study are as follows:

1. The number of participants to choose from may limited due to enrollment in the survey history class.
2. Selecting only four students to participate in the semi-structured interviews may not entirely represent other students' experiences during simulations, thereby limiting the generalizability of the findings.
3. The data collection process will occur in one class in a single semester, thereby limiting the generalizability of the findings to between different groups of students during different semesters.

## Definition of Terms

Engagement (emotional): "Students' attitudes, interests, and values particularly related to positive or negative interactions with faculty, staff, students, academics, or the institution" (Fredericks & McColskey, 2012, p. 764).

Simulation: "A teacher-directed, student-driven activity that provides lifelike problem-solving experiences through role-playing" (Bailey, 2008, p. 3).

## Organization of the Study

The study is divided into five chapters. Chapter 1 presents the introduction, statement of the problem, purpose of the study, significance of the study, definition of terms, limitations, and delimitations. Chapter 2 contains a review of related literature and current research regarding student engagement, the history of simulations and simulations as tools in history education. Chapter 3 includes the study design, rationale, and methodology. An analysis of reported data and findings are covered in Chapter 4. Finally, a summary of the findings, conclusions, discussion, and recommendations for practice and further research are presented in Chapter 5.

# CHAPTER 2

# REVIEW OF RELEVANT LITERATURE

The purpose of Chapter 2 is to provide a comprehensive review of the literature related to the problem under investigation. Chapter 2 begins with an examination of the learning theory constructivism, which led to the emergence of the pedagogical strategy known as simulations. Next, Chapter 2 examines the history of simulations and the evolution of their use over time in various areas which include the military, medical practice and education. Then, the chapter reviews relevant literature related to research on student engagement. Next, the chapter moves into an investigation of the effects of simulations on student engagement. Chapter 2 concludes by exploring simulations as pedagogical tools in history education.

The following review is divided into the following sections and subsections: History of Constructivism, A History of Simulations, Simulations as Tools for Military Training, Simulations as Tools for Medical Training, Simulations as Tools in Education, A History of Student Engagement Research, Effect of Simulations on Student Engagement, and lastly, Simulations as Tools in History Education.

## History of Constructivism

Behavioral psychologists study the observable behaviors of subjects; whereas, cognitive researchers focus on how humans process and stored information for later retrieval. Thus, cognitivists focus on the brain and its internal functions. This led to the advent of constructivist psychology. Within humans there exists an internal knowledge structure, known as schema. As experiences occur, this newly acquired knowledge is

compared to existing schema to replace or alter existing schema. Jean Piaget's work in child development advanced the cognitivist approach to educational psychology, particularly his theory of stages of development (Kalat, 2017).

Prior to the work of Piaget, Lev Vygotsky began exploring cognitivist psychology. Vygotsky postulated that the development of higher levels of reasoning happens as humans interact with their social environment. This led the development of what Vygotsky called the zone of proximal development (ZPD) (Kalat, 2017). Within a person there exists what a person can do on their own versus what they cannot do. In between is what a person can do with assistance, which is what Vygotsky called the zone of proximal development. In terms of educational influence, most of an educator's instruction should occur within a given individual's ZPD. Whereas behaviorist view learning as passive responses to given stimuli, constructionists view learning as an active process through which the learner is constantly receiving, storing and processing new information (Kalat, 2017).

Educational psychologist John Dewey promoted the notion that knowledge is acquired when learned content has relevancy and can be connected to the outside world. A teacher's instruction should, therefore, focus on the experiences of the students. Jerome Bruner theorized that knowledge is acquired when it is referenced against current or past knowledge (Kalat, 2017). The interaction between the acquisition of new knowledge versus existing knowledge results in the learner's ability to make or create meaning (Kalat, 2017).

Constructivism exposes students to learning by doing, outside of the rote memorization of isolated facts. In other words, the learner constructs knowledge from experiences which are unique to each individual learner, instead of simply responding to stimuli as in the behaviorist approach. Constructivism leads to student involvement in real-world learning experiences (Kalat, 2017). It is the constructionist approach that has led to the development of the use of simulations in education. The next section examines a broad history of the evolution of simulations and their usage in the military, medical, and educational fields.

## History of Simulations

### Simulations as Tools for Military Training

The educational constructivist approach has roots in the 20th century; however, man has known that humans "learn by doing" for thousands of years. The process of creating meaning from experiences has led to the development of simulative war games, which in turn, marked the inception of simulations as a learning tool (Sabin, 2012).

The first examples of simulations originate from over two millennia ago in ancient China and India. Starting with *Wei Hai* in China and *Chaturanga* in India, these games represent ancient versions of *Go* and *Chess,* respectively (Sabin, 2012). In Ancient Greece, Plato notes in Book VI of *The Republic* that play is vital to the development of philosopher-kings to develop analysis and critical thinking. Thus, games simulating war or military concepts have been used to teach strategy and critical thinking for many years (D'Angour, 2013; Sabin, 2012). Likewise, the western world under the

Roman Empire, used various types of wargames that utilized sand tables, thus allowing leaders to manipulate and move pieces in competition against each other (Smith, 2010).

In the 17th century, Christopher Weikman invented KOENIGSPIEL, an early version of wargames to take place on a board (Smith, 2010). Beginning in the early 19th century, Prussian officer Baron von Reisswitz began contemplating ways that he could formally teach military tactics and strategy. To accomplish this, he created *Kriegsspiel,* a game that simulated military operations and engagements on a massive sand table. Published in 1824, *Kriegsspiel* marked the beginning of wargaming as a military training tool. Over the ensuing two centuries, armed forces from most nations have used various forms of wargaming for training and planning (Sabin, 2012). For example, in the later part of the 19th century the United States Naval War College used wargames to prepare for a naval invasion of New York. In the early 20th century Germany and Japan used wargames to prepare for their attacks against Poland and Pearl Harbor (Smith, 2010). Nations continue to simulate conflict through modern wargames, a practice that most developed nations use as training exercises (Sabin, 2012). The use of simulative wargames denotes the importance of people constructing meaning by engaging in learning. For this reason, simulations are still used as training tools in the military as well as many other areas, such as medical training, a tradition that spans two millennia.

Simulations as Tools for Medical Training

Beyond the use of simulations for war, simulations have also been pioneered in the medical field. Palaganas, Epps, and Raemer (2014) note that patient and human anatomy models have been used since the ancient world, but healthcare simulations

(HCS) in their modern form have evolved alongside technological advancements in aviation training and computer science. Beginning in the early 1800s, trainees in the medical profession began practicing tracheostomies on dolls. Such simulative experiences have evolved into full-sized, highly sophisticated mannequins, which can simulate a vast array of medical problems. The authors delineate the progression of simulations in Table 1 (Palaganas et al., 2014, p. 111). This progression of simulation use is key, as simulation usage in medical education is now ubiquitous (Dieckmann, Gaba, & Rall, 2007; Lapkin, Levett-Jones, Belchambers, & Fernandez, 2010; Palaganas et al., 2014; Rudolph, Simon & Raemer, 2007).

**Table 1.** *Evolution of modern-day healthcare simulations.*

| | Simulators | Healthcare Team training |
|---|---|---|
| 1800s | Partial task trainers; tracheostomy dolls | |
| 1900s | Low-tech mannequins | In-clinic apprenticeships |
| 1940s | Standardized patients | |
| 1960s | High-tech mannequins | Human factors training (e.g. MedTeams) |
| 1970s | Partial task trainers (e.g. IV arms, medical plastic laboratory) | Learning Resource Centers |
| 1980s | Screen-based patient case study programs/ high-technology mannequins | Simulation Anesthesia crisis resource management |
| 1990s | High-technology mannequins | Simulation-enhanced CRM |
| 2000s | High-technology mannequins | Avatar team training |

Issenberg, McGaghie, Petrusa, Gordon & Scalese (2005), in a meta-analysis of 109 studies on the effectiveness of medical simulations spanning 34 years, found that medical simulations are educationally effective and simulation-based learning compliments medical education. Furthermore, Issenberg et al. (2005) point out that simulations are becoming an integral and effective aspect of medical education at all levels, an assertion that other researchers have noted (Dieckmann et al., 2007; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007).

Another meta-analysis conducted by Lapkin et al. (2010) found that students reported an overwhelming satisfaction with their learning using human patient simulation

mannequins (HPSMs) when compared to their peers who learned using case studies. This is significant because learner satisfaction enhances students' engagement, thereby facilitating learning (Lapkin et al., 2010). Lapkin et al. (2010) echo Issenberg et al. (2005), noting the results of their systematic review appear to be in favor of using simulations in medical training.

Rudolph et al. (2007) and Dieckmann et al. (2007), like Lapkin et al. (2010), pointed out the engaging aspects of using simulation in medical education. Rudolph et al. (2007) note that simulations capture the imagination and gradually draw the students into the experience. This is due to the high emotional engagement triggered by these role-play simulations (Dieckmann et al., 2007; Rudolph et al., 2007).

Rudolph et al. (2007) and Dieckmann et al. (2007) note the concept of "as if," a theoretical construct first identified by Hans Vaihinger (1927), a foundational idea of effective simulation. The "as if" construct of simulation operates on the premise that the students (i.e simulation participants) act *as if* they were working on a real-life patient. Thus, participants forego the idea that they are engaged in a simulative activity and pretend as if they are engaged in a real-life scenario. It is for this reason that role-playing simulations have been selected as the type of simulation used in this study.

Clearly, simulations have a multitude of uses whether it be military or medical training. As research indicates, simulations are becoming an integral and effective aspect of medical education at all levels, an assertion that much research supports (Dieckmann et al., 2007; Gaba, & Rall, 2007; Issenberg et al., 2005; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007). It is the inception of simulations into medical training

that has led professionals in the field of education to experiment with their uses in a formal, educational setting.

Simulations as Tools in the Field of Education

Simulations are valuable teaching tools in both military and medical training programs (D'Angour, 2013; Dieckmann et al., 2007; Gaba, & Rall, 2007; Issenberg et al., 2005; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007; Sabin, 2012; Smith, 2010). In terms of military training, participants engage in a game-based version of military campaigns or battles (D'Angour, 2013; Sabin, 2012; Smith, 2010). In the medical profession, trainees engage in simulative experiences that require them to apply knowledge in real-time scenarios (Dieckmann et al., 2007; Gaba, & Rall, 2007; Issenberg et al., 2005; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007). Because simulations can be considered gamified versions of real-life experiences, it seems logical to then experiment with the use of simulations in a formal educational setting.

The notion of using games in education is not a new concept. Research reviewed indicates people have been using games as learning experiences since the ancient world. In the early 20th century, the Playground and Recreation Association of America stated that games should be used in educational settings and that these "games should develop the child physically, mentally and morally" (Tettegah, McCreery, & Blumberg, 2015, p. 254).

However, the use of simulations in the classroom has undergone a series of phases. Rolfe (1990) notes that the first phase, which took place during the 1960s, was a period of wild excitement. Simulations were a new concept and teachers were eager to

implement them. From the 1960s to the late 1970s, researchers were very interested in the use of simulations and viewed them as a viable teaching tool. However, Rolfe (1990) notes that by the 1980s the use of simulations declined when research found that simulations did very little to raise student achievement.

Ruben and Lederman (1982) reviewed the literature on instructional simulation and gaming and suggested four factors which potentially contributed to the decline. The first reason is there was a lack of sufficient evidence documenting the value of experiential learning. Secondly, little training was being offered to teach instructors how to effectively implement simulations into their courses. Thirdly, an uncritical acceptance of the validity of simulations. Lastly, critics perceived simulations to lack rigor and substance. Thus, the use of simulations as a teaching method declined in popularity from the early 1980s through the late 1990s.

However, the 21st century has seen an explosion in the game industry, particularly in terms of video game entertainment. Video games offer a way to experience simulative environments in a wide variety of contexts. According to an Entertainment Software Association 2015 report, more than 150 million Americans reportedly play video games at least once a week. The association further highlights the fact that video games are central to millennials' entertainment preferences (Tettegah et al., 2015). This has led to a newly-inspired interest in the use of simulations and games in the academic setting, particularly the k-12 setting (Hong, Cheng, Hwang, Lee, & Chang, 2009). Of particular interest is how these types of activities can be used to facilitate students' engagement in classroom activities with the hopes of improving their academic performance (Connolly,

Boyle, MacArthur, Hainey, & Boyle, 2012; Girard, Ecalle, & Magnan, 2012; Honey & Hilton, 2011; Hong et al., 2009; O'Neil, Wainess, Baker, & Neil, 2005).

While the studies focus primarily on video game usage, a renewed interest in the usage of games and simulations has once again overtaken American education. This has led to a renewed exploration in the efficacy of game-based learning (GBL), particularly using games and simulations in traditional education settings (Matera, 2015; Sheldon, 2011). Game-based learning represents a learning environment in which games and simulations are used as mediums to convey content, teach skills, and promote an interactive atmosphere (Matera, 2015; Sheldon, 2011). In the most complex form, GBL is transformed into a gamified learning environment in which every aspect of the class plays towards the outcome of the game which lasts the entire length of the school year or course (Matera, 2015; Sheldon, 2011). Games are inherently engaging. Thus, researchers now have shifted to discern what exactly engagement means and how to assess engagement. The following section examines the history of student engagement research and various types of assessment measures employed in the data-collection process.

## A History of Student Engagement Research

The concept of student engagement has become an area of specific interest to educational researchers, including engagement in postsecondary classrooms (Mandernach, 2015). Research has clearly shown the dire effects of not engaging students (Gilbert & Troitzsch, 2005; Taylor & Parsons, 2011; Willms, 2003). For example, Willms (2003) conducted a massive study of 224,058 students age 15 in 8,364 different schools spanning 42 different countries over the course of two years. Willms

found that nearly 25% of students were disengaged. Likewise, Cothran and Ennis (2000) conducted a study of 51 students in three different suburban high schools where students were observed and interviewed. The authors found that nearly 66% of students interviewed and observed were disengaged. According to the data, students reported that more engaging teachers were the ones who enthusiastically presented active learning opportunities for the students to engage in.

Several seminal pieces of research that have been produced to help institutions and faculty enhance student engagement, such as Chickering and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education" and Chickering and Kuh's (2005) "Promoting Student Success Creating Conditions So Every Student Can Learn."

In early studies, student engagement was primarily defined as time on task (Mandernach, 2015). Kuh (2003) defines engagement as the amount of time students invest in educational activities, both inside and outside of classes. Current definitions still include such ideas, but have been expanded to include variances in behavioral, emotional, and cognitive dimensions (Lester, 2013). Fredericks and McColskey (2012) define different types of engagement in the following ways.

First, Fredericks and McColskey (2012) explain that cognitive engagement involves two components, psychological and cognitive. The psychological component encompasses motivational goals and self-regulated learning as it relates to investment and effort to comprehend complex ideas. Behavioral engagement consists of students' involvement in academic and social activities. Emotional engagement consists of

students' attitudes, interests, and values particularly related to positive or negative interactions with faculty, staff, students, academics, or the institution. Cognitive involves self-regulated learning, metacognition, application of learning strategies, and being strategic in thinking and studying.

Others recognize cognitive and behavioral dimensions but have renamed the emotional dimension to be called affective (Mandernach, 2015). The author explains the differences between each type of engagement. Cognitive engagement denotes the extent to which students are attending to and expanding mental effort in the learning tasks encountered. Behavioral engagement is the extent to which students are making active responses to the learning tasks presented. Affective engagement is the level of students' investment in, and their emotional reactions to, the learning tasks.

With a wide range of definitions on student engagement, the issue is further complicated by determining how best to assess engagement. Hence, how one assesses student engagement becomes contingent upon how the researcher defines engagement. A subtle differentiation between engagement as a process versus a product also exists. Bowen (2005) argues that most assessments of student engagement focus on the learning process; whereas, Barkley (2010) explains that student engagement is produced from student motivation and active learning. The small distinction determines how one assesses engagement. When assessing the process, the focus is on behaviors, activities and attitudes that lead to student learning. Assessments of product emphasize engagement as a cognitive state resulting from the learning process (Mandernach, 2015). Despites these differences, most assessment measures incorporate aspects of both the

process and product of student engagement. With much research citing the importance of understanding how to most effectively engage students, naturally teachers, faculty, and institutions turn to various types of pedagogy. An argument can be made for the use of simulations as one such tool to be employed to boost student engagement.

The issue of engagement has become an area of concern in the field of history (Lesh, 2016). At the Iowa Council for the Social Studies Annual Conference in 2016, Lesh proposed two reasons to explain why students in history courses are disengaged. First, he argues that the teaching method employed in history courses has not changed in nearly 100 years of teaching. Furthermore, he cited studies (e.g.: Wiggins, 2015) noting the heavy use of lecture, the negative impact on student's interest, and the overall lack of engagement with the content.

In addition to the use of historical inquiry skills to boost student engagement suggested by Lesh (2016), the author suggests simulations may be one tool to boost student engagement in history courses. Simulations have emerged as one aspect of game-based instruction. Game-based instruction has been noted to have positive effects on learning (Crocco, Offenholley, & Hernandez, 2016).

