The Role of Historical Simulations in an International Baccalaureate Primary Years Program Social Studies Class

Anna Hasenkamp

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THE ROLE OF HISTORICAL SIMULATIONS IN AN INTERNATIONAL BACCALAUREATE PRIMARY YEARS PROGRAM SOCIAL STUDIES CLASS

by

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DEDICATION

This dissertation is dedicated to my family and friends without whom my dissertation would have been impossible. To my wonderful husband, Coen Hasenkamp, thank you for encouraging me, proofreading, and pushing me when I felt like giving up. I love you beyond measure. To my parents, Rick and Donna Walden, your unending support has allowed me to pursue all of my dreams. To my sister, Rachel, thank you for always being there for me and helping me in immeasurable ways. To my best friend, Aubry Amerson, even though we may not be biologically related, we are also sisters, and your encouragement and support has meant the world to me. Finally, to Fran, my constant writing companion, you have made the numerous hours of writing much better with your purrs and sweet head butts.
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I have also had the privilege to work with amazing educators throughout my experiences as a teacher. I owe a tremendous amount of thanks to the 7th grade dream team of Sheila Barnes, Christy Bishop, Heather Gaston, and Brad Sponic. I would not be the teacher I am today without your friendship and inspiration.
ABSTRACT

This paper presents an action research study as part of a Dissertation in Practice. Based on observations from the classroom of the participant-researcher, Problem of Practice is described: an over-reliance on teacher-centered instructional methods and the mismatch of these instructional techniques to the pedagogy endorsed by the International Baccalaureate. Through the identification of this PoP led to a research focus concerning student achievement, instructional methods, and the use of historical simulations in the social studies classroom. As a result of this research focus, the research question of what, if any, is the possible impact of historical simulations on student achievement? In order to answer this question, a quasiexperimental research design was developed where data was collected through a pretest and a posttest in order to determine the student achievement based on a historical simulation exercise versus student achievement based on traditional, teacher-centered instructional methods. While the study did not produce statistically significant results, the study did produce practical results that could be considered by the participant-researcher in order to develop an action plan. The action plan that was developed as a result of the findings of this study provides a framework for the participant-researcher to continue to study the use of historical simulations while hoping to affect positive change as a curriculum leader.
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CHAPTER 1

OVERVIEW

The purpose of Chapter 1 is to provide an overview of the proposed action research study for this Dissertation in Practice (DiP). The present action research study sought to determine whether the introduction of historical simulations into a social studies curriculum can lead to increased student achievement while more closely aligning to the pedagogy expected to be utilized in an International Baccalaureate Primary Years Programme classroom (IBPYP). While the Problem of Practice (PoP) in the present action research study was developed based on observations from a classroom under the supervision of the participant-researcher, a reflection on previous social studies classes taught by the participant-research and a review of past research into instructional practices of social studies and literature concerning the expectations of IB social studies classes also informs the study.

Research suggests that students in social studies classroom do not connect personally with the material being taught, and students in the United States often describe history as boring (Zhao & Hoge, 2005). Chiodo and Byford (2004) posit that the perception of social studies as boring is related to instructional decisions made in their social studies classes.
Lectures and reading assignments from textbooks are cited as primary and passive modes of instruction that are frequently utilized in social studies classrooms (Chiodo & Byford, 2004; Zhao & Hoge, 2005). However, teacher-centered methods of instruction do not allow students to see the past as relevant to their lived experience. According to Schug, Todd, and Beery (1984), students believe that social studies is too far removed from their personal experiences and has no relevance to their future careers or lives. However, according to the IB (2014), students of history should “engage with exciting, stimulating, and personally relevant topics and issues” (p. 7). Such research reveals a disconnect between essentialist pedagogy common in social studies classrooms and the curricular framework expected to be utilized in an International Baccalaureate classroom; however, there is evidence to suggest that the use of historical simulations can be used to bridge this gap. Historical simulations have been used by educational practitioners to allow students to take on a different persona more fully to understand beliefs, actions, and motivations (Alvarez, 2008; Wedig, 2010; Pearcy, 2015). A review of the literature reveals that educational practitioners have praised the use of historical simulations to allow student to gain meaning that goes beyond reading material due to the active learning nature of such activities (Dawson & Banham, 2002; Gradwell & DiCamillo, 2013; Wedig, 2010). There is also evidence that the use of historical simulations allows students to connect content with their lived experiences (Dawson & Banham, 2002). The content and significance of literature related to the pedagogy of the IB and the benefits that can result from the use of historical simulations will be subject to a more detailed discussion in Chapter 2.
Chapter 1 will introduce the PoP and provide a background to the PoP. Also, Chapter 1 will briefly discuss the use of action research about the PoP, the purpose of the proposed action research study, and the research question. This information related to the methodology of the proposed action research study will be described in further detail in Chapter 3. Finally, Chapter 1 will provide a general overview of the DiP by detailing the suspected underlying problems resulting in the PoP, examining of the educational theories that underly the PoP, discussing the limitations of the proposed action research study, the significance of the proposed action research study, and defining terms that will be used throughout the study.

**Background to the Topic**

Educational reform movements have existed throughout the history of the educational system of the United States (Spring, 2014). The publication of *A Nation at Risk* in 1983 set off a reform movement that resulted in changes to school curriculums, testing, and educational policies all targeted at increasing the number of students who meet higher academic standards (Grant, 2014). According to Sperandio (2010), US schools have been given increasing freedom to choose their curriculum programs to spur on school reform and growth in student achievement. One curriculum that has become increasingly popular in recent years is the Primary Years Programme (MYP) of the International Baccalaureate (IB): the numbers of US schools designated as PYP has continued to grow since the introduction in 1994 (Bunnell, 2011). Sperandio (2010) points out that schools applying to become IB schools are often dissimilar, but may have similar reasons for their choice of the IB curriculum. These reasons include the desire to increase rigor and challenging academic standards while still maintaining flexibility for
schools to have control over content knowledge and assessments (Sperandio, 2010). In addition, the presence of an IB program is seen as an indicator of schools meeting college and career readiness expectations for students (Mikulecky & Christie, 2014). While PYP schools utilize a curricular framework established by the IB, individual schools have the ultimate control over the content chosen to be taught in PYP courses; this allows schools to implement academic standards that are required locally or nationally (IB, 2015b). However, there is still an expectation that the pedagogy endorsed by the IB will be used to teach PYP courses in schools with IB programs. This pedagogy includes a framework of learning that emphasizes a holistic approach where students are prepared to be active learners through creativity, critical thinking, and reflection (IB, 2015b). This pedagogy is influenced by progressive and constructivist schools of thought concerning educational theory.

**The Problem of Practice**

The identified PoP focuses on instruction in a PYP social studies classroom at Jacobs Elementary School (JES) (pseudonym), a suburban school in the south. This social studies classroom continues to rely on instruction and assessment from the essentialist paradigm of education. For example, lectures, the assignment of individual student reading, and comprehension question worksheets are often used in instruction. While, the described traditional instruction has been used to prepare these students for the South Carolina Palmetto Assessment of State Standards (SC PASS), a high stakes assessment completed at the end of the course, it does not fit into the active, student-centered, and inquiry-based pedagogical approach that is promoted by the IB nor does it engage students in the social studies content. JES is a school that is in the process of
becoming an IB World School and moving to the IBPYP curriculum. As such, the observed PoP was that overreliance on passive learning techniques to prepare students for standardized tests. This identified PoP took into consideration that students need to be exposed to more active, student-centered learning while at the same time continuing to perform well on measures of academic progress. The present action research study proposed that the introduction of active learning through historical simulations will result in improved levels of student achievement.

**Methodology**

An action research methodology provides the best-fitting context for the present study. The proposed study fit into the ideals of action research because the participant-researcher was addressing a problem of practice from the a classroom where the participant-researcher was a stakeholder. While aforementioned research supports the use of historical simulations to increase student achievement, conclusions drawn from traditional educational research may not be immediately applicable to teachers' individual classrooms (Mertler, 2014). This reality makes the utilization of action research a good fit: action research empowers teachers to make instructional and classroom decisions by looking at a local problem (Mertler, 2014). Through a systematic but cyclical process, the researcher evaluated and will continue to evaluate the use of historical simulations on student achievement in a local classroom.

**Statement of purpose.** Historical simulations were used to create an active learning environment that was more closely aligned with the curricular framework and expected pedagogy of the PYP while still preparing students to be successful on the SC PASS. The primary and specific purpose of the proposed action research study was to
evaluate the impact of implementing role-playing exercises in the curriculum of a fifth-grade IBPYP social studies classroom on student achievement. The secondary and more general purpose was to devise an action plan based on the results of the study.

**Research Question.** The following research question was used to guide the implementation of the proposed action research study: *What is the possible impact of historical simulations on student achievement?* In order to answer this research question, a quantitative, action research study was carried out at within the fifth-grade IBPYP social studies classroom at the school where the participant-researcher was employed as the coordinator for the IB program.

**Methodology.** The present action research study was undertaken to collect and analyze quantitative data using a quasiexperimental design because of the inability to randomize the samples due to predetermined classes. This data was collected identified student achievement through a pretest that was administered prior to the intervention and a posttest that was administered after the intervention. Both the treatment and the control group took identical pretests and posttests. The specific nature of this proposed action research study will be further described in Chapter 3.