Gee (2007) ranks amongst one of the most influential theorists on the use of games in education. In studying popular video games, Gee (2007) created a list of 36 learning principles that coincide with up-to-date best practices. Oblinger (2004) argues that GBL serves six key learning functions. First, GBL activates prior learning. Secondly, games teach players the relationship between knowledge and content. Thirdly,

GBL provides rich feedback and assessment of in-game actions. Fourthly, GBL fosters an environment that encourages application of previously-gained knowledge. Fifthly, GBL accommodates experiential learners. Lastly, because games are inherently social, GBL fosters the sharing of knowledge.

Squire and Jenkins (2003) suggest that a "good game can function as a gateway through which students can explore a broader range of knowledge" (p.29). With games having such a positive effect on learning, it makes sense to suggest that games and simulations could be implemented as a tool to boost student engagement. However, little research has sought to examine whether or not a relationship exists between the use of simulations in a history classroom and student engagement.

Crocco et al. (2016) undertook a meta-analysis of 440 undergraduate students in which they report on the effects of GBL on enjoyment, engagement, and learning. They (2016) found that the game-based classes showed higher enjoyment than the non-game based classes. Games helped greatly reduce anxiety by increasing enjoyment in classes where confidence was low and anxiety high. Also, when games are integrated with course learning outcomes and other pedagogy, the results are more likely to be successful. It can be noted then that when enjoyment is increased, student engagement is likely to increase as well. To assess the effectiveness of GBL, Crocco et al. (2016) gave an initial survey, a post-lesson survey, held a debriefing discussion and gave post-lesson quizzes after each lesson.

The study reveals a strong positive correlation between student reports of increased enjoyment and student success (r=0.967 for math, r=0.967 for science and

r=0.655 for English). This shows student enjoyment can be increased and it is necessary for learning. If student enjoyment can be enhanced in English, science, and math, as Crocco et al., (2016) have shown using GBL, perhaps the same can be true when using role-playing simulations in history courses.

Plass, Homer, and Kinzer (2016) note the complexity of learning that takes place when games are implemented in a learning environment. For this reason, the authors claim that games should not be interpreted as only impacting one perspective of learning, such as motivation, engagement, or cognitive aspects of learning. Rather, Plass et al. (2016) call for research that outlines game design patterns and general solutions to recurring problems that can guide the design of effective game-based learning environments. Rather than focusing on the motivating aspect of games, Plass et al. (2016) argue that one of the main reasons to use games for learning is that games turn learning into a playful process.

Garris, Ahlers, and Driskell (2002) present research that presents game design patterns called for by Plass et al. (2016). Garris et al. (2002) state that effective games and simulations have common game features that trigger a game cycle. This cycle causes the player(s) to repeat judgements and behaviors that characterizes the engagement that game a player displays. In a game, the cycle continually engages the user, who continues to come back and engage in play.

However, Garris et al. (2002) suggest a level of caution when it comes to the employment of games and simulations in a learning environment. Dekkers and Donatti (1981) found a negative relationship between duration of training and training

effectiveness. Plass et al. (2016) also noted this as one of the greatest challenges in creating effective game experiences, that is, creating a game that continues to motivate over time. In other words, the longer the simulation, the less effective the learning becomes if the game is not designed well. Secondly, Garris et al. (2002) references Caillois (1961) who claims that a game that one is forced to play ceases to be play, and Huizinga (1950) who suggested that play is the direct opposite of seriousness. Garris et al. write, "At what point do we risk violating some of the basic principles of games—that play is free and voluntary, nonproductive, and separate from the real world? In other words, play differs from work" (p. 459). Following the appropriate game cycle involuntarily motivates students to *want* to engage in the game; hence, the need to implement simulations that involve a certain level of playfulness. We can conjecture that perhaps it is a level of playfulness that may engage students in history content.

The research suggests that games can be effective, but that one must approach their usage knowing the most effective methods of employment (Becker, 2004; Caillois, 1961; Dekkers & Donatti, 1981; Garris et al., 2002; Hertel & Millis, 2002; Huizinga, 1950; Kille, 2002). This reinforces contextual factors that must be considered when using simulations (Becker, 2004; Chartier, 1972; Hertel & Millis, 2002; Kille, 2002; Livingston, 1970; McIntosh, 2001; Shirts, 1975). The instructor's attitude towards simulation-gaming and toward students, as well as their knowledge of the game mechanics, can affect the experiences students have with simulations and games. Livingston (1970) found significant differences in attitudes between groups of students who played the same simulation under different instructors. Meaning, the person

conducting the simulation can dictate how engaging the overall experience is. Other administrative variables also impact the level of engagement that students experience. Things like how the simulation is introduced, how games vary, and the debriefing, affect the experiences of players (Bredemeir & Greenblat, 1981).

A widely-recognized practice lies in the postgame debriefing, where the instructor can maximize learning. It is here that instructors can take generalizations and symbolic meaning out of players' in-game experiences (Crookall, 2010; Hertel & Millis, 2002; Livingston, 1970). In terms of increasing student engagement, simulations appear to be an effective tool. "The evidence suggests, that under certain circumstances and for some students, simulation-gaming can be more effective than traditional methods of instruction in facilitating positive attitude change toward the subject and its purpose" (Bredemeier & Greenblat, 1981, p. 324). Furthermore, numerous studies have shown positive effects on attitudes when simulations and games are employed (Corbeil & Laveault, 2011; Harteveld, Thij, & Copier, 2011; Pierfy, 1977; Reid, 1979).

Pierfy (1977) reviewed 22 studies on experiments with social studies simulations that compared their effects to traditional teaching methods related to several different learning outcomes, including two measures of cognitive achievement, acquiring factual knowledge and retention of information. Three studies showed significant differences in favor of simulations and games for acquisition of factual knowledge. Of the 22 studies, eight found retention significantly better with simulation and games. In a different study, Pierfy (1977) examined eleven studies related to simulations and games effects on

student attitudes. In eight of the eleven studies, simulations were found to have significant positive effects on student attitudes over conventional methods.

Reid (1979) conducted a study of 1,100 14-16-year-old British students in which he found positive effects of simulations and games in developing attitudes of awareness and appreciation in science education. Furthermore, Corbeil and Laveault (2011) conducted a study of 65 college level students, 44 of these who were in the experimental group. Of the students, over 50% of the students said they enjoyed the entire class, where simulations were used. Sixty-four-point seven percent found the game more motivating than traditional techniques.

Even more numerous are the studies over time that support the use of simulation and games in terms of motivating students, and increasing their interest in the subject matter (Beidatsch & Broomhall, 2010; Chartier, 1972; Cherryholmes, 1966; Chin, Dukes, & Gamson, 2009; Justice & Ritzhaupt, 2015; Livingston, 1970; O'Brien & Sears, 2011; Taylor & Walford, 1972; Vos & Brennan, 2010). For example, Livingston (1970) undertook a meta-analysis of seven years of research and over 150 studies and found that across all the studies students were more motivated during games and simulations than during other traditional teaching methods. More recently, Chin et al. (2009) reviewed 40 years of simulation and gaming outcomes and noted evidence across the years of research that positive attitudinal effects of simulations was huge. Chin et al.'s findings substantiate Pierfy's (1977) data thirty years prior to the 2009 study. However, a cautionary approach must be taken when examining the older studies. As previously

noted, the late 1960s and 1970s represent a time of "wild enthusiasm" for simulation usage (Rolfe, 1990; Ruben & Lederman, 1982).

Despite the cautionary approach taken in the implementation of simulations and games, evidence over time appears to be overwhelmingly in favor of their ability to increase motivation, thus impacting a student's willingness to engage in the content (Cherryholmes, 1966; Chartier, 1972; Auman, 2011; Beidatsch & Broomhall, 2010; Justice & Ritzhaupt, 2015; O'Brien & Sears, 2011; Vos & Brennan, 2010). In the following section, I examine how simulation games can be employed in a history education setting and their potential at increasing student engagement with history content.

## Simulations as Tools in History Education

Ralph Waldo Emerson (1909), in an essay entitled "Education," implores educators to seek methods that engage students and that ignite in them a sense of imagination. He writes, "I assume that you will keep the grammar, reading, writing and arithmetic in order; 'tis easy and of course you will. But smuggle in a little contraband wit, fancy, imagination, thought" (Emerson, as cited in Suzallo, 1909, p. 33). Simulations in history education offer one type of contraband that Emerson desires.

Despite Emerson's calls for reform in the later part of the 19th century, history classrooms around the country have maintained traditional teaching practices (Cuban, 1993; Elliott & Woodward, 1990; Grant, 2003, 2006; Lesh, 2016). In a massive study, Cuban (1993) examined teaching practices from 1880 to 1990. His research found that teacher-centered instruction, a model that follows the traditional lecture model, has been

the dominant instructional practice for nearly 110 years. Furthermore, Wiggins' (2015) research affirms Cuban's (1993) findings. Wiggins (2015) notes in a survey of 3,400 high school seniors from around the country that history classes were the most lecture heavy. Additionally, during a normal class period the teacher talked for about three fourths of the time (Wiggins, 2015). Lecture heavy history classes may contribute to widespread student disengagement, an area of concern that researchers have studied for several decades (Brint & Cantwell, 2012; Rosenzweig & Thelen, 1998).

This type of teaching has led to history being taught as a series of facts, which leads to students retaining very little information, an assertion that researchers have examined over time (Barton & Levstik, 1998; Epstein, 1998; Stahl et al., 1996; Van Sledright & Frankes, 2000). With students seeing history as a series of disconnected facts, engagement in the material has suffered (Rosenzweig & Thelen, 1998; Wiggins, 2015). With engagement suffering, the authors suggest simulations may offer immersive experiences that may re-engage disinterested students.

Whereas a multitude of studies have been cited, each denoting the benefits of simulations and games (Becker, 2004; Beidatsch & Broomhall, 2010; Caillois, 1961; Dekkers & Donatti, 1981; Garris et al., 2002; Hertel & Millis, 2002; Huizinga, 1950; Kille, 2002; Livingston, 1970; O'Brien & Sears, 2011; Taylor & Walford, 1972; Vos & Brennan, 2010), there is a paucity of research examining the efficacy of simulations and games in history education. A benefit of using simulations is that simulations are akin to experimental methodologies. An instructor can set up a simulation and run the activity

many times, "varying the conditions in which it runs thus exploring the effects of different parameters" (Gilbert & Troitzsch, 2005, p. 14).

Herein lies the benefit to the history instructor. An instructor can employ a simulation and need not worry whether the results are "historically accurate." This reinforces the definition of a simulation game in that a simulation is a student-driven activity (Bailey, 2008). The students determine the outcome of a historical simulation. This may seem like a counter-intuitive approach to teaching history, yet it is precisely this approach that has been adopted by Reacting to the Past (RTTP) Consortium, a national group of colleges, universities, and individual professors dedicated to publishing *Reacting to the Past* history role-playing simulation games (Carnes, 2005).

Carnes (2005, 2014) is the founder of *Reacting,* and his recent Harvard University Press book, *Minds on Fire,* proposes that role-playing simulations are perhaps one tool that can enhance student engagement in history courses. According to Carnes (2014), in a study of 248 colleges and universities, fewer than 8% of college courses surveyed featured role-playing simulations. Moreover, Carnes (2014) argues that students are engulfed in subversive play. Carnes (2014) defines this as play or distractions that pull students' attention and minds aware from academic work. He claims that our culture is engrossed in it, through the use of video games, the internet and students' busy social lives. Thus, Carnes (2014) notes that no wonder students cannot engage in a lecture hall.

McCall (2010) suggests that historical simulation games can offer immersive and provocative experiences. "When playing a simulation…a learner can become immersed in a virtual representation of the past…and be provoked to consider how and why humans

lived, made choices, and acted the way they did" (Kee, 2014, p. 230). While McCall's (2010) research validates the use of simulations in the teaching of history, his research is limited strictly to electronic simulations rather than an all-inclusive approach to the usage of simulations, which would include face-to-face format.

Accordingly, further study should investigate the impact of using games and simulations in history education. While a considerable amount of research over time cites the efficacy of simulations (Bredemeier & Greenblat, 1981; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; McCall, 2010; Orbach, 1977; Kee, 2014; O'Brien & Sears, 2011; Taylor & Walford, 1972), very little of this research has focused on history education (Carnes, 2005; Cavanagh, 1975; Corbeil & Laveault, 2011; McCall, 2010). There is a need for more research which focuses on how games and simulations can increase student engagement in history education.

## Summary

This literature review began with an examination of the learning theory constructivism, a theory that laid the groundwork for the pedagogical strategy known as simulations (Kalat, 2017). Next, the review examined the history of simulations and the evolution of their use over time in various areas such as military, medical, and education fields (D'Angour, 2013; Dieckmann et al., 2007; Gaba & Rall, 2007; Issenberg et al., 2005; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007; Sabin, 2012; Smith, 2010).

The review continued with an investigation on the research of student engagement and how simulations impact student engagement. As the literature noted, a considerable

amount of research over time cites the efficacy of simulations (Bredemeier & Greenblat, 1981; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; McCall, 2010; Orbach, 1977; Kee, 2014; O'Brien & Sears, 2011; Taylor & Walford, 1972), very little of this research has focused on history education (Carnes, 2005; Cavanagh, 1975; Corbeil & Laveault, 2011; McCall, 2010).

While most of the studies examined have been quantitative in nature, this study is proposing a qualitative approach to studying simulations. A qualitative approach was selected because the essence of qualitative research is prolonged contact with participants in their natural setting (i.e. my students in my classroom) in order to gain a holistic view of the phenomenon (i.e. simulations) (Miles et al., 2014). This prolonged contact will allow research to be conducted that examines the students' experiences during the simulation and build our understanding of what it is about the simulations that students find engaging. Perhaps simulations offer the type of contraband called for by Emerson, in which case simulations may be one tool to increase student engagement.

# CHAPTER 3

# METHODOLOGY

## Research Design

The purpose of this phenomenological study is to explore the lived experiences of students who are taught using simulations in a survey history course. By lived experiences the researcher implies thoughts, feelings, and attitudes during the classroom simulations. Through an examination of students' lived experiences, the researcher is seeking to better understand students' experience of engagement when involved in simulations. This method was selected because the researcher is interested in the student's perspectives of this type of pedagogy. Research over the last several decades cites the efficacy of simulations (Bredemeier & Greenblat, 1981; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; McCall, 2010; Orbach, 1977; Kee, 2014; O'Brien & Sears, 2011; Taylor & Walford, 1972), but most of this research discusses the *impact* of simulations rather than the lived experiences of students *during* the simulation. This study gives voice to the individual student experience during a simulation.

## Qualitative Approach

This study will employ a qualitative research design. A qualitative approach was selected because the essence of qualitative research is prolonged contact with participants in their natural setting (i.e. my students in my classroom) in order to gain a holistic view of the phenomenon (i.e. engagement in simulations) (Miles et al., 2014).

Essential to this study is the researcher's foundational belief in constructivist pedagogy. Constructivists view learning as an active process through which the learner is constantly receiving, storing and processing new information. The interaction between the acquisition of new knowledge versus existing knowledge results in the learner's ability to make or create meaning (Kalat, 2017).

## Methodological Approach

The primary research question developed for this study is as follows: "What are the lived experiences of students who are taught using simulations in a survey history course?" It is this question that led to the use of phenomenology. Phenomenology has roots in Kant and Hegel, however, German philosopher Edmund Husserl formally introduced phenomenology as a scientific approach to research at the beginning of the twentieth century (Groenewald, 2004). The "aim of phenomenology is to produce a description of a phenomenon of everyday experience, in order to understand its essential structure" (Priest, 2003, p. 51). Thus, to understand the lived experiences of students during simulation usage, phenomenology was selected as the methodological approach.

Swanwick and Barlow (1994) affirm phenomenology's ability to aide in an analysis of several people's experiences, which can lead to a deeper understanding of the phenomenon being explored. Morris (2013) notes that phenomenologists are a part of their work, which is why this type of methodology was selected for the study. As a professor, the researcher cannot disconnect from the classroom, the students, or personal teaching methods. Hammersley (2000) reaffirms Morris' assertion, claiming that a researcher cannot be detached from their own presuppositions. It is from the researcher's

implicit bias towards simulation usage that the researcher is seeking to understand the students' experiences of the methods employed within my classroom, leading to phenomenology as the most appropriate methodological approach for the study.

Van Manen (1984) identifies six specific elements in phenomenological studies, which are:

1. "turning to a phenomenon which seriously interests us and commits us to the world
2. investigating experiences as it is lived rather than as it is conceptualized
3. reflecting on essential themes which characterize the phenomenon
4. describing the phenomenon through writing and rewriting
5. maintaining a strong and oriented pedagogical relation
6. and balancing the research context by considering parts and whole" (Van Manen, 1984, p. 30-31).

Within Van Manen's (1984) outline, phenomenologists engage in four steps throughout the research process. These steps are 1) epoch, 2) phenomenological reduction, 3) imaginative variation, and 4) synthesis (Moustakas, 1994). Moustakas (1994) explains epoche, a Greek word meaning "to abstain," as the process in which the researcher sets aside any biases or preconceived notions related to the phenomenon. During this opening phase, the researcher is seeking to gain new knowledge based on his or her observations of the phenomenon (p. 84).

Next, Moustakas (1994) describes phenomenological reduction as the point when the researcher attempts to put into writing that which was observed. To accomplish this,

the researcher must look and describe, then look again, seeking next to describe their observations in new experiential ways. This process is repeated while continuous reflection occurs within the researcher's writing process. Moustakas (1994) indicates the process is phenomenological, as the researcher continually seeks to describe the experience while at the same time reducing the observances into thematic categories (p. 90).

Within the phenomenological reduction phase, a series of steps occur to fully accomplish a reduction of the observances. First, the researcher "brackets" their attention solely on the phenomenon at hand. Next, the research looks at every statement or observance as being of equal value. This process is known as "horizonalizing" information. Essentially, each piece of data is treated as equal until themes emerge from the data. Next, the researcher clusters the horizons into themes. As patterns or themes (i.e. horizons) emerge, data that is irrelevant, overlapping, or repetitive is deleted. Once this is complete, a written summary of the clustered themes emerges, which Moustakas (1994) calls the "textural description."

The third step in the phenomenological process is called imaginative variation. Here, Moustakas (1994) explains that the researcher must seek to imaginatively view the phenomenon from "divergent perspectives, different positions, roles, or functions" (p. 97). The process thus leads to a textural description of how a person experienced what happened during the phenomenon. For this study, that is how a student experiences a simulation in a given class session. It is here that essential structural themes are noted from the observances and are textually described (Moustakas, 1994).

The fourth and final step is the synthesis stage. It is here that the researcher creates a "unified statement of the essences of the experience of the phenomenon as a whole" (Moustakas, 1994, p. 100). In the final stage, it must be noted that the unified statement represents a single time and place from the perspective of a single researcher.

## This Study

### Reflexivity and Positionality

At the time of this study, the researcher has nine years of teaching experience. During this time, the researcher has engaged in frequent use of simulations in his classes. Usage of simulations has occurred with students ranging from fifth grade through college seniors, resulting in positive feelings towards the effectiveness of simulations. Thus, there is an inherent bias towards their effectiveness in positively impacting student engagement. To counter the researcher's bias, this researcher engaged in a continual process of reflexivity, a process that will help identify any personal or philosophical biases that may affect the researcher's ability to collect and interpret data (Leedy & Ormrod, 2015).

### Participants and Participant Selection

The participants in this study will be William Penn University undergraduate students enrolled in the researcher's history course. While all students will participate in the classroom activities, as the methods employed are pedagogies that would be used regardless of the study, students identified as possible participants will be asked to volunteer as participants in interviews, as well as the document review process. Participants will be required to sign a consent form which demonstrates their

understanding of the study, what is required of them, and that states their willingness to participate in the study.

It is critical that the researcher be the person to conduct the simulations and interviews. The researcher is the person who knows the activities and knows when to ask for clarification. Furthermore, the researcher will be able to dive deeper in the interviews that an outsider because the researcher is the expert in delivering the content. Furthermore, the researcher must be the one to conduct the simulations so as to maximize the potential for student learning. As research notes, effectively debriefing a simulation creates the conditions for the learning to be maximized (Coleman, 1973; Crookall, 2010; Livingston, 1970; Hertel & Millis, 2002).

Using criterion sampling (Patton, 2001) based upon classroom observations by a third-party observer, utilization of the Behavioral Engagement Related to Instruction (BERI) protocol (Lane & Harris, 2015), three students who are identified as being actively engaged will be invited to participate in the study.

## The Simulations

Based upon the researcher's teaching experience, the researcher has selected the following simulations to be used in the study:

1. Struggle for a Continent: This activity simulates the trade, diplomacy, and warfare in eastern North America during the colonial period. Students are broken up into teams, each representing various Native American groups or European nations. Each vies for control of territory and resources through diplomacy and alliances while seeking to undermine the interests of enemy nations.

2. World War I: In this simulation students are assigned the roles of key historical figures from various nations involved in World War One. Utilizing an online platform, students practice diplomacy while also controlling land and naval forces allowing them to battle through the four years of World War One.
3. International Relations: This activity simulates the complexities of international politics and diplomacy in the modern world. It introduces the ever-shifting realities in which nations negotiate volatile issues.

## Data Collection

### Classroom Observations

Corbin and Strauss (2014) explain that observations place researchers in the center of the action. As the teacher conducting the classroom activities, it is natural then that the researcher would utilize the things he hears and sees as data for this phenomenological study. The observation data that the researcher anticipates gathering will be used to cross-reference data gathered during interviews (Corbin & Strauss, 2014).

### Memos and Diagrams

Throughout the research process, memos and diagrams will be produced following Corbin and Strauss' (2014) memo and diagram protocol. Memos are representative of more than field-notes, rather, they are written records of analysis. As research indicates (Corbin & Strauss, 2014; Leedy & Ormrod, 2015), the analytical memo process must be continuous throughout the entire study. Leedy and Ormrod (2015) note that memos differ from raw observed data due to the nature of analysis that

occurs in writing memos. Corbin and Strauss (2014) identify five types of memos. They are as follows:

1. open data exploration
2. identifying or developing concepts and categories
3. making comparisons and asking questions
4. exploring relationships between data
5. and developing the story line (p. 117).

Furthermore, field-notes must be as objective as possible, whereas memos begin the process of interpreting that which was observed (Corbin & Strauss, 2014; Leedy & Ormrod, 2015; Moustakas, 1994).

Besides memos, the researcher will be using diagrams to visualize the collected data. Corbin & Strauss (2014) note that one benefit to creating diagrams is that they force researchers to think about their data in as "lean" a way as possible. Diagrams force researchers to reduce data down to its simplest form, then visually display the data, its meaning, and the relationships that exist between concepts (Corbin & Strauss, 2014).

Semi-Structured Interviews

A semi-structured interview protocol will be used to gather data from the participants following recommended formats from various research (Corbin & Strauss, 2014; Doody & Noonan, 2013; Jacob & Furgerson, 2012). Corbin and Strauss (2014) explain the value of semi-structured interviews over other types because semi-structured interviews allow researchers to maintain a small amount of control of the topics covered while at the same time giving participants freedom to discuss whatever questions they

desire in any given order. There are, however, several disadvantages to the use of interviews in this study. Doody and Noonan (2013) note that interviews are susceptible to bias and cite the following disadvantages:

1. "Participants' desire to please the researcher
2. Saying what they think/feel the researcher wishes to hear
3. A desire to create a good impression
4. The researcher's views can influence the participant's responses" (p. 29).

Of particular concern is that participants will be the researcher's students. This could potentially lead to Doody and Noonan's (2013) listed disadvantage of participants saying what the researcher wants to hear. Answers may also be given in hopes of pleasing their professor. To counter these disadvantages, it is critical to engage in a continual process of reflexivity (Leedy & Ormrod, 2015). Furthermore, it is important to remind the students that their answers will in no way impact the grade in the course.

Three individual interviews, each lasting roughly forty-five minutes will be conducted following three different simulations. The interviews will focus on how the students experienced the simulation and what it was about the simulation that motivated them to engage in the content. Interviews will be recorded on an Ipad and transcribed at a later time.

As research notes, the interview questions will be broad, open-ended in order to give the participants opportunity to freely express their viewpoints (Bevan, 2014; Corbin & Strauss, 2014; Doody & Noonan, 2013; Giorgi, 1997; Jacob & Furgerson, 2012).

Interview questions include the following:

1. Could you please describe a typical college class session? Followed by the prompt: How does this activity compare to other activities that you have experienced in other college courses? Followed by the prompt: how does this activity compare to activities you have experienced in other history classes in either college or high school?

2. Have you ever participated in a simulation before? Followed by the prompt: If so, when and please describe the activity.

3. Think about the simulation you just participated in, what stands out about it for you? Followed by the prompt: Please describe the most enjoyable moment of the simulation.

4. What were you thinking or feeling during the simulation?

Document Review

Throughout the study, students will be required to write three reflective essays about their experiences during the simulations. These documents will be reviewed and cross-referenced with observation, memo, and interview data. As data are reviewed, categories and sub-categories can be derived from the data from which patterns may begin to emerge (Corbin & Strauss, 2014).

Prompts for the first reflective essay include:

1. What thoughts or feelings were you experiencing during the simulation?

2. What happened to your nation?

3. How did you work with your allies; did anyone betray you?

4. How does this compare to what historically happened?
5. What did you like or dislike about this activity? Do you have any suggestions for improvement?

## Methods of Data Analysis

This phenomenological study is qualitative in nature. As such, the data collection and data analysis methodologies employed are closely intertwined throughout the entire study (Corbin & Strauss, 2014). For the data analysis methodology, the researcher selected Creswell's (2013) Data Analysis Spiral. Corbin and Strauss (2014) summarize the process in this way:

1. Organize the data, breaking down text into smaller units.
2. Contextually begin to process the data as a whole. Write memos, noting possible categories and begin interpreting data.
3. Identify general categories or themes. Identify patterns.
4. Integrate and summarize the data for readers, observing relationships among the categories.

Interview data, memos, and observations offer triangulation in this study to help find consistencies or inconsistencies in the data. It is the researcher's hope that these multiple data sources will converge into consistent conclusions (Leedy & Ormrod, 2015).

# CHAPTER 4

# FINDINGS

## Overview

Chapter 4 begins with a brief review of the study, including the purpose of the study, the research questions, and the methodology. The chapter presents the data collected, which consisted of classroom observations, memos and diagrams, semi-structured interviews, and document review. The first research question focuses on the lived experience of students during simulations in a college history course. The second research question focuses on the students' perceptions of their personal level of engagement during simulations. Next, Chapter 4 highlights the five themes, described as phases, and the discovery of three universal themes that represent the lived experiences of students during simulations. A synthesis of the essence of the phenomenon is provided. The chapter concludes with a summary of the research questions' findings.

## Purpose of the Study

The purpose of this study was to explore the *lived experiences* of students who are taught using simulations in survey history courses. More specifically, what occurs *during* a simulation that engages students.

## Research Questions

This study sought to answer the following questions:

Research Question 1: What are the lived experiences of students who are taught using simulations in a survey history course?

Research Question 2: How do students engage during simulations?

## Participants

The participants in this study were William Penn University undergraduate students enrolled in the researcher's history course. While all students enrolled in the class participated in the classroom activities, as the methods employed are pedagogies that would be used regardless of the study, students identified as being actively engaged were asked to participate in the study, which involved three semi-structured interviews, as well as a document review process.

Using criterion sampling (Patton, 2001) based on third-party classroom observations, utilization of the Behavioral Engagement Related to Instruction (BERI) protocol took place (Lane & Harris, 2015). Four students were identified as being actively engaged during two weeks of observation. To protect the participants' privacy, pseudonyms were used. The participants' names, ages, and majors are listed:

- Bob, 21, Industrial Technology
- Larry, 19, Business Management and Economics
- Isaac, 19, Sports Management
- John, 19, Applied Computer Science, Information Technology

## Methodology

### The Simulations

Based on the researcher's teaching experience, the researcher selected the following simulations to be used in the study:

1. Struggle for a Continent: This activity simulates the trade, diplomacy, and warfare in eastern North America during the colonial period. Students are broken up into

teams, each representing various Native American groups or European nations. Each vies for control of territory and resources through diplomacy and alliances while seeking to undermine the interests of enemy nations.

2. World War One: In this simulation students were assigned the roles of key historical figures from various nations involved in World War One. Utilizing an online platform, students practiced diplomacy while also controlling land and naval forces allowing them to battle through the four years of World War One.

3. International Relations: This activity simulates the complexities of international politics and diplomacy in the modern world. It introduces the ever-shifting realities in which nations negotiate volatile issues.

## Data Collection

### Classroom Observations

Corbin and Strauss (2014) explain that observations place researchers in the center of the action. As the teacher conducting the classroom activities, it is natural then that I utilized the things that I heard and saw as data for this phenomenological study. The observation data that I gathered were used to cross-reference data collected during interviews (Corbin & Strauss, 2014).

### Memos and Diagrams

Throughout the research process, memos and diagrams were produced following Corbin and Strauss' (2014) memo and diagram protocol. Corbin and Strauss (2014) identify five types of memos. They are as follows:

1. open data exploration

2. identifying or developing concepts and categories
3. making comparisons and asking questions
4. exploring relationships between data
5. and developing the storyline (p. 117).

Furthermore, field-notes must be as objective as possible, whereas memos begin the process of interpreting that which was observed (Corbin & Strauss, 2014; Leedy & Ormrod, 2015; Moustakas, 1994).

Besides memos, the researcher created diagrams to visualize the collected data. Corbin & Strauss (2014) note that one benefit to creating diagrams is that they force researchers to think about their data in as "lean" a way as possible. Diagrams force researchers to reduce data down to its simplest form, then visually display the data, its meaning, and the relationships that exist between concepts (Corbin & Strauss, 2014).

Semi-Structured Interviews

A semi-structured interview protocol was used to gather data from the participants following recommended formats from various research (Corbin & Strauss, 2014; Doody & Noonan, 2013; Jacob & Furgerson, 2012).

Four individual interviews, each lasting roughly forty-five minutes were conducted following three different simulations. The interviews focused on how the students experienced the simulation and what it was about the simulation that motivated them to engage in the activity. Interviews were recorded on an iPad and transcribed at a later time.

As research notes, the interview questions were broad, open-ended grand tour questions that gave the participants opportunity to freely express their viewpoints (Bevan, 2014; Corbin & Strauss, 2014; Doody & Noonan, 2013; Giorgi, 1997; Jacob & Furgerson, 2012).

Interview one questions included the following:

1. Could you please describe a typical college class session? Followed by the prompt: How does this activity compare to other activities that you have experienced in other college courses? Followed by the prompt: how does this activity compare to activities you have experienced in other history classes in either college or high school?
2. Have you ever participated in a simulation before? Followed by the prompt: If so, when and please describe the activity.
3. Think about the simulation you just participated in, what stands out about it for you? Followed by the prompt: Please describe the most enjoyable moment of the simulation.
4. What were you thinking or feeling during the simulation?

Document Review

Throughout the study, students were required to write three reflective essays about their experiences during the simulations. These documents were reviewed and cross-referenced with observations, memos, and interview data. Data were reviewed, categories and sub-categories were derived from the data, from which patterns emerged (Corbin & Strauss, 2014).

Prompts for the first reflective essay include:

1. What thoughts or feelings were you experiencing during the simulation?
2. What happened to your nation?
3. How did you work with your allies; did anyone betray you?
4. How does this compare to what historically happened?
5. What did you like or dislike about this activity? Do you have any suggestions for improvement?

## Methods of Data Analysis

This phenomenological study is qualitative in nature. As such, the data collection and data analysis methodologies employed are closely intertwined throughout the entire study (Corbin & Strauss, 2014). For the data analysis methodology, the researcher selected Creswell's (2013) Data Analysis Spiral. Corbin and Strauss (2014) summarize the process in this way:

1. Organize the data, breaking down text into smaller units.
2. Contextually begin to process the data as a whole. Write memos, noting possible categories and begin interpreting data.
3. Identify general categories or themes. Identify patterns.
4. Integrate and summarize the data for readers, observing relationships among the categories.

Interview data, memos, and observations offer triangulation in this study to help find consistencies or inconsistencies in the data.

## Themes

For the data analysis methodology, the researcher selected Creswell's (2013) Data Analysis Spiral. First, the researcher categorized all transcripts, field notes, and memos related to individual participants. Next, the researcher began to process the data as a whole contextually. Using transcriptions from the interviews, the researcher began to identify general categories and identify patterns by listing all expressions related to the interview question: What were you thinking or feeling during the simulation? After analyzing the transcripts, the researcher conducted member checks to improve internal validity of the data.

Following this process for each participant, the data revealed five distinct themes. The themes were identified as phases due to each theme representing a distinct period, or stage of feelings and emotions, during simulations in a college survey history course. To aid in the discovery of the five themes, or phases and their meanings, the researcher created a diagram (Figure 1) to assist in visualizing the data in as lean a way as possible (Corbin & Strauss, 2014).

The five phases represent the lived experiences of students during simulations. It is the five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 that represent the lived experiences of students during simulations in a survey history course.

Figure 1 Phases of Students' Lived Experiences During Simulations

*Figure 1.* Phases of Students' Lived Experiences During Simulations. This figure illustrates the phases through which students move during simulations and the corresponding feelings that students experience during a simulation.

## Textural Descriptions

The five phases and their meanings were used to produce textural descriptions of the participants in this study. These descriptions use verbatim quotes, phrases, and expressions from the interview transcripts, even when the interviewees use improper grammar, crass language, and slang jargon. The following section outlines each individual's lived experience as it relates to each of the five phases followed by a group synthesis. In an effort to maintain confidentiality, the participants were given pseudonyms.

### Bob

Initial Exposure Phase. Bob represents the oldest of the four participants at the age of 21. Bob is an industrial technology major and took the survey history course because the college requires students to earn at least three credits in a survey history course. When asked the first of the grand tour questions, which asks what a typical college class session looks like, he responded that the vast majority of his classes had

been lectured based. "Most of the time it is usually the professor standing up in front of the class and lecturing you, that's probably 75% of it." Though, Bob did note that sometimes professors deviated from “lecturing” to do “group work.” "Once in a while…the professor will assign an assignment, and then you'll do it in groups. But, most of the time it's just lecture."