**Suspected Underlying Causes**

Research indicated social studies classrooms rely on instructional strategies, such as lecturing and reading from textbooks, despite negative perceptions of these passive learning techniques and decreased engagement of students (Chiodo & Byford, 2004; Zhao & Hoge, 2005). In addition, the passive modes of instruction that research suggested are oft-used in the social studies classroom do not fit into the curriculum necessitated by the IB. The IB curricular framework encourages active, inquiry-based
learning and reflection (IB, 2013). Tookey (1999) states that direct experience and action are a central tenet of the IB curriculum, and within this curriculum for social studies classes, students are expected to learn to think instead of simply learning facts from a body of knowledge. An analysis of curricular demands of IB world history classes includes the requirement that students “do” history through work with primary and secondary sources in order to go beyond rote memorization (Byrd, 2007). The IB (2014) lists the criteria that students should meet as not only knowing and understanding social studies content, but also investigating, communicating, and thinking critically about content. Passive modes of instruction simply do not fit these requirements. However, research suggests that social studies teachers have struggled to move from covering facts into teaching with critical and higher order thinking skills in the era of accountability (Vogler & Virtue, 2007).

Cuban (1993) posits that reliance on teacher-centered instructional strategies is a cultural phenomenon that is widespread due to history, the organization of schools, and the requirements of teachers concerning classroom management. However, Cuban (1993) also acknowledges that standardized achievement test scores and meeting demands for standards encourage teacher-centered instruction because such instruction often enables teachers to finish the textbook by the end of the class. As the importance of standardization and tests has increased, teachers have resorted to utilizing essentialist pedagogy in their classrooms (Cuban, 1993; Ametepee, Tchinsala, Agbeh, 2014).

Faulkner and Cook (2006) posit that the use of passive strategies is influenced by high-stakes, standardized assessments that are often required of students at the end of courses. Research by Vogler (2008) similarly concludes that even when using a
combination of teacher and student-centered instruction, instructional decisions are influenced by testing when students are required to take a high-stakes standardized assessment. Time is often a scarce resource in classrooms; research suggests that the required standards and limited class time in social studies classrooms result in limited coverage of material (Cuban, 1993; Vogler & Virtue, 2007). From interviews with teachers, Faulkner and Cook (2006) found that while teachers believed the student-centered instruction and activities most benefitted students, the majority of teachers interviewed utilized whole-class, teacher-directed activities more frequently and high numbers of teachers reported that state assessments had negatively affected their classroom practices.

Teachers must learn to work within the model of testing for accountability. McTighe and Brown (2005) state accountability measures are here to stay: “High stakes accountability measures are not just a passing fad. They are part of the lifeblood of teaching and learning in the 21st century” (p.243). However, McTighe and Brown (2005) assert that teachers must learn new ways to teach in this period of renewed accountability. Vogler and Virtue (2007) argue that while teachers must accept curriculum standards and can use examples from state-mandated tests when developing lesson plans, they must also use their own pedagogical beliefs to guide students to learn more than a set of facts for a test. Based on these research findings, the participant-researcher of the proposed action research study will plan, design, and implement a study to evaluate the use of historical simulations through role-playing exercises on student achievement.
Active Learning

Active learning refers to students dynamically participating in the process of learning through gathering information and problem-solving instead of passively receiving knowledge (Edwards, 2015). It is propelled by the belief that learning is more effective when students move beyond teachers transmitting knowledge while they listen; active learning requires that students do more than memorizing. Bonwell and Eison (1991) note that active learning is student-centered and encourages participation to stimulate inquiry. According to Meyers and Jones (1993), active learning incorporates dialogue, literacy through both reading and writing, and reflection. However, the key feature of active learning is that students are involved in the acquisition of knowledge through doing instead of simply memorizing (Bonwell & Eison, 1991). As such, active learning pedagogies encompass a variety of techniques and instructional strategies including inquiry-based activities, research-based activities, the creation of presentations, discussions, experiments and other hands-on projects, games, and building models (Edwards, 2015). Bonwell and Eison (1991) also include debates, role-plays, dramas, and peer-teaching as examples of active learning.

Social Studies. In the social studies classroom, active learning results in students doing history instead of taking notes about history. Levstick and Barton (2001) describe doing history as students being engaged in substantive inquiry through developing questioning, investigating with sources to collect data, analyzing the data, and then drawing conclusions. Similarly, Edwards (2015) describes the ideal social studies classroom taught using active learning strategies as one where students are consistently engaged in the intellectual activity and the use of social activity. For example, students
should be required to explain answers, make connections, and collaborate with others (Edwards, 2015).

**Historical Simulations.** Historical simulations have been widely defined. However, in this research project, the term historical simulation indicates when a student takes on a different persona than that of themselves in order to more fully understand beliefs, actions, and motivations throughout different historical eras (Alvarez, 2008; Wedig, 2010; Pearcy, 2015). According to Wright-Maley (2015), there has been an increased interest in the use of historical simulations in the classroom. Educational theorists and practitioners regularly define historical simulations as an active learning technique. McCarthy and Anderson (2000) describe historical simulations as a form of active learning because of the emphasis on collaboration, critical thinking, student-directed research and learning.

**Theoretical Framework**

The decision to use historical simulations is based on the belief that the inclusion of historical simulations into the curriculum will align with the goals, curricular framework, and pedagogy espoused by the IB. The proposed action research study will thusly be grounded in curricular theories that influence the development of the goals, curricular framework, and pedagogy that the IB utilizes.

**The role of the school.** The IB states in its mission that the goal of an IB education to produce lifelong learners who will work towards the creation of the better world (IB, 2013). Education and the school have long been linked to the creation of responsible citizens and positive social change (Adler, 1982; Counts, 1932; Dewey, 1897). Progressive theorists envision the classroom as small communities where students
are given freedom and opportunity to grow (Ellis, 2014). However, progressives, such as Dewey (1897) acknowledge that schools are not the sole arbiters of education: education can exist without schools because it is a continual process where the learner is shaped by any number of forces throughout their life. However, Dewey (1897) argued that the best results from school motivate students to want to continue learning throughout their life. According to Dewey (1938), schools should guide students to greater understandings about themselves and the world they live in because the students of today will be making the decisions of tomorrow, and these students need to be prepared to face challenging decisions. Perennialists also acknowledge the role of the school as important for future generations. Adler (1942, 1982) similarly considered education to be a lifelong process, with the role of schools to teach through its subjects how to learn. Adler (1982) suggested that a quality education enabled students to enjoy life, participate in society, and enact positive change in the world. Other theorists have expanded on these views by suggesting that education should actively encourage social and democratic change throughout society. Counts (1932) called for educators to use schools to change the existing social order through educating students to specifically understand the importance of continuing democratic traditions and end oppression. Freire (1968) advocated using schools and formal education to raise awareness about oppression and encourage learners to be able to use their education to fight against oppression.

**Curricular framework.** Schools that implement IB programs are required to utilize a specific curricular framework designed by the IB. Based on this prescribed curricular framework, IB programs are examples of perennialist thought. Adler (1982) advocated the use of a common curriculum based the belief that increasing specialization
and vocational training in K-12 schools were undermining the quality of education student received and negatively affecting society. Hutchins (1950) further argued that overly specialized courses of study result in the isolation of students, while a broad and standard curriculum ensures the ability to communicate and relate to different people. Adler (2013) argued that because all knowledge worth teaching was unchanging, all students should study the same curriculum. Adler acknowledged that the liberal arts curriculum he espoused was generally reserved for the socially elite. However, he believed that because this curriculum consisted of universal truths, it should be taught to all students (Flinders & Thornton, 2013). Hutchins (1953) stated this belief by saying, “the best education for the best is the best education for all” (as quoted in Flinders and Thornton, 2013, p. 145).

Within schools that are designated as IB World Schools, IBPYP students are required to complete courses which are labelled as transdisciplinary in that they transcend one specific discipline and draw in multiple types and sources of knowledge (IB, 2015b). The idea of a prescribed curriculum for IB schools was developed after World War II with the increase in international mobility when schools needed to prepare students for admission to colleges within the students’ home countries; this allowed students to receive a comparable education anywhere the program was in place (Tarc, 2009). Hutchins (1936) echoes similar concerns that a common curriculum throughout educational systems would result in students better prepared for to study at college.

**Pedagogical basis.** The IB places great importance on how students experience learning; teaching and learning in IB classes are expected to be learner-centered and collaborative (IB, 2013). The IB describes teaching and learning through a nonlinear
cycle of “asking, doing, and thinking” (IB, 2013, pp.4) Progressive and constructivist theorists such as John Dewey, Jean Piaget, and Lev Vygotsky have influenced the development of learner-centered classrooms.

**Active learning.** Dewey (1938) argued that how students learn is just as important as what students learn. Dewey (1938) stated: “It is a great mistake to suppose… that the traditional schoolroom was not a place in which pupils had experiences” (pp. 26). However, Dewey (1938) warned that these experiences are often negative because they involve boredom and rote memorization. Dewey (1938) believed that education should do more than produce students who can recite information. Dewey (1916) was critical of presenting knowledge with the basis for students to learn it for a reward or punishment. Dewey (1897) believed that when teachers utilized passive methods of learning for students, they were going against the active nature of children. Instead, Dewey (1916) suggested activities that directly engage students in the learning based on the personal interests and natural curiosity of students. According to Dewey (1916), such meaningful learning experiences would shed light on learning by connecting prior and future knowledge. Dewey (1938) argued that it was the role of teachers to provide these active experiences. Piaget (1952) similarly described the role of the teacher to organized the environments for students to gain knowledge instead of simply telling students what to know.

**Inquiry.** Dewey (1938) offered inquiry as an active learning experience that was an alternative to passive and irrelevant learning experiences. Vygotsky (1980) also determined that inquiry was a guiding force in knowledge development. According to Dewey (1916), because the inquiry is a method of problem-solving that results in greater
knowledge, schools should be a place where students are asked to solve realistic problems using their existing knowledge and skills. Dewey (1938) posited that students could use inquiry to develop long-term projects that met their individual interests freely. However, Vygotsky (1980) believed that students needed to be guided through inquiry; he argued that effective inquiry utilized problems that students could not complete unaided but were able to do with assistance. Vygotsky (1980) termed this the zone of proximal development.

**Reflection.** Dewey (2007) asserted reflection was key to meaningful learning experiences in an inquiry-based curriculum. Dewey (2007) argued that inquiry allows students to refer to their own background and experiences, but through reflection, students are able to build meaning by connecting new information to previous knowledge. Piaget (1952) referred to the prior knowledge that students build on as their schema and the process of creating connections and new knowledge accommodation and assimilation.

**Lived Experiences.** Dewey (1938) asked the question "How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation of the living present?" (p 23). Dewey (1956) contended that teachers could and should build on the interests of their students in order to connect the curriculum to their lived experiences. In doing so, Dewey (1956) argued that teachers would pave the way for students to understand and succeed in school. Piaget (1952) acknowledged that the transfer of knowledge is a difficult process learners all have different background experiences that inform their interpretation of what they are learning.
Collaboration. Dewey (1916) argued that learning was naturally a social process, and later theorists expanded on this view. Vygotsky (1962) argued that collaboration is necessary because meaningful learning occurs through social interaction and the use of language. According to Vygotsky (1980), learning cannot occur in isolation. Freire (2000) also advocated the use of dialogue to encourage learning.

Operational Definitions

The following operational definitions will be used throughout the proposed action research study.

Active learning: Active learning refers to instruction that has students participating in the construction of knowledge by solving problems, working collaboratively, or apply knowledge to new situations. Active learning requires students to think critically and deeper about content (Thomas, 2009).

Collaborative learning: Collaborative learning refers to the interaction and communicating with others during the learning process (Vygotsky, 1962).

Historical simulations: In the context of this study, historical simulations will refer specifically to the act of taking on a historical persona through research and using the knowledge gained to make decisions (Alvarez, 2008, Wedig, 2011; Wright-Maley, 2015).

Inquiry: Inquiry refers to the use of authentic problems to guide learning (May, 2009).

International Baccalaureate: The International Baccalaureate is a continuum of an internationally minded curriculum model that is encompassed by the Primary Years Programme, the Middle Years Programme, and the Diploma Programme and governed by an executive body (Lineham, 2013). These programs feature a prescribed curriculum
that is knowledge-based and focuses on the importance of the development of critical thinking skills (Ellis, 2014).

*Lived experience:* Lived experience is the culmination of one’s human experiences. A person’s lived experience includes how their daily life is affected by race, class, gender, sexuality, religion, and other cultural characteristics. The lived experience of a person affects how they perceive and construct knowledge (Given, 2008).

*Primary Years Programme:* The IBPYP is a flexible curriculum designed by the IBO for students aged 3 to 12. The curriculum itself utilizes a transdisciplinary approach for students to study language acquisition, language and literature, individuals and societies, sciences, mathematics, arts, physical and education, and design (International Baccalaureate, 2015). The subject groups are taught using the content from local, state, or national standards, but through the framework developed by the IB. As such, it is expected that teachers will utilize unit plans that involve multiple subject areas, provide context for global learners, and incorporate conceptual understanding (International Baccalaureate, 2015).

*Reflection:* Reflection is a metacognitive thought process where students consider prior and current learning to create connections and build knowledge (Dewey, 1938).

*Student Achievement:* In the context of this study, student achievement refers to the learning outcomes based on the students’ scores on a test.

**Delimitations, Limitations, Assumptions, and Other Considerations**

The goal of this present action research study was to continue to improve professional practice within one classroom observed and taught by the participant-researcher. Many considerations of this study were thusly related to the nature of the
study, the research question selected, and the participants. The research question that guided the proposed action research study focused solely on the academic achievement of a select group of students at one elementary school. The participants are limited to the classroom the participant-researcher used for the study to collect data, and there are not great demographic variables present. As such, the data collected can only provide information about this specific group of students and cannot be generalized to a larger population. This study is quantitative in nature, and while the data generated from the study may show correlation, it does not reveal causation. The variable of student achievement was measured by a test. While all efforts were made to ensure that the test was both valid and reliable, the results of such a local study are affected by the validity and reliability of the teacher-created test. In addition, any outside factors that may result in lower or higher scores on the test were not taken into account.

Furthermore, the positionality of the participant-researcher must be considered. The participant-researcher is investigating student achievement that is occurring in a classroom that they are an active participant in instructional design. Until the study was completed, the participant-researcher did not know if the implementation of role-playing exercises will have the desired effect. However, for the study to beneficial, the result and analysis of these findings had to be honest and forthcoming. The participant-researcher also had to be willing to examine and understand her own biases when conducting research to remain honest. The participant-researcher, in this case, was open to unexpected results or data and has reported honestly about the results of the study.
Significance of the Study

The present action research study has contributed to knowledge about the role of historical simulations in the social studies classroom, resulted in practical knowledge that will be applied to the participant-researcher’s classroom, and help the participant research further advance social justice through education.

Knowledge generation. Research into historical simulations shows an alignment between the curricular theories that underlie the IB and the use of role-playing exercises. Role-playing allows students to be active in the learning process as they take on personas (Alvarez, 2008). In addition, students are given an opportunity to reflect on a debriefing period (Pearson & Smith, 1985). Additionally, researchers have found positive benefits to utilizing historical simulation: role-playing has been shown to increase engagement, understanding, and student achievement (Johnson, Boyer, and Brown, 2011; Parker et al., 2011). The participant-researcher hopes to add to the existing literature that suggests historical simulations, such as role-playing, enable teachers to follow state-mandated standards and prepare students for accountability measures. The present action research study has generated further knowledge about the benefits and limitations of the use of historical simulations in the social studies classroom for the participant-researcher.

Practical application. The proposed action-research study will be used to develop appropriate activities for the classroom of the teacher-researcher. According to Reeves (2011), while the image of a teaching is often of a teacher at the front of the classroom, the deep work of teaching is the instruction design. It is in the instructional design of curriculum and individual lessons where teachers take into account what their students need to learn, how they will teach this information, and how they will assess
mastery (Reeves, 2011); in short, in instructional design, teachers select their pedagogy. The PoP in the proposed action research study looked at the issue of instructional design in a local and particular social studies content. By evaluating decisions concerning instructional design, the present action research study was aligned with educational leadership and policies because changes in education will not occur spontaneously. Instead, as argued by Fullan (1993), important changes comes through the actions of individuals. Through individual actions, teachers can serve as leaders and affect change.

**Social justice and diversity.** Multiculturalism is an important component of IB. While the IB was originally founded to educate the children of internationally mobile students, it has increasingly become less of an international curriculum and more of a national curriculum. The expansion of the IB in recent years has the resulted in the change that the IB is no longer focused on internationally mobile students, but instead internationally minded students who appreciate diversity (Nugent & Karnes, 2012). As stated by Cole-Baker (1989), a founder of the IB, “in a true international school, international education is a question of the environment; in a national school, it is a frame of mind” (as quoted in Hill, 2007). According to the IB (2013), the IB curriculum places inherent value on intercultural understanding in its mission statement: “These programmes encourage students across the world to become active, compassionate, and lifelong learners who understand that Other people, with their differences, can also be right” (p. iii). In developing this frame of mind in all students, the IB (2013) defined intercultural understanding as being able to recognize and reflect on one’s own perspective as well as the perspective of Others. The use of historical simulations to fit into the curricular framework of the IB must also include an understanding of the
importance of multiculturalism. Traditional instructional methods, such as reading and lecturing, do not enable students to gain this multiperspectivity at more than face value. Freire (2000) compared traditional instruction to banks: teachers make deposits of facts and information into their students’ heads that students are expected to memorize. However, historical simulations invite collaboration and dialogue into the classroom: students are able to cooperate in order to work through complicated and difficult issues and discuss causes, effects, advantages or disadvantages to lives and lifestyles that are dissimilar to their own (Fisher & Vander Laan, 2002).

The proposed action research study further fit into the social justice focus of action research through an examination of teaching methods and classroom learning conditions (Dana & Yendol-Hoppey, 2014). According to Fullan (1993), people often choose to become teachers for moral purposes. Fullan (1993) reports that surveyed teachers most frequently responded they became teachers to make a difference in the lives of students. Fullan (1993) posits that teachers can become agents of change in the classroom and in students’ lives in a variety of ways including continuing to learn and evaluate the use of different pedagogies. One goal of this present action research was to improve the participant researchers individual educational practices. Improved practices can lead to better student learning outcomes for all students, and educational opportunities can become more equitable.

One side of creating more equitable educational outcomes is the idea of fairness. According to Field, Kuczera, and Pont (2004), fairness in education means that gender, socioeconomic status, or ethnic background should not affect one’s ability to receive an education. An examination of classroom practices can affect fairness. In the proposed
action research study, the use of role-playing seeks to increase student achievement through active involvement of all students.

Improved practices can also lead to improvements in social justice outside of the realm of education. Research suggests that historical simulations can be used to aid in understanding and empathizing with the positions and perspectives of Others. DiCamillo and Gradwell (2012) cited the creation of historical empathy as a key reason that teachers choose to utilize historical simulations. Pellegrino, Lee, and D’Erizans (2012) posit that when students take on the roles of agents of change through role-playing in historical simulations, students gain historical empathy as they seek insight that may be different from their own. When teachers can help students understand empathy, a praxis can begin that results in a wider social change (Leistyna, 2008). Many students in the present action research study did not have world experiences that enable them to see multiple viewpoints or diversity; however, through taking on roles with differing viewpoints, the student was able to understand the greater importance of accepting differing viewpoints.