When asked how he felt about a typical class, he responded in the negative. “It gets kind of boring…it’s tough to sit there and listen and pay attention. You don’t retain much information. But, it also depends on the teacher.” When prompted to tell the researcher more about what he meant by “it depends on the teacher” he responded that it depends on their style of teaching:

> It depends on how they teach, like if they’re excited about what they’re teaching or if they just, you know, drone at you, kind of monotone just reading from PowerPoint. It’s kind of hard to listen to that and learn. It makes it more interesting when the teacher is engaging.

When asked what he thought “an engaging professor looked like” he described them as “someone who involves students in the class,” who “actually cares about students and puts extra effort into their lessons to make it more interesting.”

After describing a typical class and what he viewed as an “engaging” teacher, Bob was asked to describe his thoughts or feelings when he was first introduced to the simulation. He responded:

> Initially, I didn’t think it’d be a very good thing because I don’t normally like to meet new people and have to talk to people in class. Overall, I wasn’t looking forward to it. When I found out I had to work with someone, I didn’t want to do it. After hearing the rules, I was confused. That was my original thought.

Despite Bob's initial reluctance, after the first turn, he thought perhaps "it might not be so bad." He said, "I thought it might be fun. It could be kind of fun to do something different than just get lectured at." Bob's experiences during the initial exposure phase show he moved from initial reluctance, through confusion, and into piqued curiosity.

Growing Anticipation Phase. Bob was asked what changed his mind regarding the activity. In essence, what was it that caused him to move through the lived experience of the initial exposure phase and into the growing anticipation phase? He described, "I think being in sort of a competition. I wanted to win-I mean; you said there was extra credit on the line. That was a nice incentive to win, at least for me. Plus, I don't like to lose. I wanted to beat the other teams." Despite initial reluctance to engage in the activity and a lack of a desire to talk to people in class, Bob described the competitive nature of the activity, along with the incentive to earn extra credit nudged him towards collaboration. Interesting, Bob stated that in most classes he does not like to have to meet, talk with, or collaborate with people. However, he recalled:

> We knew we had to do something. We were going to lose if we didn't. I figured we better go talk to people. I think having something to talk about, that helps a lot. It forces you—normally when you meet new people you have to come up with something to say or introduce yourself. But, when you are in a group and part of a simulation like this, you're required to talk to people. It pretty much forces you to talk to people, which actually helps me, because if I'm not forced to talk to people in class, I really don't talk to people. For example, the girl who sat in front of me. I'd never just talk to her. But, I talked her into joining our alliance.

Bob recalled that the competitive and collaborative nature of the simulation was different, but that he found it motivating. "It was fun. Normally, I don't talk to people. I'm kind of quiet, but it allowed me to actually talk to people. It forced me to."

Moreover, Bob liked that he was able to make choices and experience the history, rather than “just learning the facts.” This positive experience was refreshing for Bob, and it moved him into the emotional investment phase.

Emotional Investment Phase. Bob moved into the emotional phase after moving through the initial exposure and growing anticipation phases. Once the simulation procedures were understood, Bob was able to begin working with his partner to determine how to proceed. Bob stated that in previous experiences, “you just normally get told the facts.” But, with the simulations, “it was cool to actually have to try and make your nation thrive. You got to determine the outcome." For Bob, the autonomy of the simulations was freeing. He noted, on multiple occasions, that a simulation made him "think in a different way." Instead of being told factual information, he was given autonomy in the simulations to make choices, and these choices determined whether or not he would win or lose.

It was the ability to make autonomous choices that required Bob and his partner to think strategically about how to proceed with the simulation. He said:

> It was cool how each action had its own outcome. We got to decide our own fate; we had conversations about who to trade with, and how much stuff we wanted to give them. We had conversations about running the army and where to move and who to attack. We made our own moves. It’s like we had to outthink another person, so that strategy. You had to think about it, think a couple of moves ahead.

For Bob, the autonomous choices and strategic thinking were motivating. In fact, Bob found the simulations so motivating that he was excited to continue the simulation. He said, “It got me excited to come back to class…I don’t say that very often.”

When asked what his thoughts and feelings were at the conclusion of the first simulation, Bob described enjoying the activity, and even called the activity "fun." The positive experience with the first simulation moved Bob from the emotional investment phase to a heightened sense of anticipation in subsequent exposure to the next simulations. He recalled, "I really liked A Struggle for a Continent. It was fun. Since I really liked the first activity we did, I was really looking forward to the next simulations. I was excited to come to class for the next simulations." The positive feeling of being excited to attend class for the next simulation shows a heightened sense of anticipation for subsequent class simulations. It is here that we see Bob moving into the subsequent exposure phase.

Subsequent Exposure Phase. Bob's experiences during the initial exposure phase showed he moved from initial reluctance, through confusion, into piqued curiosity. Bob recalled that the competitive and collaborative nature of the simulation was different, but that he found it motivating. Moreover, Bob liked that he was able to make choices and *experience* history, rather than "just learning the facts." This positive experience was refreshing for Bob, and it moved him into the Emotional Investment Phase. For Bob, the autonomy of the simulations was freeing.

He noted, on multiple occasions, that a simulation made him "think in a different way." Instead of being told factual information, he was given autonomy in the simulations to make choices, and these choices determined whether or not he would win or lose. The autonomous choices that he and his partners were forced to make led Bob to have to think strategically. In his own words, he said, "We had to try and out-think the

other players." The competitive and collaborative nature of the simulation was motivating because Bob was given the freedom to decide his fate in the simulations. The positive feelings led to heightened anticipation for the subsequent simulations. He noted feelings such as being "excited" to attend future classes.

When asked what feelings he experienced on the first day of the second simulation compared to the first day of the first simulation, Bob's response indicates being immediately emotionally invested in the activity, rather than reluctant and confused. Bob was emotionally invested right away because he anticipated the ability to make autonomous choices that would allow he and his team to collaborate to accomplish a common goal strategically. He said,

> Well, originally, I mean, really excited. The first day of the World War One simulation I really, really loved as a team, as an alliance. We achieved successful moves. I thought we were going to take down an empire!

It was the competitive nature of the simulation that motivated Bob to want again to come back to class. "I was excited to come back. Which doesn't happen very often. I mean, it's an 8:15 class, it's hard to get excited for class sometimes."

<u>Emotional Investment 2.0 Phase.</u> Bob had a positive experience with the first simulation. Despite initial reluctance due to a more introverted personality, Bob described enjoying participating in the first simulation. In subsequent exposure to the second and third simulations, Bob immediately became emotionally invested. When asked why, he stated, "I was excited because the first simulation was fun. I enjoyed it, so I figured the other ones would also be fun." Bob went on to explain why he emotionally invested himself into the subsequent simulations. He explained:

> The thing I liked about the simulations most was that you had to make decisions as a country, it was kinda cool. You got to control what was going to happen. You had to figure out ways to get people to help you, and it just made it interesting trying to come up with tactics to get multiple groups to work together.

Bob's response suggests that an initial positive experience, coupled with the ability to make autonomous choices collaboratively led to strategic thinking. These factors led to heightened anticipation in subsequent simulations, followed by an immediate emotional investment in future simulations. Bob's response indicates his entrance into the emotional investment 2.0 phase, a distinct experience from the initial emotional investment phase.

Larry

Initial Exposure Phase. Larry is a 19-year-old freshman majoring in business management and economics. Larry took the survey history course because of graduation requirements. When asked the first of the grand tour questions, what does a typical college course look like, Larry described class sessions dominated by lecture. He stated:

> You come in, you sit down, pretty much wait for the professor to take attendance. Then they usually just get right into things, whether it's writing things on the board, a PowerPoint presentation that we have for the day. We might turn in homework to begin the class, or you take out your notebook to take notes. Then they pretty much just kind of lecture at you for however long class is. If it's longer, like the hour and a half classes, maybe they don't lecture for the entire class period, but the 50-minute classes are usually full lecture or discussion. It's a lot of taking notes.

Larry's most frequently cited feeling in his college courses was boredom. "Boredom is the top thing. There's not really critical thinking; there's no analyzing. It gets tough, especially when it's not your favorite topic. Class just drags a bit." Based on these experiences, Larry initially was reluctant to engage in the simulation when first

exposed to it. In fact, he expected the activity to be monotonous. “When you were explaining it, I thought here we go again. This is going to be another boring activity. I figured it was going to be a bust.” His previous experiences with activities in college course were mostly negative, thinking that a simulation would be a repetition of normal activities. When asked to elaborate on what a typical activity looked like, Larry described being given questions to answer based on textbook readings or a topic to research as a group. These prior experiences led him to be reluctant to engage in the activity initially.

Moreover, he felt confused when the rules and procedures were first introduced. “I was a little confused as to what we were supposed to do right away. But, after the first turn, everyone was catching on.” However, his initial reluctance and slight confusion gave way to piqued curiosity. Larry said that the more the simulation was explained and the “more you [the researcher] got fired up about it [the simulation], the more engaged and interested I became. I imagine the rest of the class too.” He went on to describe how upon reviewing the playing map he made a personal connection to a video game he played called Rome Total War. "When you handed out the map with colors on it, I was like, ‘oh, this is like Rome: Total War.' I could relate to it because I had played the game." It was his piqued curiosity that moved Larry towards the next phase.

Larry's lived experience shows that he was initially reluctant to engage in the activity and that upon initial exposure he was slightly confused. However, as the rules and procedure were further explained and as he began the simulation, he experienced

piqued curiosity. It was his piqued curiosity that moved Larry into the growing anticipation phase.

Growing Anticipation Phase. For Larry, one unique contributing factor that moved him from the initial exposure phase into the growing anticipation phase was the personal connection that he made between the simulation and his previous experiences playing video games. Larry said:

> When I realized this was more than a typical activity and that you [the researcher] were really serious about it, the more you got fired up about it, it got me, and I would imagine the rest of the class, fired up about it. When somebody talks passionately about something, or with a great deal of interest, you're going to listen to them. Nobody wants to learn from a half-assed teacher.

For Larry, another unique contributing factor that caused him to enter the growing anticipation phase was the researcher's personal excitement displayed for the activity. Larry used the word "passionate" to describe the researcher's demonstrated behavior and said it "excited" him for the activity. It seems, at least for Larry, that he was more motivated to engage in the simulation and therefore the activity when the presenter displayed personal enthusiasm for the simulation. However, a personal connection with video games and a passionate teacher were not the only factors that moved him into the growing anticipation phase.

Through personal connections with video games and displayed presenter excitement represent unique factors described by Larry, he also described three experiences that parallel the other participants. These are the competitive and collaborative nature of the simulations, which motivated him to actively engage with his partner and his peers throughout the entire simulation.

One of the most heavily noted feelings experienced by Larry was the urge to "compete" and to "win" the simulation. The urge to compete and win could be attributed to the fact that Larry is also a collegiate athlete, and so has an innate competitive personality. When asked why he engaged in the activity, he declared:

> Because it was a competition! Because you had to win! In a school of athletes, all of us compete on a daily basis. It was a competition. There was this intrinsic motivation. There was the will to win; you needed to win.

For Larry, the competitive nature of the simulation became increasingly motivating for him.

Like the other participants, Larry cited the collaborative nature of the simulation to be motivating. In fact, the simulation was so competitive and collaborative for Larry that he and his partner discussed how to strategically win outside of class. He said:

> My teammate [partner in the simulation and also basketball teammate] and I, we were on the same team for the simulation, we were sitting in the locker-room after practice talking about it. How are we going to stick it to these guys and make sure that we win this? It made us look forward to getting up at 7:30 a.m. to come to class if you can simply look forward to something like that. It was fun, a lot of fun….What made it especially fun was the interaction with other people in class. It was fun because you got to be yourself and it wasn't like you were tied down to a chair. You got to talk to people.

For Larry, the personal connection to video games, the teacher's displayed passion, and the competitive and collaborative features of the simulation moved him into the emotional investment phase.

<u>Emotional Investment Phase.</u> Larry became so emotionally invested in the simulation that he described his experience as "relieving." When compared to previous experiences, Larry noted that the simulations "were by far the most unique experience I have ever had in a college course." The uniqueness can be attributed to the autonomy

that Larry experienced during the simulation. It was the autonomy experienced in the simulations that caused Larry to become emotionally invested. “There were multiple outcomes, but there was one kind of wide road that we were all headed down. It was relieving.” When pressed as to why he used the word “relieving,” he said:

> Because you got to think for yourself, instead of having a set of instructions that you had to do. Instead, it was what we wanted to do on our own guidelines. I mean, we had the foundation of what we *had* to do, but it was a matter of what *we* were going to do, rather than you have to do this and this. You really got to do what you wanted to do and what you would do in a situation. It was interesting to me because you were put in the power of your own destiny. We felt powerful. We felt like we're going to get some things done. It was just a matter of how *we* were going to go about it.

For Larry, the autonomy of the activity gave way to his ability to making choices. The ability to make choices led to a sense of control over his “own destiny.” The autonomy and ability to make choices became increasingly motivating and led to further emotional investment because he and his partner had to think strategically about how to proceed in the simulations.

Larry used an analogy of being a guy with a gun. "You were the guy with a gun; you had to decide what you were going to do with this gun because you were tied to the amount of power you had." He noted that wielding power in the simulation forced him to think strategically about how to flex his control over his allies and his opponents most influentially.

Larry’s emotional investment deepened to the point where he immersed himself emotionally into his role. In essence, he assumed the role of someone from history. He describes his experience this way:

> It was educationally enlightening, as far as what happened and what different

> leaders were feeling because we were acting as if we were really freakin running those countries, those colonies. People didn't tell me. In my mind, I was. I was that focused on it, I guess, which is different for me because really, I'm not a real big fan of school and I'm not a big guy to put myself out there to kind of learn about different things like that. But it really spoke to me.

By the end of the week, his emotional investment was so profound that Larry felt physically and mentally drained. He described being "worn out because we had been thinking about what we were going to do next the entire time."

However, after a day, Larry describes how he and his partner became emotionally invested in the simulation before the final day. Again, Larry notes that he was so motivated by the simulation that he and his partner were strategizing in the locker room before practice *and* during shootaround before a basketball game. Larry believed that he was not the only one emotionally invested in the activity. "The way people came back Thursday, they had been thinking about it too. It wasn't like anyone sat down and was like, 'Oh, I forgot about this.' People came back ready to go."

Larry's emotional investment in the simulation was evident throughout his experience. The autonomous choices that he and his partner were able to make created a relieved sense of freedom that became increasingly motivating as he engaged in the simulation. The emotional investment deepened to a point where Larry strategized for the simulation outside of class. His emotional investment, coupled with the overall positive experience, led to a heightened sense of anticipation when subsequently exposed to future simulations.

<u>Subsequent Exposure Phase.</u> When exposed to subsequent simulations, Larry felt a heightened sense of anticipation. When asked why he felt more emotionally invested

he responded, “I was more prepared, I sort of knew what was coming. I was definitely more interested than the first time.” Due to the concept of simulations not being new, Larry was now able to experience a heightened sense of anticipation for the next simulations. “Knowing how the first simulation operated made me appreciate the second one [World War One] because I sort of knew how things were going to go down.” This heightened sense of anticipation led to a desire to more rapidly collaborate with his allies in the simulation to achieve victory. Again, one of the motivating factors was Larry’s sense of competition and a desire to win. Here, Larry entered the emotional investment phase 2.0.

Emotional Investment 2.0. Larry’s desire to collaborate and win again led to being motivated enough to talk about the activity outside of class. "Tuesday after class, we [allied partner] walked out together, and we walked to the park together, and we were talking about what was going to happen and what we should do.” Once again Larry experienced an emotional investment, however, this time it occurred much sooner than the first emotional investment phase.

Larry found himself immersed in his role immediately, to the point where he was emotionally invested enough to exchange playful banter with his opponent, who happened to be his teammate and friend. He explained:

> Jordan [pseudonym] and I definitely talked shit in the locker room to each other about it. I was like, ‘Yeah, you just wait until Thursday.' Wednesday before our basketball game we had a shootaround. Jordan said to me, ‘Yea, just you wait, you’re really gonna get screwed over tomorrow.’ He was really feelin’ good about himself. We were definitely talking some shit. I just tried to brace myself for what was going to happen in Belgium the next day.

Again, it is evident that Larry was motivated by the collaborative and competitive nature of the activity.

With his allies, Larry was given the autonomy to drive the activity through strategic choices in determining what moves to make and how to proceed. Larry's sense of autonomy went far enough to where he secretly sent several text messages during class to the "enemy," contemplating turning on his allies. "I texted them [the enemy] to contemplate switching over, but I didn't want my group to know that I was talking to them. I was trying to win, and I knew we were in big trouble when France fell." This new emotional investment occurred much quicker than the previous emotional investment phase. The emotional investment attributes to the fact that Larry had a sense of how simulations operated, and he anticipated the autonomy he would be given to make his own choices. For Larry, the ability to engage in a student-driven, teacher-led activity that provides the student choices in determining their fate was motivating. "When you get to control a little bit of it [your learning], it definitely kept my attention."

Larry's lived experience shows that he was initially reluctant to engage in the first simulation, perceiving it to be a routine group activity that would most likely end up being "boring." Furthermore, when introduced to the simulation Larry felt confused by the expectations and how to proceed with the simulation. However, he experienced a piqued sense of curiosity because the simulation felt similar to previous video games that he had played and due to what he described as the instructor's "passion" for the activity. All of these factors encouraged Larry to move from the initial exposure phase to the growing anticipation phase.

In the emotional investment phase, the autonomous choices that Larry and his partner were able to make created a relieved sense of freedom that became increasingly motivating as he engaged in the simulation. The emotional investment deepened to a point where Larry strategized for the simulation outside of class. His emotional investment, coupled with the overall positive experience, led to a heightened sense of anticipation when subsequently exposed to future simulations.

Larry described his lived experience with subsequent simulations as "exciting" because the students were forced to "figure things out" on their own. The ability to make strategic choices to win led to a collaborative effort amongst the teams, particularly with Larry and his allies. Larry, like the other participants, found the simulations so engaging that they talked about the simulations outside of class. “We were all talking about it outside of class. We left talking about it. When we saw people in the caf or something like that, we talked about it.” The emotional investment elicited from the students in subsequent simulations led to students entering the final phase of students’ lived experiences in simulations, emotional investment 2.0.

By the final phase, students knew what to expect and were excited to begin engaging with each other to win. According to Larry’s observations of the simulations, “everyone was more involved in the second and third simulations…everyone kinda sat closer together. No one was really spread out." By the second and third simulations, students were excited to collaborate with their partners and to compete with their peers.

The emotional investment in the subsequent simulations caused Larry to fear to make bad decisions. "I wanted to make sure I made all the right decisions, and I didn't

blow it for myself or the alliances that I was associated." In the emotional investment 2.0 phase Larry, along with is peers, became intently focused on the simulations. Larry pointed out that “everyone was focused on the task at hand instead of getting into groups and talking about what we were going to do that weekend. There was a sense of ownership to the whole thing. You really owned the thing, the role that you had.” Larry's sense of collaboration led to him and his partners profoundly investing in the simulations, primarily due to the competitive nature of the simulations. This forced Larry and his teammates to think strategically about how to negotiate as well as how to win. Larry’s descriptions evidence his journey through the five phases of students’ lived experiences during simulations.

Isaac

Initial Exposure Phase. Isaac is a 19-year-old freshman majoring in sports management. Like his peers, Isaac took the history class to fulfill college graduation requirements. When asked what a typical college class was like, Isaac's response echoed the responses of the other participants. "It's been lecture. We'd go in, and they'd have PowerPoint up. A lot of slides." When asked how he felt about this kind of teaching, Isaac responded that it is hard for him to focus and sit still for an entire class period. Isaac noted that most of his classes follow a similar pattern and that "it's frustrating” to attend classes each day that follow the similar pattern of lecture and notes.

Assuming that all his classes would follow a pattern of lecture and notes when initially exposed to the simulation, Isaac was somewhat reluctant to assume his role in the simulation. “At first, it was just like we're going to play a game. We had papers in front

of us ya know?" It is evident that Isaac entered the initial exposure phase. His reluctance was reinforced when the rules and procedures of the simulation were discussed. He emphasized:

> At first, it was confusing. I haven't really done an activity like that and I didn't know how it really works. I thought it was going to be much harder than it really was. It was just a little overwhelming; I think we were all a little bit confused.

Isaac's reluctance and confusion reveal his experiences match the descriptors within the initial exposure phase.

Despite initial reluctance and confusion, Isaac described being intrigued by the activity. He articulated his piqued curiosity this way:

> This was a unique activity. It was somethin' different. A lot of professors or teachers, like I said, we didn't do none of the activities. You do an activity like this [the simulation] it gets you goin'.

Having displayed reluctance, confusion, and piqued curiosity it is evident that Isaac's experiences demonstrate that he moved through the initial exposure phase. It was Isaac's piqued curiosity that drove him into the next phase, growing anticipation.

Growing Anticipation Phase. Isaac displayed a strong desire to compete and win, similar to the other participants. "It was all about winning and getting land. We wanted to win; we had to win." To achieve victory, Isaac realized that he needed to work with his partner and his allies to achieve their goals, and ultimately win. Isaac's desire to win displays his movement through the growing anticipation phase. "I first had to think about how my group [partners] is going to come together. So, our first step was to try and ally with somebody, come together, and just have the upper hand compared to somebody

else." Isaac goes on to describe how working with his allies to compete and win, was increasingly motivating.

Isaac's desire to compete and collaborate displays his movement through the growing anticipation phase. Isaac's anticipation began to climax as nations in the simulation prepared for war. He stated:

> Once we [allies] were paired up, it was almost a feeling like we really got to get you or attack you [the enemy]. When the European groups squared off with the other groups [Native/enemy groups], I was feelin' excited, ready to attack. It drawed all my attention. It drawed all my attention. It's like for somethin' to win, you know? We were top dogs. We wanted to conquer. We wanted to win; we had to win.

Isaac's growing enthusiasm for the activity evidenced that Isaac became increasingly emotionally invested in the simulation. Consequently, Isaac entered into the emotional investment phase.

<u>Emotional Investment Phase.</u> Isaac had a positive experience with the first simulation because he found the energy that came with doing simulations to be motivating, or "uplifting." The competitive nature of the simulation forced Isaac and his partner to collaborate to try and win. The ability to work with a partner towards a common goal of winning became increasingly motivating. A deepening emotional investment became apparent during the first simulation that carried into the second simulation. He recalled, "I was lookin' forward to it. I felt like it was goin' to be fun, it was going to be a game where we interact and compete, based off the last one. Ya' know, we're all interacting, we're competing."

Like the other participants, Isaac enjoyed the autonomy that was given him in the simulation, particularly the ability to make choices related to how he and allies would conduct the simulation. He stated:

> The game was really competitive. There was a lot of options, like how you got troops each year…You got to be precise on what moves you do because if you do the wrong move and your troops go to a different land, they [the enemy] take it. You gotta fight for it back, so it's like a mind game almost.

Isaac became so emotionally invested in the choices he was making that he began to feel a sense of urgency to ensure he would not make a wrong move. This sense of urgency led him to think strategically about how to proceed. "You got to know where to attack, what to attack. It gets you thinking. You feel like you can't mess up because a wrong move could affect you, or worse, your teammates' land."

Isaac noted that he began to plan with his allies strategically and this led to a collaborative effort to win. "You talk with your teammates, and then you ask the people you are allied with. You want to see their thoughts." Again, Isaac recollected that he was so emotionally invested in the simulation that he strategized with his teammate and allies outside of class. Isaac shared:

> At basketball practice, we'd talk about the game. We'd talk about how to beat the Allies, ya' know, cuz we were the Central Powers. Me and Jason [pseudonym] we were talking about Jason going north, each go the opposite way. The objective was France. He'd go north, through Belgium, I'd go bottom from Italy, hit their capital. We planned it in practice while nobody was around. You had to really think, come together with your partners. We were trying to outthink them.

Isaac's emotional investment is evidenced through his description of his feelings during the activity and by the fact that outside of class, during basketball practice, Isaac was emotionally invested enough in the simulation to strategize how to win the simulation.

Isaac's emotional investment in the simulation was evident throughout his experience. The autonomous choices that he and his partner were able to make created a sense that they were "all into the game." The simulation became increasingly motivating as the game picked up "in tempo," causing the entire class to engage. The emotional investment deepened to a point where Isaac strategized for the simulation outside of class. His emotional investment, fueled by the strategic choices he was allowed to make, coupled with the overall positive experience, led to a heightened sense of anticipation when subsequently exposed to future simulations.

Subsequent Exposure Phase. Isaac noted that after day one of the first simulation he was excited to return to class. The growing anticipation and emotional investment that Isaac experienced carried into other simulations. Isaac explained that he doesn't always look forward to attending his classes. "There are some classes, you just sit and act like da-da-da. You come in, straight book work, having a boring class, no one talks, stuff like that." Isaac expresses that he was bored and disengaged and in most of his other classes.

However, Isaac conveyed that the simulations caused him to feel differently about the history class. "Like I said about the simulations, you look forward to coming to class the next day. Knowing that we're not just coming in, just sittin' still. You look forward to the game, the next day, trying to finish, see who wins, find the outcome." Not only did Isaac look forward to coming to the class after day one of the first simulation, but Isaac was motivated to attend class during subsequent simulations. "I was excited for the next simulations. It's competitive, so I knew coming to class, I knew it was going to be fun.

When probed about why Isaac felt a heightened sense of anticipation during subsequent exposure to simulations, he answered:

> Cause' it [simulations] brings energy to the classroom…it's competitive…We all get active into it. Maybe the first day, we don't catch on but once we start coming together, it eventually involves everyone in the class, so we start coming [collaborating] together. It brings energy to the class, energy to the game. Makes it exciting.

Isaac's positive experiences caused him to be excited about future simulations. His response indicates being immediately emotionally invested in the activity, rather than reluctant and confused.

Isaac emotionally invested right away because he anticipated the ability to make autonomous choices that would allow he and his team to strategically collaborate to accomplish a common goal, which was to win. Isaac's immediate emotional investment in subsequent simulations evidences his entrance into the emotional investment 2.0 phase.

Emotional Investment 2.0 Phase. Unlike the first emotional investment phase, which predicated on a growing sense of anticipation due to the competitive and collaborative nature of the simulation which students found motivating, emotional investment 2.0 signifies a distinct emotional investment into the simulations. Isaac appeared to emotionally invest himself in the subsequent simulations immediately, rather than having to be convinced the activity would be meaningful. "I was excited because I knew, based off the other simulation we did, that it would be exciting and engaging. I knew it'd be competitive…I was immediately excited and engaged."

Isaac's emotional investment in the simulations was evident throughout his experience. "Doing all three of these [simulations], I looked forward to them. The whole class comes together…it brings everyone together…we get to choose strategies." The autonomous choices that he and his partners were able to make create a sense of competition amongst his peers, while also promoting collaboration with his teammates. Isaac's became emotionally invested immediately upon the start of subsequent simulations due to knowing that he could make choices compete against his peers while working collaboratively with partners, thus evidencing his entrance into the emotional investment 2.0 phase.

John

John represents an anomaly in the research findings. Despite strong initial engagement in the course, halfway through the semester, John stopped attending class. His disappearance occurred partway into the second simulation. Thus, John was only interviewed once instead of three times. After multiple attempts to schedule the second and third interviews, the researcher learned that John had unforeseen circumstances that did not allow an opportunity to interview the participant two more times. The researcher did hold several informal conversations with John related to his experience during the first simulation and part of the second simulation. Despite only completing one interview, John's responses in the interview and informal conversations indicate a parallel between his lived experience and that of the other participants.

Initial Exposure Phase. John is a 19-year-old freshman majoring in information technology. Like the other three participants, John had to take a history course to fulfill

institutional graduation requirements. When asked the first of the grand tour questions, what does a typical college classroom look like, John emphasized a lecture-heavy environment. "It's lecture for the most part. It usually is a PowerPoint, go over the points. You leave, you do the homework, you come back and repeat…You're just kind of like when's it over? I'm here because I have to, you just go through the motions."

John's response echoes that of the other participants, that is, a lecture-heavy environment leads to boredom. John's previous educational experiences led him to believe that the first simulation was going to be similar to his negative experiences. He noted, "At first, it's kind of how you get the feeling with every activity. It's like, 'Do we really have to do this?' I'd kind if rather just sit there and get lectured at." John's description of his lived experience confirms his entrance into the first phase, initial exposure.

John indicated that initially, he did not want to participate in the simulation because he perceived it to be similar to other boring classroom experiences. Furthermore, he expressed confusion about the expectations. However, John indicated a sense of piqued curiosity towards the activity. "Once we really got into what the activity was going to be like and you started explaining how turns work, it was like, okay, this might actually be pretty fun." With a piqued sense of curiosity, John resolved to engage in the activity because he had never participated in a simulation before and perceived the activity to be potentially interactive.

<u>Growing Anticipation Phase.</u> As John began to engage in the activity, he entered into the growing anticipation phase, which involves three essential elements:

competitiveness, collaboration, and motivation. John noted that the competitiveness led to collaboration with his partners, which became motivating because he and his partners wanted to win. He said, “Sometimes when you do activities, it’s like let’s just do the bare minimum together and just get done. But this time it was like we wanted to win! There was a competitiveness to it!” Moreover, John not only enjoyed the collaboration with his partner but perceived the entire class to be motivated by the activity. "It was fun because it got the whole class involved with each other, so we weren't just sitting there. There was the forming different alliances and stuff…within a turn, the game could completely change based on what another person does." He went on to note that he thought most of the students were motivated to win. "For the majority of us, a lot of us I think we're like, how do we win?"

John's growing enthusiasm for the activity supports the fact that he voiced interest for the next classes. John was one of the students who had expressed negative feelings towards history, yet the Struggle for a Continent simulation motivated him enough that he wanted to come to class. John admitted:

> I was like, okay, this is actually going to be pretty fun. It definitely made, I know waking up that Tuesday and Thursday, it made going to class really easy. I was actually looking forward to going and doing the next part.

John was excited to attend the next sessions, so much so that he became motivated enough to discuss the simulation with his partner and allies outside of class. “I was excited to come back to the next class and do it again. I was talking to my partners about what we could do…we could do this and this. We were just kind of strategizing a little

bit to see what we could do." Consequently, John entered into the emotional investment phase.

Emotional Investment Phase. John's emotional investment corresponds to the other participants in that he enjoyed the autonomy that was given him in the first simulation. The autonomy of the activity allowed John to dictate the choices he made for his nation. John affirmed his positive feelings towards the simulation. "It was definitely the most interactive activity that I've done at Penn…you kind of got a feel for what it was actually like and what decisions had to be made." Assuming the role of a leader and being forced to make choices led John to feel a sense of pressure.

John felt the pressure of having to make decisions, which led to strategic thinking. He posited "whether this was the right move? Is this what we really want to do? Is this what's best for us, for our tribe? If we do this, does it hurt other people, other Native tribes, what do they gain or lose, what do I lose?" The questions John asked himself show a deep level of introspection towards his role and on the part of his peers.

John expressed an appreciation for the autonomy that the simulation gave him. "There wasn't much outside influence; it was really just people playing the game." When pressed about if he liked the autonomy granted to him, he responded in the positive. He said:

> Definitely, because if you don't really have any say or freedom of what your choices are, there's really no point in the activity because you are just kinda' a puppet. What's the fun in that? It's fun to have your choices and see how things play out. It makes it more interactive and immersive.

John's emotional investment in the simulation was evident throughout his experience. The autonomous choices that he and his partner were able to make made the

experience “interactive and immersive.” John also noted that the simulation made “learning history more interesting” than what he had previously experienced.

The simulation became increasingly motivating as the simulation took on a “game feel.” John expressed that “the strategy involved, the unpredictability, all the different variables, the different sides, all the choices you had” gave the simulation a competitive, game-like feel. The emotional investment deepened to a point where John, like all the other participants, strategized for the simulations outside of class. John’s emotional investment, fueled by the strategic choices he was allowed to make, coupled with the overall positive experience, led to a heightened sense of anticipation for the future simulations.

Unfortunately, despite strong initial engagement in the simulation, halfway through the second simulation John stopped attending class. Thus, John was only interviewed once instead of three times. After multiple attempts to schedule the second and third interviews, the researcher learned that John had unforeseen circumstances that did not allow an opportunity to interview the participant two more times.

However, at the end of the first interview, John indicated that he was very excited for the next simulation, World War I. Based on field notes, it was evident that John became emotionally invested in the second simulation, just as he had the first simulation. John and his partner assumed the roles as heads of their nations quickly, and actively worked with their allies.

In one particularly memorable moment noted in the researcher's field notes, John decided to make a bold a move, which ended in a massive defeat of his army. He became

noticeably mad at his decision and was overheard saying to his partner, “We shouldn’t have done that!” When pressed if he wanted to make any other moves, John responded testily, “I’m a little fuckin’ salty right now Professor Henderson, now I don’t know *what* to do!" John was exasperated at the turn of events. The researcher believes this exasperation insinuates a deeper level of emotional investment, perhaps evidence on par with an entrance into the emotional investment 2.0 phase, though this is merely speculation.

Evidence suggests that upon subsequent exposure John would have had a heightened sense of anticipation that would have led to a broader understanding of emotional investment, or an emergence through the subsequent exposure phase and into the emotional investment 2.0 phase. Unfortunately, John's situation did not allow for the researcher to confirm these suppositions through a second and third interview.

## Composite Textural Descriptions

The five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 represent the lived experiences of students during simulations. When students unfamiliar with simulations are exposed to a simulation, students enter the initial exposure phase. It is during this phase that students initially felt reluctant about the simulation. Reluctance is due to negative experiences with traditional classroom activities and perceiving mainstream classroom activities as boring. As the instructor exposed the students to the rules and procedures of the simulation, students felt more reluctant about the activity and became confused by what was expected and how to proceed with the simulation.