**Conclusion**

While the increase in standardization has led to an over-reliance in teacher-centered instruction, IB pedagogy necessitates teachers to implement instruction that allows students to participate in the social studies classroom actively. The proposed action research study will take into account curricular theory concerning the role of schools, curricular design, the importance of experience in learning, and collaboration. The examination of these curricular theories along with past research have emboldened the participant-researcher to act on an observed PoP, and the proposed action research
study will examine the effect of historical simulations on student achievement in a PYP social studies classroom. Through designing and planning the proposed action-research study, the participant-researcher is taking part in a tradition where teachers act as agents of change in the classroom by evaluating how to balance the instructional dilemma of preparing students for standardized tests and providing a learner-centered classroom environment.

The next chapter, Chapter 2, provides a literature review. Past studies and research were summarized to support the decision to undertake the proposed action research study.
CHAPTER 2

LITERATURE REVIEW

The purpose of Chapter Two is to provide a literature review for the present action research study for this Dissertation in Practice (DiP). This action research study involved the implementation of historical simulations to engage students with content in one fifth-grade IBPYP social studies class at Jacobs Elementary School (JES). The proposed Action Research study focuses on these historical simulations designed to meet the aims of the IBPYP and to provide fifth-grade social studies students with rich learning experiences in order for them to see the connection between the state-mandated history curriculum, their own lives, and issues in the modern world that will enable them to find academic success. The literature review will begin by discussing the importance of a review of literature in action research and the methods with which literature was selected. The literature review will then inform the reader of the literature related to the variables of the study. These variables include the PYP classroom, the implementation of historical simulations, and student achievement. Theoretical and research studies will be presented to define these variables further, inform the reader of the most important aspects of each variable, and lay the foundations of common themes to be explored. Following this discussion, this literature will provide a lens to view the present action research study through a theoretical framework, a contextual framework, and an instructional framework.
Throughout this discussion, the literature review will inform the reader of prior research and varying methodologies used to investigate key concepts of the study. These key concepts include active learning, inquiry, reflection, lived experiences, and collaboration. Prior research was selected that clearly related each of these key concepts to the proposed action research study. Each of these key concepts will be explored through the common themes of the role of the key concept in the IB curriculum, the ability of the key concept to improve student achievement, and the integration of the key concept with historical simulations.

**Importance of the Literature Review**

The purpose of this literature review is to aid the reader in understanding the proposed Action Research study through a synthesis, analysis, and evaluation of theoretical and scholarly works. This is important within action research in order to The review of the related literature will establish that the use of historical simulations is grounded in educational theories, provide insight into the key concepts contained within the present action research study, and explain the instructional framework for historical simulations that was developed as a result of previous scholarly research.

This literature review was guided by the research question: *What is the possible impact of role-playing on PYP student achievement?* The literature review will also clearly show the need for the proposed action research by identifying gaps in the literature concerning a particular topic (Mertler, 2014).

**The International Baccalaureate and the Primary Years Programme**

The proposed action research study examines the classroom practices of an IBPYP social studies classroom. An understanding of the history, context, and other considerations of the IMYP informs the proposed action research study.
A Brief History and Current Status

The IB formed in 1962 in Geneva, Switzerland as a program of educational study and college preparation for the final 2 years of high school for students who were receiving their education outside of their home countries (Hill, 2010). However, in the years since its initial formation, the IB has developed into a continuum of educational programs for students beginning in kindergarten and ending with high school graduation (Bunnell, 2011). A program for the IBMYP provides a curricular framework and approaches for teaching and learning for students in grades 6-10. Hill (2010) posits that the IBMYP emerged at the insistence of teachers who thought it was important to introduce the tenets of the IB earlier than the final 2 years of high school. Since 1994, the IBMYP has experienced significant and steady growth (Bunnell, 2011). In addition, Bunnell (2011) asserts that the IBMYP is influential because the selective nature of students who enter the upper-level program of the IBDP may result in the IBMYP having greater contact with learners.

Curriculum

The IBMYP curriculum is established by the IB to be a holistic curriculum but also to provide flexibility to schools to meet national, state, or local standards (IB, 2013). MYP students are required to take courses in the areas of language acquisition, language and literature, individuals and societies, mathematics, sciences, arts, physical and health education, and design (IB, 2015). Marshman (2010) analyzes the IB curriculum with the conclusion that such a curriculum design promotes holistic learning and a concurrency of learning throughout the IBMYP. According to Harrison, Albright, and Manlove (2015) this “broad and balanced” curriculum allows students to engage with a variety of subjects
and remain open to numerous educational pathways as they advance in their studies (77). Similarly, Nugent and Karnes (2012) conclude that the use of a standardized curriculum allows for breadth in the content offered to students and depth in advanced studies.

Sixteen set key concepts are used to teach subject matter in interdisciplinary units throughout IBPYP courses (International Baccalaureate, 2015b). According to Marshman (2010), the benefit of interdisciplinary units and key concepts is that students gain an understanding that knowledge is interconnected and become well-rounded learners who have a deeper level of knowledge that better prepares them to solve problems in the real world.

**Benefits of Enrollment in IB Programs**

Nugent and Karnes (2012) posit that the students in the IBMYP are exposed to classes and assignments that challenge them academically resulting in long-term benefits. Based on field notes, Hertberg-Davis and Callahan (2008) note that IB students appreciated the more challenging curriculum compared to what was considered more boring work in other classes. In addition, the researchers conclude that students felt there would be a long-term benefit to their challenging coursework (Hertberg-Davis & Callahan, 2008). This benefit of an academically challenging curriculum is further supported by the results of a survey conducted by Taylor and Porath (2006) where graduates from IB program were asked about their experiences in the IB and its subsequent effect on their experience at college. Of significant note in this study was the belief by former IB students that they were exposed to a rigorous but rich curriculum and the belief that their participation in an IB program resulted in higher levels of preparation for college classes and work (Taylor & Porath, 2006). Nugent and Karnes (2011) also
conclude that the IBMYP results in the development of a system of values that is beneficial for students later in life.

Despite evidence that suggests the beneficial nature of the IB, there are also criticisms of the program. The IB has been accused of not being equitable. The nature of the curriculum and coursework has also been criticized. Quantitative data concerning minority student achievement collected by Kyburg, Hertberg-Davis, and Callahan (2007) reveals that there is a mismatch between the needs of learners from diverse background and the curriculum and instruction offered by the IB. In addition, there are concerns that there is not equitable access for students of poverty and minority students to such programs (Kyburg, Hertberg-Davis, and Callahan, 2007). There are also concerns from students who participated in IB programs. Hertberg-Davis and Callahan (2008) describe stress as a criticism of the program. In interviews with students enrolled programs for advanced coursework, participants in IB programs specifically mentioned the heavy course load as a contributing factor to stress. Hertberg-Davis and Callahan (2008) describe the rigidity of the curricular framework to be a barrier for some students; in their study 24 of the 28 students who left their IB program did so because of the inflexible nature of the program.

In addition, there is a research gap specifically concerning the IBPYP. Many studies conducted on the results and benefits of the IB specifically deal with the upper-level IBDP program. While the IBPYP is a growing program, this gap in scholarly literature may be related to the relative newness of the program when compared to other IB programs or a lack of clarity among researchers about the nature of the program itself.
Student Achievement

The National Board for Professional Teaching Standards (2011) asserts that “the hallmark of effective teaching is student learning” (pp. 16). However, many variables affect student achievement. Research suggests that the many factors influence student achievement including school leadership, class size, school size, time allocated to subjects, teacher expectations, teacher experiences, classroom environments, and classroom instruction (Cotton, 1996; Fisher et al., 1982; Rivkin, Hanushek, & Kain, 2005).

While many of these factors are out of the control of the teacher, teachers still face increasing pressure to increase student achievement. Au (2009, 2013) notes that the emphasis on high-stakes assessments has a radical effect on the curriculum of individual classrooms because teachers do feel a pressure to align their curriculum to these tests. Beginning in the late 20th century, this trend is often referred to the “age of accountability” and despite numerous discussions of reforms, does not appear to be lessening (McTighe & Brown, 2005).

Age of accountability. In 1981, T.H. Bell, secretary of Education under the presidency of Ronald Reagan, created the National Commission on Excellence in Education. The committee was tasked with researching the quality of the American education system, compare US curriculum with the curricula of schools around the world, to address problems facing the American education system, and make recommendations for actions to be taken to improve the quality of education for American students (Springs, 2014). The committee authored the report A Nation at Risk: An Imperative for Education Reform and education reform quickly became a national issue (Spring, 2014)
The report, published in 1983, criticized the poor quality of American schools and warned that such schools threatened the future of the United States, and pressed for school reform (Spring, 2014).

Mehta (2015) contends that the over-the-top rhetoric of *ANAR* did lead to a change in the basic foundation of the American education system; instead of focusing on creating productive citizens capable of succeeding in the democratic society of the United States, US schools focused on the creation of students as human capital (Mehta, 2015). Spring (2014) similarly draws the conclusion that the changes brought about by the report led the creation of workers from students.

Mehta (2015) also points to the claim by the report that for the first time in US history the education of one generation would not be equal to that of their parents as a key piece of rhetoric used to encourage the creation of new curriculum that focused on “the new Basics” (p. 22). In addition to the longer school days, more standardized curriculum, and decreased offering of electives in lieu of academic subjects, *ANAR* led the increase in high-stakes standardized testing (Mehta, 2015). *ANAR* served to further increase the use of high-stakes assessments as a measure of individual learner progress and quality of local schools. Guthrie and Springer (2014) cite that within twelve months of *ANAR*’s release, three-quarters of US states’ educational supervisory departments had begun proposing, developing, or implementing new achievement tests. According to Spring (2014), the changes that came about as a response to *ANAR* were not isolated to the immediate release of the report; the idea that education is a national issue that the federal government is interested continued into the twenty-first century, and the landmark legislation No Child Left Behind (NCLB) can be directly linked to *ANAR*. When NCLB
was signed into law, it required standardized assessments for all students in grades three to eight in reading, language arts, math, and science in order to create accountability for all schools to have brought students to a proficient level in these subjects by the 2013/2014 (Ametepee, Tchinsala, Agbeh, 2014). Despite the end of No Child Left Behind in 2014, the legacy of accountability measures remains (Spring, 2014).

This can be seen in the system of testing for social studies in South Carolina where 5th and 7th grade students take SC PASS to measure proficiency levels in social studies. Because of the nature of these tests, where students are largely asked multiple choice questions about knowledge of the respective history fields covered in the grade being tested, teachers of social studies often rely on rote memorization for students to learn material for classroom tests, district benchmarks, and ultimately the standardized test administered at the end of the school year (Savoy, 2006).

**Patterns of underachievement.** Despite the aforementioned increase in accountability measures, research suggests that student achievement levels have largely remained unchanged and in some instances, patterns of underachievement have become prominent (Haycock & Huang, 2001). Of special concern to many researchers is the existence of an achievement gap for minority students (Harris & Herrington, 2006; Lee, 2002). Ladson-Billings (2006) notes that such an achievement gap is one of the “most talked about issues” in educational research (pp.3). The achievement gap specifically refers to the discrepancy in standardized test scores when comparing the scores of White students to the scores of minorities: White, non-immigrant students perform better on standardized tests as compared to Black students, Hispanic students, and students who are immigrants to the United States (Ladson-Billings, 2006). Lee (2002) notes that that based
on scores of NAEP tests, the achievement gap is widening. Researchers have posited a variety of causes for this achievement gap. Coleman et al. (1966) listed the disparity between resources, the demographic make-up of schools, and teachers all as contributing factors to an achievement gap between races. However, Coleman et al. (1966) most notably emphasized the impact of students’ home environments on disparities in achievement. Hanushek (2016) notes that this emphasis led to a belief that schools did not matter in the long run with regard to student achievement and closing any existing achievement gaps. In the same vein, Harris and Herrington (2006) conclude that current reforms are missing the mark in closing the achievement gap. However, this does not account for the pockets of excellence that appear on standardized tests across the country in individual schools (Haycock, 1998). Such patterns of underachievement are noticeable at the JES, especially concerning achievement scores in social studies.

**The impact of teachers.** Despite restrictions placed through district-mandated common assessments, pacing guides that emphasize breadth over depth, quarterly benchmarks, and the stress that many teachers feel as a result of standardized tests, teachers are able to affect change in their local environments. The impact of quality teachers has been widely researched, especially concerning the consideration of what makes an effective teacher.

Teachers and the quality of teaching are important in student achievement, and the verbal and math skills of teachers are one indicator of future student achievement (Haycock, 1998). Quantitative studies show a positive correlation between teachers’ scores on standardized tests and the value-added scores of their students: teachers with higher scores also had students with increased gains and higher scores on achievement
tests (Ferguson, 1998; Ferguson & Ladd, 1998). In addition, researchers posit that teacher knowledge can also affect student achievement (Darling-Hammond, 1999).

However, evidence suggests that there is no conclusive link between teachers’ content knowledge and student achievement (Darling-Hammond, 1999). On the other hand, evidence does suggest that increased knowledge about teaching and learning does positively correlate with increased student achievement; Darling-Hammond (1999) summarizes the results of several studies that similarly conclude the quality of teacher training and professional development can impact student performance. Based on review studies concerning teacher behavior and lesson structure, Brophy and Good (1984) conclude that there are instructional methods that increase student achievement, identifying such methods through covering required content, allowing students to participate in discussions, and asking developmentally appropriate questions. More recently, Hattie (2003) concluded teachers who were termed as “experts” were able to influence learning in part through planning and instructional strategies.

**Student engagement.** Research suggests that the level of student engagement is a predictor of student achievement (Akey, 2006). Balfanz, Herzog, and Mac Iver (2007) present data that demonstrates signs of disengagement such as attendance issues and misbehavior are early warning signs of decreased student achievement. However, Schlechty (2011) concludes that engaged students will work harder and persevere through more challenging tasks because they are personally invested and interested in the learning experience. Akey (2006) also argues that students who are actively engaged in classroom instruction have better learning outcomes because they work harder in and outside of class to meet learning goals.
In the past, teachers have viewed engaged students as students who are participating in the lesson and turning assignments in on time (Donner, et al., 2010). However, Schlechty (2002) differentiates between engaged students and students who are simply compliant with expectations of teachers. Compliant student may appear to be engaged but are actually going through the motions of engagement to receive an extrinsic reward, such as good grade, without actively engaging with the content in deep or meaningful ways. Onosko (1991) describes the transmission of content and the breadth of content to be barriers to engagement in classrooms.

However, teachers can encourage students to be more engaged through instructional design (Donner, et al, 2010; Ministry of Education, 2009). To create engagement in the classroom, teachers must consider what is being taught and how the information is being taught. Tsai, Kunter, Ludtke, and Trautwein (2008) argue that engaged students are interested in the content being taught, either through personal interest or through interest generated by the teacher. According to Onosko (1991) engaged classrooms go in depth to specific content instead of covering large amounts of content but not in detail. In addition, teachers should assign work that is appropriately challenging, instead of work that is too easy or too hard (Donner, et al, 2010; Ministry of Education, 2009).

Research also suggests that collaboration encourages engagement (Brown, Reumann-Moore, & Hugh, 2009; Johnson, 2008; Patrick, 2007). According to Patrick, collaboration results in engagement because students are forced to justify, evaluate, and refine their own beliefs about a topic as they work together. Anderson and Cook (2004) found that students were consistently engaged through work completed in small group.
Engaged students construct meaning through hands-on work or problem-solving. Newman and Wehlage (1993) assert that engaged students are often working on sustained, discipline-based inquiry. Smith, Sheppard, Johnson, and Johnson (2005) posit that students are engaged when working to solving problems in student-centered learning environments where teachers are acting as facilitators.

Studies that are concerned with student achievement as a result of another variable are largely quantitative studies (Brophy & Good, 1984; Ferguson, 1998; Ferguson & Ladd, 1998; Flanders, 1970). Large-scale studies such as Ferguson (1998) and Ferguson and Ladd (1998) often use data from standardized tests scores. However, there does exist a body of action research concerning student achievement that utilizes quantitative measures based on classroom tests (Johnsen, 2009; Wenglinksky, 2001). While the results of these studies cannot be generalized to other classrooms, they can provide a methodological basis for the implementation the proposed quantitative action research study.

**Historical Simulations**

Garvey (1967) argues that such role-playing in the social studies classroom can range from the simplistic use of reproducing actions to the more complex use of problem-solving and debate. Vansickle (1970) states that simulations allow students to make choices in a setting that approximates reality. Clegg (1991) adds that through decision-making allows students to interact with content and teaches principles used in the simulation.

Research suggests that there are benefits of historical simulations, such as increased retention of content over time and increased conceptual learning (Johnson, Boyer, & Brown, 2011; Parker et al., 2011). Through a quantitative analysis, Alvarez (2008) self-reported the success in using role-playing simulations as a way to increase
engagement, rigor, and learning outcomes in the classroom. Alvarez (2008) utilized survey research where students were asked to score the simulation exercise based on enjoyment, difficulty, and whether they believed such exercises were a valid learning exercise. The mean and standard deviation allowed Alvarez to compare the use historical simulations with other instructional methods at the end of the school year.

Anderson and Cook (2014) found that students who were participating in simulations to be consistently engaged throughout the simulation. Previous studies also support that the introduction of historical simulations will result in increased student achievement on tests. McCarthy and Anderson (2000) report that when compared to students in classes utilizing traditional instruction, students who participated in a role-playing simulation in a history class scored an average of one letter grade higher on the final summative assignment. Russell and Byford (2006) also concluded that the use of a simulation resulted in increased interest and understanding in the classroom.

Researchers do point to weaknesses of historical simulations. Simulations are often time-consuming, and adequate background knowledge needs to be provided for meaningful learning to occur (Parker, Mosborg, Bransford, Vye, N., Wilkerson & Abbott, 2011). Furthermore, if not given adequate time and preparation, simulations also risk only providing surface coverage of content (Parker et al., 2011). Opponents of the use of historical simulations also cite the oversimplification of history and the danger of trivialization as criticisms of historical simulations (DiCamillo & Gradwell, 2012).

In addition, the review of literature relating to Historical Simulations does show gaps. Much of the research involves self-reporting by teachers (Alverez, 2008; Moorhouse, 2002) or is dated (Clegg, 1991). The majority of the literature involving
Historical Simulations draws on qualitative research methods. Self-reporting by teachers has often relied on teacher observations of simulations (Dawson & Banham, 2002; Moorhouse, 2007). Researchers of historical simulations (DiCamillo & Gradwell, 2012) have also examined case studies of teachers who have utilized Historical Simulations that show that the use of historical simulations have positive effects on the classrooms and students who have participated in these role-playing exercises.

**Theoretical Framework and Key Concepts**

The theoretical framework of progressivism and constructivism influence the key concepts in the present action research.

**Active Learning.** Dewey (1916, 1938) advocated the use of active learning instead of transmitting knowledge in passive ways such as lecture and readings. According to Collins and O’Brien (2003), active learning is “the process of keeping students mentally, and often physically, active in their learning through activities that involve them in gathering information, thinking, and problem-solving” (as cited in Edwards, 2015). Edwards (2015) argues that in addition to intellectual benefits, active learning also allows students to work together and gives often-energetic middle school students a chance to move physically in the classroom and results in improved learning environments.