Despite reluctance and confusion, the students felt a sense of piqued curiosity. Students experienced a sense of piqued curiosity because they had never participated in a simulation and the proposed activity represented something new. Students' piqued curiosity moved them to the next phase, growing anticipation.

During the growing anticipation phase, students grew increasingly engaged in the simulation due to two contributing factors. These were the competitive and collaborative nature of the simulation. The simulation required the students to compete against each other, while at the same time work with their teammate to trade, conduct diplomacy, or conquer allies and enemies. The competitive and collaborative design of the simulation led to increased motivation by the students to engage in the activity. Driven by competition and collaboration, students became increasingly motivated to participate, leading to an emotional investment in the simulation. This marks the emergence into the third phase, emotional investment.

Three factors attribute to students entering into the emotional investment phase. These are autonomy, choice, and strategic thinking. Students became emotionally invested in the simulations because the activities gave the participants the autonomy to proceed however they wished in the simulation. Moreover, students could make choices related to their turns, which included initiating diplomacy, trade, or war. Students also noted that participating in simulations forced them to think strategically about how to proceed. Students explained they were always wondering if they were making the correct choice, how their allies would react to their decision, how their enemies would respond to

their choice, and how to proceed to gain the upper hand over allies and opponents. These questions represent students making autonomous, strategic choices.

Students were initially reluctant and confused about how to participate in a simulation. However, after their initial exposure and participation in a simulation, students subsequently exposed to simulations felt heightened anticipation and excitement about the upcoming simulation. This attributes to the overwhelmingly positive emotional experiences that students had during their first simulation. Students noted high levels of engagement and motivation due to the competitive and collaborative nature of the classroom simulation. Moreover, the simulation allowed for students to make autonomous choices that led to strategic thinking. It is the knowledge that the student will have the autonomy to make decisions during a simulation that leads students to enter the final phase, emotional investment 2.0, upon the start of subsequent simulations.

Students experienced emotional investment immediately during subsequent exposure to simulations rather than growing anticipation due to the knowledge that they would have the ability to make choices, collaborate, and strategically plan how to win. It is the five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 that represent the lived experiences of students during simulations in a survey history course.

Through the use of individual and composite textural descriptions presented around the themes of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0, the researcher interpreted the meaning of the individual and composite textural descriptions to deepen the

understanding of students' lived experience during simulations. The interpretative process led to the discovery of three universal structural themes—reluctance, novelty, and experiential (see Figure 2).

The first universal theme, reluctance, elucidated the first phase in students' lived experience during simulations. It is during the initial exposure phase that students initially felt reluctant about the simulation. This is due to negative experiences with traditional classroom activities and perceiving mainstream classroom activities as boring. As the instructor introduced the students to the rules and procedures of the simulation, students felt even more reluctant about participating in the simulation and became confused by what was expected and how to proceed in the simulation. Thus, the initial exposure phase is universally understood to produce reluctance, that is to say, rather than becoming motivated to engage in the simulation, students experienced a greater reluctance to participate in the activity.

The second universal theme, novelty, enhanced the researcher's understanding of the lived experience, growing anticipation. During the growing anticipation phase, students became increasingly engaged in the simulation due to two contributing factors, which were the competitive and collaborative nature of the simulation. The simulation required the students to compete against each other, while at the same time work with their teammates to trade, conduct diplomacy, or conquer allies and enemies. The competitive and collaborative design of the simulation led to increased motivation by the students to engage in the activity.

Figure 2 Universal Themes

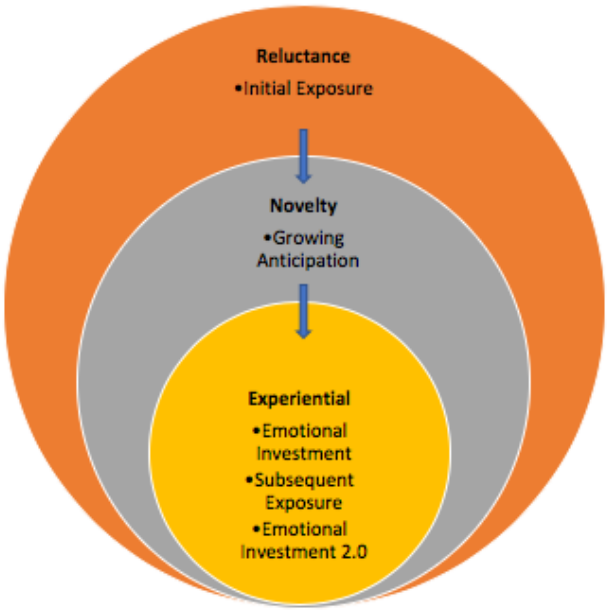


*Figure 2. Universal Themes of Students' Lived Experience During Simulations.* This figure illustrates the relationship of the five phases to the three universal themes reluctance, novelty, and experiential.

The second universal theme, novelty, enhanced the researcher's understanding of the lived experience, growing anticipation. During the growing anticipation phase, students became increasingly engaged in the simulation due to two contributing factors, which were the competitive and collaborative nature of the simulation. The simulation required the students to compete against each other, while at the same time work with their teammates to trade, conduct diplomacy, or conquer allies and enemies. The competitive and collaborative design of the simulation led to increased motivation by the students to engage in the activity.

The desire to compete and collaborate through the various avenues of trade, diplomacy, and war in the simulation was an entirely new experience for the participants.

Having never been exposed to such an activity in a classroom, the students experienced the second universal theme, novelty. The theme novelty is named as such because simulations engage students in a sui generis experience, unmatched in previous educational settings.

The third universal theme that deepened the researcher's understanding of the phenomenon of engagement during simulations was experiential. The experiential impact can be universally understood to encapsulate the emotional investment, subsequent exposure, and emotional investment 2.0 phases. Driven by competition and collaboration, students became increasingly motivated to participate, marking the emergence into the emotional investment phase.

Three factors attribute to students entering into the emotional investment phase. These are autonomy, choice, and strategic thinking. Students became emotionally invested in the simulations because the activities gave the participants the autonomy to proceed however they wished in the simulation. Moreover, students could make choices related to their turns, which included initiating diplomacy, trade, or war. Students also noted that participating in simulations forced them to think strategically about how to proceed.

Students were initially reluctant and confused about how to participate in a simulation. However, after their initial exposure and participation in a simulation, students subsequently exposed to simulations felt heightened anticipation and excitement about the upcoming simulation. This can be attributed to the overwhelmingly positive emotional experiences that students had during their first simulation. Students noted high

levels of engagement and motivation due to the competitive and collaborative nature of the classroom simulation. Moreover, the simulation allowed for students to make autonomous choices that led to strategic thinking. It is the knowledge that the student will have the autonomy to make choices during a simulation that leads students to enter the final phase, emotional investment 2.0, upon the start of subsequent simulations.

Students experienced emotional investment immediately during subsequent exposure to simulations rather than growing anticipation due to the knowledge that they would have the ability to make choices, collaborate, and strategically plan how to win. All of these contributing factors allowed students to *experience* history through the ability to assume a role, make autonomous choices, collaborate with partners and allies, while at the same time think strategically about how to compete and win against your peers. Therefore, the third universal theme was expressed as experiential because simulations fostered an environment of participation and promoted an atmosphere of emotional investment through experiential classroom conditions.

The five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0, can be understood within the purview of the three universal themes—reluctance, novelty, and experiential, all of which represent the lived experiences of students during simulations in a survey history course.

## Structural Descriptions

Applying structural descriptions to each individual's lived experience deepens our understanding of the relationship between the three universal themes—reluctance, novelty, and experiential, and the participant's lived experiences during simulations. The

following section outlines each individual's lived experience as it relates to each of the three universal themes.

Bob

Reluctance. Based on past negative experiences with classroom activities, Bob initially did not want to participate in the simulation. "Normally you just get told the facts…it can get boring…you don't retain much information." These negative experiences promoted an initial reluctance in attitude towards the simulation. Moreover, Bob felt that his personality did not match what was required of students to participate in a simulation. He noted:

> Initially, I didn't think it'd be a very good thing because I don't personally like to meet new people and have to talk to new people, that was my original thought…Overall, I wasn't looking forward to it.

Thus, it seems that Bob perceived the classroom activity to be redundant, or "boring," causing him to experience the universal theme of reluctance. Bob's negative perception of engaging in an unnecessary classroom activity perpetuated the myth that all future classroom activities would just be boring.

Moreover, Bob indicated that he was not comfortable in new social situations and therefore during the initial exposure was reluctant to want to engage with his partner and with different teams. Bob also indicated that he was reluctant to participate in the activity because initially, he was "confused by the rules."

Despite Bob's reluctance, he "thought it might not be so bad" since "it could be fun to do something different than just getting lectured at." Bob's changing perception of

the simulation can be attributed to the distinctiveness of the activity or the experience of the novelty of simulations.

Novelty. For Bob, simulations in a class were a novel concept, something he had never experienced before. Thus, despite initial reluctance, simulations intrigued him because it produced an environment where students were given the opportunity to make autonomous choices and compete. Moreover, it forced Bob to engage with his peers. "It's different…but I really liked it. It was fun because normally I don't meet many other kids or talk to anybody much. So, it allowed me to actually talk to people."

Bob noted that in his experience with a college course, you mostly "get told the facts" in class. However, simulations "let me think in a different way." Bob had to "take on the role of the national leader" and "try and make my nation thrive." The fact that students were able to simulate history, rather than be told history, motivated students and led to growing anticipation towards engagement. The genesis of emotional investment in simulations stems from growing anticipation due to the novelty of the activity.

Experiential. Out of a growing sense of anticipation for the simulation, Bob realized that simulations led to an ability to *experience* the historical moment rather than merely "learn the facts." It is here that students' engagement deepens due to emotional investment, through the exposure to subsequent simulations, which led to the deepest level of engagement, emotional investment 2.0. Why did this occur? For Bob, and the other participants, it was due to the experiential impact of simulations.

Bob stated, "The thing I liked… was that you had to make decisions as a country. You got to control what was going to happen. You had to figure out ways to get people

to help you…you had to come up with tactics to get multiple groups to join." Bob stated that simulations allowed him to experience history in a way that "put you in their [historical figures] shoes." Being able to engage in a simulation led to an emotional investment because Bob was given the autonomy to dictate how the simulation unfolded.

In subsequent exposure to simulations, Bob was motivated to engage in the activities because of the novelty of simulations, primarily due to the ability to make choices. While collaboratively working with his partners and allies, and at the same time competing against his enemies, Bob was forced to think strategically about how to proceed in the simulations. Motivation to engage, the ability to make choices, to collaborate and compete with Bob's peers were made possible because simulations represent exposure to a teaching strategy that is embodied by the experiential impact of simulations.

Larry

Reluctance. Larry's most frequently cited feeling in his previous educational experiences was boredom. "Boredom is the top thing. There's not really critical thinking; there's no analyzing…Class just drags a bit." Based on these experiences, Larry initially was reluctant to engage in the simulation. In fact, he expected the activity to be boring. "When you were explaining it, I thought here we go again. This is going to be another boring activity. I figured it was going to be a bust." His previous experiences with activities in college courses were mostly negative, thinking that a simulation would be a repetition of normal activities. These negative prior experiences led him to be reluctant to engage in the simulation initially.

Confusion towards the rules and procedures also added to his reluctance. "I was a little confused as to what we were supposed to do right away." As a result, Larry found himself believing the activity was going to replicate previously experienced boredom in classroom activities. But, as the simulation began, Larry realized that the simulation was unlike anything he had done in previous classes. Larry recognized that he was going to be given the freedom to make choices and to determine the outcome of the activity. The ability to make autonomous choices was a novel experience for Larry in a college class.

Novelty. Despite Larry's initial reluctance and slight confusion, Larry's intrigue gave way to piqued curiosity. Larry said that the more the simulation was explained and the "more you [the researcher] got fired up about it [the simulation], the more engaged and interested I became. I imagine the rest of the class, too." Larry described the first simulation as "a unique experience" and "definitely something new" for a college classroom.

Having experienced boredom in the majority of his classes, participating in a simulation was "almost kind of relieving" because it "made you look forward to getting up at 7:30 to come to class." Larry described his experience with simulations as "the most engaging activities that I've done in college" because he finally felt he had the ability to "think for yourself" because the students were able to do "what we wanted to do" within the simulation. In essence, the students were able to operate freely within the parameters of the simulation and determine the outcome of the simulation.

Larry explained that the freedom and autonomy in the simulations gave him and his teammates a "sense of ownership to the whole thing…you really owned the thing, the

role you had to play." For Larry, participating in simulations was a novel experience because he was allowed to take control of his learning by assuming a role. Having assumed this role, Larry was able to make choices to compete against his opponents while dictating the direction of the activity.

Larry described his experience with simulations as "a more new-school" approach to teaching, compared to the majority of his experiences with "old-school" lectures and notes. Simulations represented a "new way of teaching" that allowed he and his peers to engage in a teacher-directed, student-driven activity that provided them problem-solving experiences through roleplay. It was the novel experience of simulations that promoted an atmosphere where students began to experience history, rather than memorize facts. Here we see Larry engaging with the third universal theme, the experiential aspects of simulations.

Experiential. Not only did the simulations introduce the participants to a novel teaching strategy, but more importantly, the use of simulations fostered an environment where students were able to experience history. Larry realized the simulations were going to be "educationally enlightening…because were acting as if we really freakin' ran the colonies." Larry explained that simulations "allowed us to learn from the experiences…I felt like I was the governor, like I was the general, like I was the president, so you learn from it." For Larry, having been placed "in the shoes" of historical characters, the historical events were easier to understand "because you'd been there and done it." Larry said experiences made it easier to relate to the history and in essence created empathy for historical people who had to make difficult decisions.

Driven by the desire to win, Larry along with his allies were forced to make several tough decisions. They had to decide whether or not they were going to place their desire to win and conquer over aiding their allies. In several instances, Larry chose to betray his people, however, this betrayal in the *game* caused Larry to experience *real* feelings of remorse. "I felt like a jerk after doing that. They wanted to ally with us, and we took all their fur [for nothing in return]. The next turn, we canceled our alliance and absolutely stuck it to them [conquered them]." He went on to say, "I felt really poor about myself when I left that day. I didn't feel real proud of myself for doing something like that." When asked why he decided to do it replied emphatically "because we had to win!" The desire to compete and to win led to, in this instance, Larry experiencing genuine feelings of remorse.

When Larry was given the opportunity to roleplay, to experience the history, he felt more connected to the events and more connected to his classmates. "I think it was beneficial because of the level of involvement that it brought." Larry noted multiple times that he enjoyed how the simulations fostered the ability to interact with his peers, in which he began to experience a sense of community in the classroom. "I met a lot more people than I would have by doing them [simulations]." Simulations allowed Larry and his peers to experience history but also to experience community by promoting collaboration.

In other classes, Larry experienced the opposite of community. He noted that he "doesn't know anyone's name" in classes that are lecture-heavy. However, because of the experiential effect of simulations, Larry was able to connect with every single student

personally. "In our class, I know everyone's name." Moreover, the novelty of the simulations kept everyone on task and motivated students to participate. "Everyone was focused on the task at hand…instead of talking about what was going to happen on the weekend. I never experienced that kind of talk." Simulations, at least for Larry, represent a teaching strategy that brings to class a sense of wit, fancy, imagination, and thought. This is due to the novel, experiential influence of simulations.

Isaac

Reluctance. Like the other participants, Isaac assumed that the history class would follow a pattern of lecture and notes. So, when initially exposed to the simulation, Isaac was somewhat reluctant to assume his role in the simulation. His reluctance was reinforced when the rules and procedures of the simulation were discussed. He emphasized:

> At first, it was confusing. I haven't really done an activity like that and I didn't know how it really works. I thought it was going to be much harder than it really was. It was just a little overwhelming; I think we were all a little bit confused.

Isaac's reluctance and confusion reveal his lived experience can be identified with universal theme of reluctance.

Despite initial reluctance and confusion, Isaac described being intrigued by the activity. He articulated his piqued curiosity this way:

> This was a unique activity. It was somethin' different. A lot of professors or teachers, like I said, we didn't do none of the activities. You do an activity like this [the simulation] it gets you goin'.

Having displayed reluctance and confusion, it is evident that Isaac's experiences demonstrate that he moved through the universal theme of reluctance.

Novelty. It was Isaac's piqued curiosity for the simulation and his growing anticipation for the subsequent simulations that evidence Isaac's experience of the novelty simulations. Isaac affirmed that he had never experienced a simulation before the history class. "This was something big. I haven't done this in any of my other college classes. This was much different from any other class. It's usually do this paper…explain this…It was different from all my other classes."

Despite the uniqueness, Isaac found the experience to be an enjoyable one. "It was a unique activity…it gets you going; it gets you thinkin'. No one was zoned out by themselves. We're all engaged trying to figure out the next step…It was something different." As Isaac noted, the entire experience was a new, enjoyable one.

Isaac's lived experience also demonstrates his encounter with the novelty of simulations through his description of how he viewed the activities. He described them as "fun, intriguing, and engaging." He said that simulations got students "excited about it, you enjoy doing it…Excited to do the game and you're having fun while doing it." But, why would a non-history major who stated the first week of class he did not like history be excited about coming to class? The excitement attributes to the competitiveness of the simulations.