In analyzing the presence of inquiry-based teaching methods in IB elementary schools, May (2009) argues that the curricular framework of the IB promotes the active involvement of students in the learning process. Byrd (2007) found one of the benefits in IB history classes is the increased exposure to “doing history”. Alford, Rollins, Stillisano, and Waxman (2013) found that MYP and PYP classrooms engaged students in active
learning. The IB educational model itself stresses the importance of an active approach to teaching and learning in the PYP through what is termed “asking, doing, and thinking” (IB Organization, 2015b).

Active learning is expected within the PYP because of its impact on student achievement. Edwards (2015) notes that active learning stimulates the intellectual development of middle school students as they are asked to work through problems using higher-order thinking skills instead of relying on the delivery of information from a teacher. By participating in active learning environments, students are given opportunities to bridge taught information with experiences (Edwards, 2015). Collins and Valentine (2011) argue that students in classrooms with active, engaged learning performed better on standardized tests; they posit that is the result of higher levels of engagement with content. Research studies support these arguments.

A longitudinal study that compared the performance of social studies classrooms that employed active learning strategies versus traditional instruction across two high schools found that students in the active learning environment had higher scores and greater growth on college and career-readiness standards (Summers & Dickinson, 2012). An action research project also concluded that students in a fifth-grade social studies class had improved academic performance after the introduction of active learning strategies, including cooperative groups (Carrol & Leander, 2001). Through questionnaires and student interviews, Sivan, Leung, Woon, and Kimber (2010), concluded that students believed that active learning helped them meet their desired learning outcomes. A survey of middle grades students also found that students believed
their knowledge to be more permanent using active learning than traditional learning methods (Bozyigit, Ohan, Ozcinar, & Erdem, 2014).

Research suggests that historical simulations can be used to create active learning into the classroom (Wedig, 2010; McDaniel, 2000; Dawson & Banham, 2002). Gradwell and DiCamillo (2013) conclude that historical simulations, including role-plays, allow teachers to provide active learning experiences for students in middle school because they require students to react to the environment that is simulated. Wedig (2010) posits that because role-playing requires students to internalize beliefs and motivations, they apply knowledge and experience the subject matter in ways more dynamic than through reading. Dawson and Banham (2002) add that historical simulations allow students to gain meaning from experiences that are hard to understand through reading, especially how emotions and feelings of individuals resulted in decisions pivotal to historical events.

**Inquiry.** Inquiry is a common theme in educational theory (Dewey, 1916; Piaget, 1952; Vygotsky, 1980). Inquiry-based learning involves the use of authentic problems for students to solve or investigate (Hmelo-Silver, Duncan, & Chinn, 2007). While May (2009) asserts that it inquiry can be seen as the legacy of Dewey, Vygotsky’s (1980) conclusions concerning the need for guided inquiry are influential. In the classroom, inquiry is often used to guide learning (May, 2009).

While studies on the impact of inquiry are few, there is evidence to suggest that the use of inquiry has a positive effect on student achievement (Hmelo-Silver, Duncan, & Chinn, 2007). Inquiry-based learning is noted for imparting not only knowledge about specific disciplines but also skills. In one large, quantitative study, Lynch, Kuipers, Pyke,
and Szesze (2005) concluded that students engaged in inquiry-based learning made significant gains in achievement scores compared to their peers who did not participate in such learning.

According to Taylor (2014), teachers in IB programs may provide the foundational knowledge, but it is the use of inquiry that activates connections and develops skills for future learning. Taylor (2014) argues that inquiry forms the basis of an IB education because a curriculum that focuses solely on knowing the answers for tests does not fit within the IB mission of motivating lifelong learners. Rose (2007) and May (2009) both observed inquiry-based skills being successfully used in IB classrooms. Rose (2007) specifically cited the use of inquiry-based learning and the associated student ownership of learning as a specific benefit to the implementation of the IB curricular framework.

Role-playing allows for biographical inquiry as students conduct research into the personas they will take on (Akmal & Ayre-Svingen, 2002). Furthermore, McDaniel (2000) points out that role-playing exercises allow students to come up with answers to historical debates for themselves. In addition, such exercises do not involve the use of “teacher-contrived” problems that May (2009) warns will not result in a meaningful use of inquiry. For example, observed teachers in one study created and implemented ten simulations based on authentic problems that had existed throughout history including court cases, the experiences of individuals during periods of history, and major historical events (DiCamillo & Gradwell, 2012).

Reflection. Reflection is a way of thinking and process in which meaning is constructed (Rodgers, 2002). According to Dewey (1916) reflection is how students
move from participating in a learning experience to developing more concrete knowledge from explanations and hypothesis. Piaget (1952) also described the importance of reflecting in accommodating or assimilating new knowledge into existing schemas.

According to the IB (2008), being a reflective learner is a key characteristic of an IB student. According to the IB (2008) students who are reflective are able to give “thoughtful consideration to their own learning and experiences” (pp. 5). When compared to teachers who taught in non-IB schools, IB teachers who were surveyed were found to be more likely to ask students to share and reflect on their work (Wade, Wolanin, and McGaughey, 2013).

Evidence suggests that reflection results in improved student learning outcomes. Miller and Maellaro (2016) posit that experiential learning alone does not result in higher student achievement. They utilized quantitative data to demonstrate that the inclusion of a reflection process along with an experiential learning exercise did result in higher levels of student achievement on scored tests (Miller & Maellaro, 2016). Yang, van Aalst, Chan, and Tian (2016) studied the results of teaching historically low-achieving students how to reflect on learning goals to provide their own continuous feedback on understanding. Yang, et al. (2016) concluded based on quantitative data that teaching students how to reflect resulted in higher levels of student achievement.

Research concerning historical simulations also discusses the importance of debriefing after the simulation (DiCamillo & Gradwell, 2012; Wedig, 2010; Moorhouse, 2008; Dawson and Banham, 2002). During the debriefing, students step back and reflect on what occurred in a critical way (Pearson & Smith, 1985). Effective debriefing sessions require that students ask themselves and reflect on not only what happened, but also how
the end result made them feel if personal attitudes or beliefs were confronted (Pearson & Smith, 1985). Alvarez (2008) notes that in a role-playing exercise the debriefing period allows the teacher time to ask probing questions in order to help students further understand the history behind the simulation.

**Lived Experiences.** Dewey (1956) argued that teachers should utilize student interests to connect information to the prior experiences of students. In doing so, Dewey (1956) argued that teachers would pave the way for students to reach greater understandings. Researchers such as Delpit (1988) and Moll, Amanti, Neff, and Gonzalez (1992) have further contributed to the recognition of the importance of incorporating lived experiences into the classroom. Delpitt (1988) acknowledged that while students benefit from the expert knowledge of the teacher, they must also be able to integrate knowledge from their own lives, seeing themselves as something of an expert too.

The IB acknowledges that students who enter IB programs come from a variety of backgrounds and bring with them different experiences that shape their knowledge and place in the world (IB, 2013). The IB (2014) also states in that history courses; students should study personally relevant topics. However, the rigid curriculum of the IB does not always allow for the introduction of students lived experiences. Hertberg-Davis, Callahan, Kyburg (2006) describe an inflexible curriculum where students have little choice about content or the structure of the classes.

Moll, Amanti, Neff, and Gonzalez (1992) described the “expertness” that students bring with them to the classroom as students’ funds of knowledge. According to Moll et al. (1992), funds of knowledge are the result of students lived experiences and
can encompass skills, social interactions, and culture, and teachers can use such funds of knowledge as a foundation in the classroom to empower students for future learning.

Research suggests that the use of historical simulations can introduce the idea and importance of lived experiences into the IB curriculum. Students often do not have a personal connection to the rigid curriculum of the IB or the historical events studied in history classes. The use of historical simulations offers a way to connect the canon of thought of the IB to the experiences of students. Dawson and Banham (2002) posit that role-playing in Historical Simulations gets students to “think from the inside” (12). While students may not have a personal connection to the historical content, they can use their experience in the simulation to serve as their base for understanding (Dawson & Banham, 2002). Similarly, DiCamillo and Gradwell (2012) found that teachers who used Historical Simulations believed that through role-playing students were able to find content more personally relevant and were then more interested in learning more about the subject of the Historical Simulation.

Collaboration. Both Dewey (1938) and Vygotsky (1962) acknowledge the social nature of learning. The use of collaboration as a practice encourages dialogue and a transmission of knowledge between the learners (Friere, 2000). Collaboration between learners is also emphasized by the IB curricular framework (IB, 2015). IB schools are expected to utilize cooperative learning groups and model cooperation for students (Hill, 2010). Such collaboration is observed in IB programs. Wade, Wolanin, and Mcgaughey (2013) measured active learning in MYP classrooms based on the type and frequency of interactions; they report that 63% of MYP classrooms observed featured students talking to other students in the learning process.
According to Stahl (1994), collaboration allows students to learn and practice traits necessary for success in social studies. Benware and Desi (1984) posit that cooperation and collaboration between students will result in greater classroom participation. Past research provides evidence of a positive impact of collaboration between students on student achievement. A review of 90 years worth of studies concerning collaborative education suggests that student achievement is greater when they engage in collaborative practices versus independent study (Johnson, Johnson, & Smith, 1998). Boykin, Lilja, and Tyler (2004) concluded that collaborative learning resulted in an increase in student achievement scores on both formative and summative assessments through an empirical analysis of grades from a sample of 69 fourth and fifth grade African-American students. Lolah (1994) found a positive relationship between collaborative groups and student grades in 22 social studies classrooms. Past studies also propose that collaboration results in greater critical thinking skills (Abrami et al., 2009; Gokhale, 1995).

Historical Simulations invite collaboration and dialogue into the classroom: students are able to work through complicated and difficult issues with their classmates and discuss varying ideas based their prior knowledge and their experience in the historical simulation (Fisher & Vander Laan, 2002). In taking on a role in a simulation and then engaging in a dialogue with others, students can better internalize motivations; reading or listening to a lecture does not allow for this collaboration and resulting internalization (Wedig, 2010).
Instructional Framework

Based on a review of literature, the following instructional framework was created for the implementation of a historical simulation for the present action research project.

1. Choose a topic for the simulation carefully. Select historical events that can thoroughly covered in the time allotted and avoid events that could trigger emotional trauma in students (Drake, 2008; DiCamillo & Gradwell, 2013).

2. Begin the simulation with a goal for the students that involves decision-making, and provide for students a clear role to play in reaching the goal (DiCamillo & Gradwell, 2013; Russell, 2012).

3. Provide scaffolding to assure that students have the appropriate level of background knowledge to fully understand and participate in the simulation (Dicamillo & Gradwell, 2013; Wright-Maley, 2015).

3. Utilize cooperative groups to ensure that students interact with one another and discuss their experiences throughout the simulation (Moorhouse, 2008).

4. Allow students to remain active in the simulation by supporting their autonomous decision-making, controlling the number of interruptions to the simulation, and avoid setting up simulations where there are predetermined outcomes (Russell, 2011; Wright-Maley, 2015).

5. Encourage both oral and written reflection throughout the simulation, and engage in a specific debriefing period at the conclusion of the reflection where students are able to ask and answer open ended questions. (DiCamillo & Gradwell, 2013; Worthington, 2018).
Conclusion

Chapter two reviewed relevant scholarly and theoretical literature in order to provide a rationale for and a guide to the present action research study. The participant researcher seeks to work within the confines of the present system of accountability measures to affect real and substantial change within a local and specific classroom and to use that experience to develop an action plan that can be used to improve instruction for future learners. With a grounding in the educational theories of progressivism, the participant researcher envisioned an implementation of historical simulations that would engage students through active learning and collaboration, while simultaneously allowing them to connect the history being learned with their own lived experiences. By clearly establishing the instructional framework that guides the present action research study, data was able to be collected in order to determine what, if any, impact the use of a historical simulation had on student achievement in a 5th grade IBPYP social studies classroom. In the following chapter, the methodology of the present action research study will be discussed. In Chapter three, the methodology that the participant-researcher used to determine if the null hypothesis was met is discussed through the stages of action research as defined by Mertler (2014)
CHAPTER 3

METHODOLOGY

The identified PoP focused on instruction in a PYP social studies classroom at Jacobs Elementary School (JES) (pseudonym), a suburban school in the south. As JES transitions to becoming an IB World School and implementing the IBPYP across the curriculum, teachers were asked to seriously consider how their subject areas could evolve to become more student-centered and inquiry-focused. The action research study began by examining this area of interest for the participant-researcher: the need to incorporate inquiry-based units into social studies classrooms while maintaining student achievement. To create a manageable action research study, the participant-researcher narrowed the focus of the research as broad topics may be too complex or impractical to examine (Mertler, 2014). When examining the topic of a need for student-centered and inquiry-based practices across the curriculum, the participant-researcher reflected on the instructional design of social studies course. The participant-researcher considered activities that had placed students in an active role in learning new information versus those that had students passively acquiring knowledge. In reflecting, the participant-researcher began to wonder about the use of teacher-centered instructional methods through a process used to determine the underlying problem of a classroom by asking “why does/doesn’t this occur?” (Mertler, 2014, p. 57). In evaluating the original topic of teacher-centered instruction versus student-centered instruction, the participant-researcher arrived at the underlying problem of standardized testing resulting in the
reliance of teacher-centered instructional practices. This evaluation informed the
development of the PoP.

**Problem of Practice**

The action research study dealt with the implementation of historical simulations in a fifth-grade PYP social studies classroom based on an observed PoP. The observed PoP was that overreliance on passive learning techniques to prepare students for standardized tests. Because of the pressures placed on teachers as a result of high-stakes testing as accountability measures, teachers utilize instructional methods that emphasize students as passive recipients of facts in order to meet time constraints and get all the material covered prior to tests being administered. (Virtue, Buchanan, & Vogler, 2012; Vogler, 2006; Vogler & Virtue, 2007). However, these modes of instruction are the opposite of what is expected of a PYP teacher in an IB World School (International Baccalaureate, 2014). However, at the same time there is an expectation that student achievement will be improved by the implementation of the pedagogy of the IB. It is these combined expectations that informed the PoP that was identified in the present action research study in order to determine the effect of historical simulations on student achievement in a 5th grade social studies classroom.

**Purpose of the Study**

In the present action research study, historical simulations were used to create an active learning environment that is more closely aligned with the curricular framework and expected pedagogy of the MYP while still preparing students to be successful on the SC PASS. The following research question was used to guide the implementation of the proposed action research study: *What is the possible impact of historical simulations on student achievement?*
Context of the Study

The research design of the action-research study was based on previous studies conducted on historical simulations and student achievement. McCarthy and Anderson (2000) evaluated the use of role-playing simulations in college-level history and political science classrooms using a similar quasi-experimental design to the one that is proposed here. In this study, classes were divided into treatment and control groups with the treatment classes receiving instruction through lectures while the treatment group participated in role-playing simulations.

Research setting. The setting of the action-research study was a classroom under the supervision of the participant-researcher. This setting was selected to explore the impact of historical simulations on student achievement in a PYP social studies classroom. The classroom was a fifth-grade PYP social studies classroom at JES. JES is a suburban elementary school in a public school district located in Pee Dee region of South Carolina. The district serves the needs of over 15,000 students across fourteen elementary schools, three middle schools, three high schools, one career center, one charter school, and a virtual school (District Report Card, 2015).

JMS has approximately 647 students in 4k-5th grade (Demographic Report, 2016). The faculty and staff of JMS include 48 teachers, one guidance counselors, four instructional coaches, a PYP coordinator, and three administrators. The students enrolled at JMS come from diverse backgrounds: 64.6% of students are black, 25.8% are white, 4.8% are Asian, 3.6% are Middle Eastern, and 1.2% are Hispanic. In addition, JMS serves a low-income population. Over 60% of students enrolled are eligible for free or reduced lunch (Demographic Report, 2016), and the poverty index for JES is 75 (School
Report Card, 2015). JMS serves exceptional students: 15.3% of students receive special education services, and 4.3% of students are identified as gifted and talented (School Report Card, 2015).

Students at JES take their four core content classes of English Language Arts, Math, Social Studies, and Science each day, along with electives that differ by day. Elective include music, art, computer courses, and science, technology, and engineering courses.

JES is in the candidacy phase becoming an IB World School. During this phase, the school will work towards exemplifying the mission and pedagogy of the IBPYP by transforming the curriculum to fit within the transdisciplinary, inquiry-based approach espoused by the IBPYP.

**Study Design**

The action research was designed using the steps of action research as described by Mertler (2014).

**Planning.** The first stage of the action research cycle is planning. During this stage, the participant-researcher created a list of wonderings that were related to her professional practice and classroom observations. After this initial list was developed, the participant-researcher reached out to colleagues to discuss these observations. From these discussions, a research focus emerged concerning the implementation of IB, accountability measures, and instructional methods.

**Evolution of the research focus.** The participant-research worked to narrow the focus of the research design in order to make it more manageable. From personal experiences and discussions with colleagues, the most pressing considerations seemed to
be the methods of instruction that insured all standards were covered prior to end of the year tests. These discussions revealed that teachers were frustrated with lectures, notes, and review questions that left students far from engaged. Furthermore, teachers consistently brought up concerns about how instructional practices would need to change in order to meet the requirements for being an IB World School. From there, a review of relevant literature was conducted. Research revealed that the concerns about common instructional practices in social studies were not limited to the local population of the present action research study (Chiodo & Byford, 2004). Further research revealed that the use of historical simulations could be the antidote to defined PoP (DiCamillo & Gradwell, 2013). This review resulted in a framework that served as foundation for the present action research study.

**Development of the research plan.** The research plan was also developed during the planning phase of the present action research project. After the development of the research question of what, if any, is the possible impact of historical simulations on student achievement? it was determined that a quasiexperimental research design with the method of instruction serving as the independent variable would best fit the study. The dependent variable would be student achievement which could be measured quantitatively through a test score. A treatment group would receive instruction through a historical simulation while a control group that received instruction through traditional, teacher-centered instructional methods would be used for comparison.

**Acting.** In the acting phase, the data collection process was carried out and the collected data was analyzed (Mertler, 2014). This data collection and analysis process
would enable the participant-researcher to answer the research question and determine the overall effectiveness of historical simulations on student achievement.

**Sampling method.** The classroom at the center of the proposed action research study will be a fifth-grade social studies classroom. The participant-researcher works as a program coordinator and regularly observes, models, and co-teaches within the social studies classroom. In addition, to the author of this action research study acting as a participant-researchers, students in this classroom will also be participants in the proposed action research study. Due to the nature of action research and the inability to randomize because of predetermined student schedules, convenience sampling will be utilized in the proposed action research study. At JES there is one teacher who teaches fifth grade social studies, and this teacher teaches two sections of this class. The control group consisted of one class of students and the treatment group consisted of the other class.