It appears that Isaac, along with the other participants, were highly motivated by competition and also the collaborative nature of the simulations. "It was fun to have everyone come together." He described how the simulations made he and his partner talk with their allies, because "you want to see what their thoughts are." Isaac found the collaborative nature especially motivating. He said he looked forward "to working with a

partner…when working with a partner, it's more interactive." The competitiveness, the collaboration, and the ability to make choices were all novel experiences for Isaac.

The simulations provided a unique experience, unlike traditional classes. "We're not just coming in, just sitting still. We don't have a boring class, with nobody talkin'. You look forward to the game, the next day, see who wins, find the outcome." Isaac said simulations are, "Something different. Lots of professors, teachers, we didn't do none of these activities. You do an activity like that [simulation], it gets you going." For Isaac, working in a competitive, yet collaborative, environment during simulations juxtaposed with traditional classroom experiences, demonstrates his encounter with the novelty of simulations.

Experiential. Like the other participants, Isaac's lived experience demonstrates his entrance into the most profound emotional investment of simulations due to the experiential effect of simulations. Once Isaac moved passed the initial reluctance he quickly assumed his role in the simulations. He began to speak as though he was actually the leader of the nation or country. He recollected "looking forward to trying to conquer groups or to join us so we can overpower another group." He was able to experience the decision-making process of historical figures through "trading goods, trading furs for land, or attacking."

Isaac displayed a strong desire to compete and win, similar to the other participants. "It was all about winning and getting land. We wanted to win; we had to win." To achieve victory, Isaac realized that he needed to work with his partner and his allies to achieve their goals, and ultimately win. Isaac's desire to win evidence him

experiencing strong emotions, and in several instances, strong enough feelings to betray his allies.

In one of the simulations, the Cherokee Nation joined forces with Isaac's European group to conquer a different Native tribe. They successfully defeated the tribe and divided the resources. But, the following turn, Isaac and his European allies announced they were betraying the Cherokee and decided to attack them, thus stealing their land and resources. Isaac recalled "feeling tough" about the decision to betray a group that had assisted them in previous turns. But, he noted that "we had to do it" because "we had to win." Here we see Isaac, like other participants, experience real emotions during a classroom simulation.

Simulations also allowed Isaac to experience history from a different perspective and a more historical perspective. "You're learning about it [history], but you're involved in the game, so you get it from your standpoint and their standpoint back in the day." Isaac is describing learning the historical facts, but also the experience of being placed in a problem-solving situation where he is forced to make decisions that historical people had to make. The emotional investment elicited from Isaac during simulations attributes to the novel, experiential impact of simulations.

<u>John</u>

Despite strong initial engagement in the course, halfway through the second simulation, John stopped attending class. Thus, John was only interviewed once instead of three times. After multiple attempts to schedule the second and third interviews, the

researcher learned that John had unforeseen circumstances that did not allow an opportunity to interview the participant two more times.

However, based on classroom observations and field-notes, it was evident that John was engaged and emotionally invested in the first and second simulations. Evidence suggests that John's lived experience aligns with the three universal themes. Unfortunately, John's situation did not allow for the researcher to confirm these suppositions through a second and third interview. The following conclusions are drawn from John's first interview, field notes, classroom observations, and document review.

Reluctance. John's response to the first grand tour question of his experience with other classroom environments echoes that of the other participants. That is, a lecture-heavy environment leads to boredom. John's previous educational experiences led him to believe that the first simulation was going to be similar to his negative experiences. He noted, "At first, it's kind of how you get the feeling with every activity. It's like, 'Do we really have to do this?' I'd kind if rather just sit there and get lectured at." John's description of his lived experience confirms a relationship to the universal theme of reluctance.

John indicated that initially, he did not want to participate in the simulation because he perceived it to be similar to other boring classroom experiences. Furthermore, he expressed confusion about the expectations. However, John indicated a sense of piqued curiosity towards the activity. "Once we really got into what the activity was going to be like and you started explaining how turns work, it was like, okay, this might actually be pretty fun." With a piqued sense of curiosity, John resolved to engage

in the activity because he had never participated in a simulation before and perceived the activity to be potentially interactive.

Novelty. John's piqued curiosity suggests that simulations represent a novel experience for him. John stated that the simulations "were the most interactive thing I've done by far." He also stressed that he had never engaged in a classroom activity that was as immersive as the simulations. He even said that simulations class sessions "didn't' feel like class," because he was so wrapped up in the simulations due to the "game-like feel" and the "competitiveness" of the activity.

John also mentioned that he was "surprised at how fun" the simulations were. The feeling of "excitement and fun" enhanced the interactive nature of the simulations. John said it was a new experience to engage in a classroom activity where "nobody was influencing the results" except through the decisions of the students. The interaction, the game-like feel, the excitement and fun of simulations affirm John was experiencing the third universal theme, the novelty of simulations.

Experiential. It appears that John almost transcended the classroom setting to a level of immersion that made him feel as though he were part of history. "It's more like it [the simulation] put you in the shoes [of historical figures], so it's almost like you became part of the history." John emphasized that engaging in the simulations allowed he and his peers to experience history and the historical decisions that key people had to make. "You got a deeper understanding than you would've gotten if you were just lectured at, because you weren't there, and you didn't know what it felt like." However, "You kind of got a feel for what it was actually like and what decisions had to be made

and how things played out." For John, experiencing history led to a deeper understanding of the actual history and allowed him to see and experience it through the eyes of historical figures.

John also described the experiential effect of simulations by explaining that simulations and the interactiveness made the learning "easier and fun." He asserted, "The fun allowed us to grasp the concepts whereas the game allowed us to feel the history." Simulations allowed John to the experience history in a novel way. He was able to "feel what it was like" to make difficult decisions. Moreover, John described gaining a deeper understanding of history through simulations. The more in-depth knowledge of history can be attributed to John's lived experience with the universal theme of the experiential impact of simulations.

## Synthesis

Lastly, the researcher analyzed the composite textural descriptions, described as the initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 phases. Comparing the composite textural descriptions with the structural descriptions: reluctance, novelty, and experiential produced a unified statement of the essence of the phenomenon as a whole. The essence of the phenomenon of engagement in simulations is emotional investment due to the experiential impact of simulations. The third universal theme, experiential, is the quintessence of student engagement during simulations in history classes.

The experiential impact of simulations can be universally understood to encapsulate the emotional investment, subsequent exposure, and emotional investment

2.0 phases experienced by students. Driven by competition and collaboration, students became increasingly motivated to participate in the simulations, marking the emergence into the emotional investment phase.

Three factors attribute to students entering into the emotional investment phase. These are autonomy, choice, and strategic thinking. Students became emotionally invested in the simulations because the activities gave the participants the autonomy to proceed however they wished in the simulation. Moreover, students could make choices related to their turns, which included initiating diplomacy, trade, or war. Students also noted that participating in simulations forced them to think strategically about how to proceed.

Students were initially reluctant and confused about how to participate in a simulation. However, after their initial exposure and participation in a simulation, students subsequently exposed to simulations felt heightened anticipation and excitement about the upcoming simulation. Heightened anticipation and excitement can be attributed to the overwhelmingly positive emotional experiences that students had during their first simulation. Students noted high levels of engagement and motivation due to the competitive and collaborative nature of the classroom simulation. Moreover, the simulation allowed for students to make autonomous choices that led to strategic thinking. It is the knowledge that the student will have the autonomy to make choices during a simulation that leads students to enter the final phase, emotional investment 2.0, upon the start of subsequent simulations.

Students experienced emotional investment immediately during subsequent exposure to simulations rather than growing anticipation due to the knowledge that they would have the ability to make choices, collaborate, and strategically plan how to win. All of these contributing factors allowed students to *experience* history through the ability to assume a role, make autonomous choices, collaborate with partners and allies, while at the same time think strategically about how to compete and win against your peers. Therefore, the third universal theme, experiential, exemplifies the core reason students emotionally invest and become engaged in simulations in a history course.

The five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0, can understood within the purview of the three universal themes—reluctance, novelty, and experiential, all of which represent the lived experiences of students during simulations in a survey history course. The experiential impact of simulations due to the emotional investment elicited from students signifies the essence of the phenomenon of engagement during simulations.

## Summary & Findings

Chapter 4 presented qualitative data that investigated the lived experiences of students who are taught using simulations in survey history courses. The researcher sought to determine what occurred during a simulation that engaged students.

### Research Question 1:

The first research question asked what are the lived experiences of students who are taught using simulations in a survey history course? During the growing anticipation and two emotional investment phases students evidenced enjoyment in the simulation due

to the competitive and collaborative nature of the simulations. Students found the competitive and collaborative environment of the simulations motivating. During the growing anticipation phase, students grew increasingly engaged in the simulation due to two contributing factors, which were the competitive and collaborative nature of the simulation. The simulation required the students to compete against each other, while at the same time work with their teammates to trade, conduct diplomacy, or conquer allies and enemies. The competitive and collaborative design of the simulation led to increased motivation by the students to engage in the activity.

Driven by competition and collaboration, students became increasingly motivated to participate, marking the emergence into the emotional investment phase. Three factors connect to students entering into the emotional investment phase. These are autonomy, choice, and strategic thinking. Students became emotionally invested in the simulations because the activities gave the participants the autonomy to proceed however they wished in the simulation. Moreover, students could make choices related to their turns, which included initiating diplomacy, trade, or war. Students also noted that participating in simulations forced them to think strategically about how to proceed.

After their initial exposure and participation in a simulation, students subsequently exposed to simulations felt heightened anticipation and excitement about the upcoming simulation. This can be attributed to the overwhelmingly positive emotional experiences that students had during their first simulation. Students noted high levels of engagement and motivation due to the competitive and collaborative nature of the classroom simulation. Moreover, the simulation allowed for students to make

autonomous choices that led to strategic thinking. It is the knowledge that the student will have the autonomy to make choices during a simulation that leads students to enter the final phase, emotional investment 2.0, upon the start of subsequent simulations. Individual textural descriptions, composite textural descriptions, and the structural description of the three universal themes detail the lived experiences of students during simulations in a survey history course.

Research Question 2:

Secondly, chapter 4 presented data that sought to answer research question 2, which asked how do students engage during simulations? During the initial exposure phase, students experienced reluctance and confusion. However, the students felt a sense of piqued curiosity. Students experienced a sense of piqued curiosity because they had never participated in a simulation and the proposed activity represented "something new." The initial reluctance portrayed by all participants embodies the first universal theme, reluctance. Nevertheless, the piqued curiosity, this idea that simulations are "something new" is represented in the third universal theme, novelty.

The desire to compete and collaborate through the various avenues of trade, diplomacy, and war in the simulation was an entirely new experience for the participants. Having never been exposed to such an activity in a classroom, the students experienced the second universal theme, the novelty of simulations. The novelty of simulations is named as such because simulations engage students in a sui generis experience, unmatched in previous educational settings.

The third universal theme that deepened the researcher's understanding of the phenomenon of engagement during simulations was the experiential impact of simulations. The experiential impact can be universally understood to encapsulate the emotional investment, subsequent exposure, and emotional investment 2.0 phases. Students experienced emotional investment immediately during subsequent exposure to simulations rather than growing anticipation due to the knowledge that they would have the ability to make choices, collaborate, and strategically plan how to win. All of these contributing factors allowed students to experience history through the ability to assume a role, make autonomous choices, collaborate with partners and allies, while at the same time think strategically about how to compete and win against your peers.

Students enjoyed being able to "control their own learning" through being able to "trade, ally, or conduct war." The "freeing" experience of autonomy was "refreshing" and made for a "unique experience" in a classroom environment. Across all participants and throughout all the transcripts the word "fun" was used countless times by the participants. The participants described the simulations as fun due to the competitive, collaborative, and game-like feel that the simulations produced.

In Chapter 5, the researcher draws conclusions from the data and also makes recommendations derived from the findings of the study for future research.

# CHAPTER 5

# SUMMARY, CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

## Summary of the Entire Study

Chapter 1 introduced this phenomenological study of the *lived experiences* of students who are taught using simulations in survey history courses and examines what occurs during a simulation that engages students. This study gives voice to the individual student experience during a simulation.

Chapter 2 provided a comprehensive review of the literature that related to the problem under investigation. Chapter 2 began with an examination of the learning theory constructivism, which led to the emergence of the pedagogical strategy known as simulations. Next, Chapter 2 examined the history of simulations and the evolution of their use over time in various areas which include the military, medical practice, and education. Then, the chapter reviewed relevant literature related to research on student engagement. Next, the chapter moved into an investigation of the effects of simulations on student engagement. Chapter 2 concluded by exploring simulations as pedagogical tools in history education.

Chapter 3 outlined the design of the qualitative study within the parameters of phenomenology. Research methods and procedures described specific research protocols that were followed to conduct the qualitative study.

Chapter 4 presented the data for each research question and explained the composite textural descriptions and the structural descriptions. The five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and

emotional investment 2.0, can be understood within the purview of the three universal themes—reluctance, novelty, and the experiential impact of simulations, all of which represent the lived experiences of students during simulations in a survey history course. The experiential impact of simulations due to the emotional investment elicited from students signifies the essence of the phenomenon of engagement during simulations.

Chapter 5 provided a summary of the entire study and research findings. Conclusions were drawn about the two research questions based on data from Chapter 4. This chapter also includes discussions and recommendations for practice and further research.

## Purpose of the Study

The purpose of this study is to explore the *lived experiences* of students who are taught using simulations in survey history courses. More specifically, what occurs *during* a simulation that engages students.

## Research Questions

Research Question 1: What are the lived experiences of students who are taught using simulations in a survey history course?

Research Question 2: How do students engage during simulations?

## Review of the Related Literature

In Chapter 2, a review of the literature examined the history of constructivism, a history of simulations, simulations as tools for military training, simulations as tools for medical training, simulations as tools in education, a history of student engagement

research, the effect of simulations on student engagement, and lastly, simulations as tools in history education.

Constructivism exposes students to learning by doing, outside of the rote memorization of isolated facts. In other words, the learner constructs knowledge from experiences which are unique to each learner, instead of merely responding to stimuli as in the behaviorist approach. Constructivism leads to student involvement in real-world learning experiences (Kalat, 2017). It is the constructivist approach that has led to the development of the use of simulations in education.

The educational constructivist approach had roots in the 20th century; however, man has known that humans "learn by doing" for thousands of years. The process of creating meaning from experiences has led to the development of simulative war games, which in turn, marked the inception of simulations as a learning tool (Sabin, 2012). The first examples of simulations originate from over two millennia ago in ancient China and India. Starting with *Wei Hai* in China and *Chaturanga* in India, these games represent ancient versions of *Go* and *Chess,* respectively (Sabin, 2012). Thus, games simulating either war or military concepts have been used to teach strategy and critical thinking for many years (D'Angour, 2013; Sabin, 2012).

In the 17th century, Christopher Weikman invented KOENIGSPIEL, an early version of wargames to take place on a board (Smith, 2010). Beginning in the early 19th century, Prussian officer Baron von Reisswitz began contemplating ways that he could formally teach military tactics and strategy. To accomplish this, he created *Kriegsspiel,* a game that simulated military operations and engagements on a massive sand table.

Published in 1824, *Kriegsspiel* marked the beginning of wargaming as a military training tool. Over the ensuing two centuries, armed forces from most nations have used various forms of wargaming for training and planning (Sabin, 2012). For this reason, simulations are used as training tools in the military as well as many other areas, such as medical training, a tradition that spans two millennia.

Beyond the use of simulations for war, simulations have also been pioneered in the medical field. Palaganas et al. (2014) note that patient and human anatomy models have been used since the ancient world, but healthcare simulations (HCS) in their modern form have evolved alongside technological advancements in aviation training and computer science. This progression of simulation use is critical, as simulation usage in medical education is now ubiquitous (Dieckmann et al., 2007; Lapkin et al., 2010; Palaganas et al., 2014; Rudolph et al., 2007). It is the inception of simulations into medical training that has led professionals in the field of education to experiment with their uses in a formal, educational setting.

The use of simulations in the classroom has undergone a series of phases. Rolfe (1990) notes that the first phase, which took place during the 1960s, was a period of wild, excitement. Simulations were a new concept and teachers were eager to implement them. From the 1960s to the late 1970s, researchers were very interested in the use of simulations and viewed them as a viable teaching tool. However, Rolfe (1990) notes that by the 1980s the use of simulations declined when research found that simulations did very little to raise student achievement but found that simulations are inherently engaging. Researchers now have shifted to discern what exactly engagement means and

how to assess engagement. Evidence over time appears to be overwhelmingly in favor of their ability to increase motivation, thus impacting a student's willingness to engage in the content (Auman, 2011; Beidatsch & Broomhall, 2010; Chartier, 1972; Cherryholmes, 1966; Justice & Ritzhaupt, 2015; O'Brien & Sears, 2011; Vos & Brennan, 2010).

The review continued with an investigation on the research of student engagement and how simulations affect student engagement. As the literature noted, a considerable amount of research over time cites the efficacy of simulations (Beidatsch & Broomhall, 2010; Carnes, 2005, 2014; Chartier, 1972; Cherryholmes, 1966; Frederick, 2000; McCall, 2010; O'Brien & Sears, 2011; Taylor & Walford, 1972).

A benefit of using simulations is that simulations are akin to experimental methodologies. An instructor can set up a simulation and run the activity many times, "varying the conditions in which it runs thus exploring the effects of different parameters" (Gilbert & Troitzsch, 2005, p. 14).

Herein lies the benefit to the history instructor. An instructor can employ a simulation and need not worry whether the results are "historically accurate." This reinforces the definition of a simulation game in that a simulation is a student-driven activity (Bailey, 2008). The students determine the outcome of a historical simulation. This may seem like a counter-intuitive approach to teaching history, yet it is precisely this approach that has been adopted by Reacting to the Past (RTTP) Consortium, a national group of colleges, universities, and individual professors dedicated to publishing *Reacting to the Past* history role-playing simulation games (Carnes, 2005).

Carnes (2005) is the founder of *Reacting,* and his recent Harvard University Press book, *Minds on Fire,* proposes that role-playing simulations are perhaps one tool that can enhance student engagement in history courses. According to Carnes (2014), in a study of 248 colleges and universities, fewer than 8% of college courses surveyed featured role-playing simulations. Moreover, Carnes (2014) argues that students are engulfed in subversive play. Carnes (2014) defines this as play or distractions that pull students' attention and minds away from academic work. He claims that our culture is engrossed in it, through the use of video games, the internet, and students' busy social lives. Thus, Carnes notes that no wonder students cannot engage in a lecture hall.

McCall (2010) suggests that historical simulation games can offer immersive and provocative experiences. "When playing a simulation…a learner can become immersed in a virtual representation of the past…and be provoked to consider how and why humans lived, made choices, and acted the way they did" (Kee, 2014, p. 230). While McCall's (2010) research validates the use of simulations in the teaching of history, his study is limited strictly to electronic simulations rather than an all-inclusive approach to the use of simulations, which would include face to face format. However, there is a paucity of research examining the efficacy of simulations and games in history education (Carnes, 2005, 2014; Cavanagh, 1975; Corbeil & Laveault, 2011; McCall, 2010).

Methodology and Procedures

The participants in the study consisted of four students who were identified as actively engaged in the survey history course. The researcher conducted three historic simulations, which were:

- Struggle for a Continent
- World War I
- International Relations

While conducting the simulations, the researcher utilized classroom observations. The observation data that the researcher anticipates gathering will be used to cross-reference data gathered during interviews (Corbin & Strauss, 2014). A semi-structured interview protocol was used to collect data from the participants following recommended formats from various research (Corbin & Strauss, 2014; Doody & Noonan, 2013; Jacob & Furgerson, 2012). Throughout the research process, memos and diagrams were produced following Corbin and Strauss' (2014) memo and diagram protocol.

Throughout the study, students were required to write three reflective essays about their experiences during the simulations. The documents were reviewed and cross-referenced with observation, memos, and interview data. As data was reviewed, categories and sub-categories were derived from the data from which patterns began to emerge (Corbin & Strauss, 2014).

## Discussion

For the data analysis methodology, the researcher selected Creswell's (2013) Data Analysis Spiral. First, the researcher categorized all transcripts, field notes, and memos related to individual participants. Next, the researcher began to process the data as a whole contextually. Using transcriptions from the interviews, the researcher started to identify general categories and identify patterns by listing all expressions related to the interview question: What were you thinking or feeling during the simulation? After

analyzing the transcripts, the researcher conducted member checks to improve internal validity of the data.

Following this process for each participant, the data revealed five distinct themes. The themes were identified as phases due to each theme representing a distinct period, or stage of feelings and emotions, during simulations in a college survey history course. To aid in the discovery of the five themes, or phases and their meanings, the researcher created a diagram (Figure 1) to assist in visualizing the data in as lean a way as possible (Corbin & Strauss, 2014).

The five phases represent the lived experiences of students during simulations. It is the five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 that represent the lived experiences of students during simulations in a survey history course.

Through the use of individual and composite textural descriptions presented around the themes of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0, the researcher interpreted the meaning of the individual and composite textural descriptions to deepen the understanding of students' lived experience during simulations. The interpretative process led to the discovery of three universal structural themes—reluctance, novelty, and the experiential impact of simulations.

Research Question 1.

The first research question asked what are the lived experiences of students who are taught using simulations in a survey history course? During the growing anticipation

and two emotional investment phases students evidenced enjoyment in the simulation due the competitive and collaborative nature of the simulations. Students found the competitive and collaborative environment of the simulations motivating. During the growing anticipation phase, students grew increasingly engaged in the simulation due to two contributing factors, which were the competitive and collaborative nature of the simulation. The simulation required the students to compete against each other, while at the same time work with their teammates to trade, conduct diplomacy, or conquer allies and enemies. The competitive and collaborative design of the simulation led to increased motivation by the students to engage in the activity.

Driven by competition and collaboration, students became increasingly motivated to participate, marking the emergence into the emotional investment phase. Three factors can be attributed to students entering into the emotional investment phase. These are autonomy, choice, and strategic thinking. Students became emotionally invested in the simulations because the activities gave the participants the autonomy to proceed however they wished in the simulation. Moreover, students could make choices related to their turns, which included initiating diplomacy, trade, or war. Students also noted that participating in simulations forced them to think strategically about how to proceed.

After their initial exposure and participation in a simulation, students subsequently exposed to simulations felt heightened anticipation and excitement about the upcoming simulation. This can be attributed to the overwhelmingly positive emotional experiences that students had during their first simulation. Students noted high levels of engagement and motivation due to the competitive and collaborative nature of

the classroom simulation. Moreover, the simulation allowed for students to make autonomous choices that led to strategic thinking. It is the knowledge that the student will have the autonomy to make choices during a simulation that leads students to enter the final phase, emotional investment 2.0, upon the start of subsequent simulations.

Research Question 2.

Secondly, chapter 4 presented data that sought to answer research question 2, which asked how do students engage during simulations? During the initial exposure phase, students experienced reluctance and confusion. However, the students felt a sense of piqued curiosity. Students experienced a sense of piqued curiosity because they had never participated in a simulation and the proposed activity represented "something new." The initial reluctance portrayed by all participants embodies the first universal theme, reluctance. Nevertheless, the piqued curiosity, this idea that simulations are "something new" is represented in the third universal theme, the novelty of simulations.

The desire to compete and collaborate through the various avenues of trade, diplomacy, and war in the simulation was an entirely new experience for the participants. Having never been exposed to such an activity in a classroom, the students experienced the second universal theme, the novelty of simulations. Simulations represent a novel experience because they engage students in a sui generis experience, unmatched in previous educational settings.

The third universal theme that deepened the researcher's understanding of the phenomenon of engagement during simulations was the experiential impact of

simulations. The experiential impact can be universally understood to encapsulate the emotional investment, subsequent exposure, and emotional investment 2.0 phases.

Students experienced emotional investment immediately during subsequent exposure to simulations rather than growing anticipation due to the knowledge that they would have the ability to make choices, collaborate, and strategically plan how to win. All of these contributing factors allowed students to *experience* history through the ability to assume a role, make autonomous choices, collaborate with partners and allies, while at the same time think strategically about how to compete and win against your peers.

Students enjoyed being able to "control their own learning" through being able to "trade, ally, or conduct war." The "freeing" experience of autonomy was "refreshing" and made for a "unique experience" in a classroom environment. Across all participants and throughout all the transcripts the word "fun" was used countless times by the participants. The participants described the simulations as fun due to the competitive, collaborative, and game-like feel that the simulations produced. Individual textural descriptions, composite textural descriptions, and the structural description of the three universal themes detail the lived experiences of students during simulations in a survey history course.

## Recommendations for Future Research

### 1. Interview Research Participants Who are not Actively Engaged in Simulations.

The participants that were selected for the current study were identified as being actively engaged in the course based on data collected using the BERI protocol (Lane & Harris, 2015). Utilizing the same protocol, which also identifies students who are not

engaged, researchers could seek to determine why these students were not actively engaged in class activities. Furthermore, based on classroom observations students who are not actively engaged in simulations could be selected for semi-structured interviews to determine why they were not engaged in the simulations. According to the data collected in the current study, students experienced five phases of engagement. Future studies could seek to determine what, if any, phases of engagement or disengagement students move through that causes them to disengage from simulations.

2. Do Students Experience the Same Level of Engagement with All Teachers?

Livingston (1970) found significant differences in attitudes between groups of students who played the same simulation under different instructors. Meaning, the person conducting the simulation can dictate how engaging the overall experience is. Other administrative variables also impact the level of engagement that students experience. Things like how the simulation is introduced, how games vary, and the debriefing, affect the experiences of players (Bredemeir & Greenblat, 1981). Utilizing the same simulations as found in the current study, future studies could compare the experiences of participants across different classrooms and with different teachers to determine if results correspond to the five phases of engagement and the universal themes. Do students experience the five phases of engagement and the universal themes under different instructors?

3. Use a Larger, More Diverse Sample Size Across Various Institutions for Future Qualitative Studies.

The results from the current study represent the lived experiences of four male liberal arts students at William Penn University. Future qualitative studies should seek to determine if diverse bodies of students, including male and female, traditional and non-traditional students, four-year liberal arts, four-year university, and community college students experience the five phases of engagement. Future qualitative studies should also seek to incorporate a larger sample size. Future studies could even attempt to determine if the five phases of engagement occur with students outside of higher education, such students in K-12.

4. Use the Qualitative Research in this Study to Create a Generalizable Quantitative Study.

Due to the qualitative nature of this study, the results are not generalizable to other diverse student bodies. Other students of various ages, sexes, and backgrounds may experience simulations entirely differently than the four participants in the current study. A recommendation for future studies is to create a quantitative study based on the present qualitative study. To make the results generalizable, future researchers could create a survey and ask participants to identify different types of engagement, levels of engagement, and various kinds of emotional investment based on the five phases of lived experiences. A quantitative study with a large number of research participants would be generalizable and would include people with a wide range of attitudes towards simulations.

## Summary

This study confirms the efficacy of simulations as a means to motivate and emotionally engage students in experiential activities (Beidatsch & Broomhall, 2010; Chartier, 1972; Cherryholmes, 1966; Chin et al., 2009; Justice & Ritzhaupt, 2015; Livingston, 1970; O'Brien & Sears, 2011; Taylor & Walford, 1972; Vos & Brennan, 2010). Furthermore, numerous studies have shown positive effects on attitudes when simulations and games are employed (Corbeil & Laveault, 2011; Harteveld et al., 2011; Pierfy, 1977; Reid, 1979), which is also confirmed by the current study.

The purpose of this study was to determine the lived experience of students during simulations in a survey history course, and more specifically, what occurs during a simulation that engages students. For the participants in this study, five phases of initial exposure, growing anticipation, emotional investment, subsequent exposure, and emotional investment 2.0 were identified. The five phases can be understood within the purview of the three universal themes—reluctance, novelty, and experiential, all of which represent the lived experiences of students during simulations in a survey history course. Of course, the results are not generalizable to all undergraduate students in survey history courses. However, the results of the current study deepen our understanding of what students experience during a simulation and why students appear to readily engage in the activities.

The experiential impact of simulations due to the emotional investment elicited from students signifies the essence of the phenomenon of engagement during simulations. The researcher believes that this study confirms that simulations are in fact the type of

pedagogical contraband called for by Emerson (1909) that will bring wit, fancy, imagination, and thought to history education.

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# APPENDIX A

## IRB APPROVAL

Dear Investigator(s):

Your study, Pedagogical Contraband: A Phenomenological Approach to Understanding Student Engagement During Simulations, has been approved by the UNI IRB, effective 12/6/17. You may begin recruitment, data collection, and/or analysis for your project. You are required to adhere to the procedures and study materials approved during this review, as well as to follow all IRB policies and procedures for human subjects research posted on the IRB website at rsp/uni.edu/IRB-home.

Your study has been approved in the following category: Expedited 6.

**Approval for your study will expire one year** from your approval date above. Beyond that date, you may not recruit participants, or collect and/or analyze data without continuing approval. To renew approval for your project, submit the Continuing Review and Closure form before the expiration date. The IRB office will email you the form 4-6 weeks prior to expiration or you can download it from the IRB website. **When your study ends,** you must download and submit the Continuing Review and Closure form as a **brief final report on your project**. If you are a student and planning to leave campus at the end of the academic year, make sure to submit this before you leave.

**If you need to make any changes** to your study, you must request approval of the changes before continuing with the research. Requests for modifications should be emailed to the IRB Administrator at anita.gordon@uni.edu.

**If during the study you observe any problems** or events pertaining to participation in your study that are *serious* and *unexpected*(e.g., you did not include them in your IRB materials as a potential risk), you must report this to the IRB **within 10 days.** Examples include unexpected injury or emotional stress, missteps in the consent documentation, or breaches of confidentiality.

**If you need a signed approval letter,** contact the IRB office and one will be provided for your records.

Best wishes for your project success.

Anita Gordon
IRB Administrator

# APPENDIX B

## LETTER OF COOPERATION WITH WILLIAM PENN UNIVERSITY

Dear Stephen Henderson.

William Penn University is pleased to collaborate with you on your project "Pedagogical contraband: a phenomenological approach to understanding student engagement during simulations."
We understand that participating in this research will include recruiting and interviewing students over the course of one semester. We had ample opportunities to discuss the research with you and to ask for clarifications. Furthermore, Stephen Henderson and key personnel for this project will maintain confidentiality of all research participants in all phases of this project. According to our agreement, project activities will be carried out as described in the research plan reviewed and approved by the University of Northern Iowa Institutional Review Board.

We look forward to working with you, and please consider this communication as our Letter of Cooperation.

Sincerely,

Dr. Noel Stahle
Vice President for Academic Affairs and Dean of Faculty

# APPENDIX C

## WRITTEN INFORMED CONSENT

UNIVERSITY OF NORTHERN IOWA
HUMAN PARTICIPANTS REVIEW
INFORMED CONSENT

Project Title: Pedagogical contraband: a phenomenological approach to understanding student engagement during simulations

Name of Investigator(s): Stephen Henderson

**Invitation to Participate**: You are invited to participate in a research project conducted by Stephen Henderson, a graduate student in the Department of Educational Leadership and Postsecondary Education at the University of Northern Iowa (UNI). The University requires that you give your signed agreement to participate in this project. The following information is provided to help you make an informed decision about whether or not to participate.

**Nature and Purpose**: The purpose of this study is to explore the *lived experiences* of students who are taught using simulations in survey history courses. More specifically, what occurs *during* a simulation that engages students.

**Explanation of Procedures**: Participants in this study will agree to three interviews to be conducted throughout the semester. Each interview will occur after a simulation has been conducted in class. Interviews will be video recorded using an ipad for reviewing and transcription purposes. Participants will be asked about their thoughts and feelings that occurred during the simulations. Participants will also be asked to write a reflective essay about each simulation. This essay is the same reflective essay that all students will be writing about the simulation.

**Discomfort and Risks**: Risks to participants are minimal. Risks to participants are similar to those experienced in day-to-day life. There are no foreseeable risks to participation.

**Benefits and Compensation**: I cannot guarantee that research participants will receive any benefits from participating in this study, although you will have the opportunity to reflect on your experiences during classroom activities.

**Confidentiality**: Any information that is obtained in connection with this study and that can be identified with you will remain confidential. Pseudonyms will be used in the research to protect your identity.

**Right to Refuse or Withdraw**: Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or lose benefits to which you are otherwise entitled.

**Questions**: The investigator will answer any questions that you have about the study. If you have additional questions or desire information about the study at a later time, you can contact Dr. Sue Alborn-Yilek at 319-273-6264 at the Department of Educational Leadership and Postsecondary Education, University of Northern Iowa. You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

**Agreement**:

> **I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.**

_____ _____
(Signature of participant) (Date)

_____
(Printed name of participant)

_____ _____
(Signature of investigator) (Date)

_____ _____
(Signature of instructor/advisor) (Date)

# APPENDIX D

## PERMISSION TO RECORD

**Permission Form to Video Record for Stephen Henderson's Dissertation Study**

I, _____ agree to be videotaped for the purpose of collecting data for Stephen Henderson's dissertation entitled, "Pedagogical contraband: A phenomenological approach to understanding student engagement during simulations." I understand the data collected will be used only for the study and participant's names and buildings will be kept confidential. Pseudonyms will be recorded in field notes rather than actual names that would identify participants. I also understand that once the field notes are collected and data is analyzed, the videotapes will be erased once the dissertation is approved by the dissertation committee.

Signed:

_____
Name of Participant

_____

Date

# APPENDIX E

## INTERVIEW QUESTIONS

Interview questions include the following:

1. Could you please describe a typical college class session? Followed by the prompt: How does this activity compare to other activities that you have experienced in other college courses? Followed by the prompt: how does this activity compare to activities you have experienced in other history classes in either college or high school?

2. Have you ever participated in a simulation before? Followed by the prompt: If so, when and please describe the activity.

3. Think about the simulation you just participated in, what stands out about it for you? Followed by the prompt: Please describe the most enjoyable moment of the simulation.

4. What were you thinking or feeling during the simulation?