**Student research participants.** In addition to the participant-researcher, the participants of the proposed action-research study were student members of the fifth-grade social studies classes at JES. At the time of the data collection, these students ranged in age from 9-11. 45% of the participants were female, and 55% of the participants were male. These students were from a variety of diverse ethnic and racial backgrounds. Approximately 42% of students identify as Caucasian, approximately 34% identify as African-American, approximately 21%, identify as Asian or Pacific Islander, and the remainder of students identify as having multiple or Other backgrounds. 47.5% of these students are in the morning social studies class which acted as the control group,
and 52.5% of the students were in the afternoon social studies class which acted as the treatment group.

**Data collection.** The action research study included a control group and treatment group. Both groups received instruction that about the Industrial Revolution in the United States. Prior to receiving any instruction, both the control and treatment group took an identical pre-test that will be used as a baseline for achievement. The control group data was used to create a comparison sample. The control group received instruction that was teacher-centered (See Appendix A). The participant-researcher presented information to the class over eight days that covered information about the Industrial Revolution. The instructional methods use for the control group included vocabulary acquisition, lectures, reading comprehension, note-taking, and review questions.

The treatment group received instruction in the form of a role-playing exercise (See Appendix B). In the role-playing exercise, students were required to take on an identity of a muckraker, factory worker, union organizer, or supervisor during the Industrial Revolution, independently research the motivations of their assigned identities, and make decisions based on their understanding of these motivations. After explaining the simulation exercise, students participated in a research session to understand background and motivations, viewed primary documents, and engaged in several collaborative activities to make a decision about what to publish as a journalist culminating in a writer’s workshop to write, edit, revise, publish, and share.

In this research design, the independent variable was the method of instruction. The dependent variable was the impact on student achievement as based on the use of a pretest and posttest.
**Instrumentation and Materials.** The action research study utilized a pretest and posttest in order to make comparisons and determine the effect of role-playing (See Appendix C). Students took the test before and after instruction to measure student achievement. This test was a teacher-created test used to measure concepts from the South Carolina Social Studies standards for indicators 5-3.1 and 5-3.4. The test was created using district benchmark questions and released questions from the SC PASS tests and other states’ end of year assessments as models. The test originally contained 23 multiple-choice questions, but was adapted to only use 20 questions. Scores were calculated based on the number of questions the participant answers correctly; each question is worth 5 points apiece.

The validity of the pretest and posttest was conducted through an examination of construct validity and content validity. The pretest and posttest were carefully read to ensure that it only measures what is intended. Any vocabulary that was above the levels of the participant was reworded. In addition, students were provided with a quiet and distraction-free testing environment.

The reliability of a study’s dependent variables is key to the reliability of a study’s findings, as conclusions drawn from the analysis of data cannot be any more reliable than are the instruments that provided the data. Just as the validity of a study’s conclusions are limited by the reliability of the measures used in that study, so too, Miller and Lovler (2016) point out that the validity of the measures used in a study (i.e., the degree to which they measure the intended construct) are also dependent upon the reliability of the instruments. Quinino, Reis, and Bessegato (2013) have observed that a reliable instrument is one that produces scores that consistently reflect the amount of the
attribute being measured. The variability of scores produced by a reliable instrument
directly reflect variability in the amount of the attribute being measured. In contrast, an
unreliable instrument is inconsistent in capturing the attribute. This means that the
variability of scores from one individual to the next on an unreliable instrument includes
a component that does not reflect variability in the attribute being measured. Because of
this, individuals’ scores on an unreliable instrument do not accurately capture the
attribute being measured and the instrument cannot be considered to be valid.

Many times a researcher is able to utilize dependent variables that have previously
been evaluated for their psychometric properties, including reliability, but in this study,
the dependent variable was constructed by the participant-researcher. Although the 23
items forming the dependent variable were drawn from test questions released from
South Carolina end-of-course assessments and a testing company contracted by South
Carolina to measure student academic achievement, the particular combination of items
used in this study had never been evaluated for reliability. Therefore, the reliability of
both the pretest and posttest was evaluated using the Kuder-Richardson formula 20 (KR-
20; Kuder & Richardson, 1939). The KR-20 measures the internal consistency reliability
of a collection of dichotomously scored items (e.g., scored right or wrong). On their
website, the Educational Assessment Corporation (n.d.) states that the KR-20 statistic
provides a measure of the degree to which “the exam as a whole discriminated among
students who mastered the subject matter and those who did not.” McGahee and Ball
(2009) have recommended that KR-20 values of .50 and higher can be considered to be
good. In the present study, the pretest produced a KR-20 value of .60, but the KR-20
value for the posttest was an unsatisfactorily low .41. An iterative item-analysis was used
to identify posttest items that might be responsible for that instrument’s low reliability. At step 1, item 8 showed the lowest item-total correlation (rit = -.117) and was removed, improving KR-20 to .46. At step 2, item 5 (rit = -.083) was removed, improving KR-20 to .48. At step 3, item 10 (rit = -.099) was removed, bringing KR-20 for the posttest to an acceptable value of .52. In order for the pretest and posttest to be identical, items 5, 8, and 10 were also removed from the pretest. The removal of those items slightly lowered the KR-20 value for the pretest, but to a still acceptable value of .58. With the item content of the pretest and posttest determined, pretest and posttest percentage-correct scores were calculated based on the 20 items that remained. All subsequent references to the pretest and posttest in this study refer to these 20-item tests.

**Data collection.** Quantitative data was collected to determine student achievement. The action research study utilized a pretest and a posttest to measure student achievement. As it was in this case, the use of a pretest and posttest (See Appendix C) can be used to measure the change in student achievement based on the implementation of an intervention or treatment (Mertler, 2014). On the pretest and the posttest, students were asked to remember, understand, apply, analyze, and evaluate content from instruction based on South Carolina Social Studies Academic Standards. An identical pre-test was administered to both the control and treatment groups to provide a baseline for student achievement prior to instruction. The scores for each student on the pretest were recorded. At the conclusion of the study, an identical post-test was also administered to both the control and treatment groups. The scores for each student on the post-test was recorded. The post-test was used to measure student achievement, and the scores will be used to reveal the impact of the implementation of role-playing.
Data analysis. Data was described and analyzed after being collected. A frequency distribution chart was used to organize the data initially. A frequency distribution chart compares scores with the frequency of that score and the percentage of individuals who scored at that level (Mertler, 2014). Descriptive statistics were then applied to the quantitative data collected in the pretests and posttests. Descriptive statistics are useful for summarizing and organizing data (Mertler, 2014). Descriptive statistics provided measures of central tendency and dispersion of the data. By looking at measures of central tendency, the participant-researcher was able to determine the student achievement for each group collectively. The participant-researcher used the mean of scores to measure central tendency. In the event of outlier scores that would skew the mean score, the median will be used. The participant researcher calculated the standard deviation of scores in order to measure the dispersion of scores within each group. The dispersion of scores refers to the diversity within the scores of one group and will indicate what is different about the scores within the respective control and treatment groups (Mertler, 2014). Through the use of descriptive statistics, the participant-researcher was able to compare the pretest and posttest results of each group and compare the posttest results between the control and the treatment group in order to obtain an idea about the effectiveness of the intervention.

Inferential statistics were also used to analyze the data. An independent measures t-test was used to determine if the difference in scores for students who received the treatment are statistically significant (Mertler, 2014). The mean of the scores from the posttest of the control group was calculated, the mean of the scores from the posttest of the treatment group was also calculated, and the two means were statistically compared to
determine statistical significance. If there is a large enough statistical difference, then there is most likely a true difference in student achievement based on the treatment and not a difference based on chance (Mertler, 2014).

**Developing.** The third phase of the action research cycle was the developing phase where a participant-researcher develops an action plan that can be carried out based on the results of the data collection (Mertler, 2014). In order to develop an action plan for the present action research study, the participant-researcher engaged in a process of reflection where the results of the study were considered alongside observations and the literature review. The participant-researcher also invited dialogue with colleagues to determine the best course of action.

**Reflecting.** Reflecting is also a key component in action research (Mertler, 2014). In addition to reflecting on the results of the study as they related to the continued use of historical simulations in classrooms at JES, the participant-researcher also considered how the study could be improved and expanded on in the future.

**Ethical Considerations**

Teachers who act as participant-researchers are responsible for following ethical guidelines and must be aware of the insider nature of their role in the classroom. The participant-researcher realized that conflicts of interest can result from these two roles and was committed to following ethical guidelines to protect students. Owens (2006) posits that when teachers act as researchers, they have a responsibility to students that involves protecting them from negative power relationships, embarrassment, a loss of privacy, and a loss of privilege. By ethically conducting, reporting, and making instructional decisions based on their action research, participant-researchers can take
part in establishing or continuing a sound foundation of social justice in their classroom (Dany & Yendol-Hoppey, 2014). Prior to beginning any action research study in the classroom, various permissions must be obtained as they were in the present action research study.

The present action research study took place in a public school; permission was obtained from the building administrator and district officials (Cohen, Manion, & Morrison, 2007). The participant-researcher followed all school and district policies regarding teacher-conducted research (Dana & Yendol-Hoppey, 2014). The present action research study was part of a course requirement for a degree from the University of South Carolina. Therefore, it was necessary to follow all institutional standards for research as well. The action research study was accepted by the university’s internal review mechanism as data that was normally collected in the classroom. According to Mertler (2014), Human Subject Review Boards or Institutional Review Boards will review research proposals to ensure that studies follow ethical guidelines, and human subjects are safeguarded. After permission was obtained the participant-researcher paid special attention to positionality, obtaining informed consent for the participants of the study, and ensuring the privacy of participants in order to assure an ethically sound action research study.

**Informed consent.** Student participants of this action-research study were fifth-grade students who are in the class of the participant-researcher. Because the participants were minors, the teacher researcher obtained assent from participants and also informed consent from the parents or guardians of the participants. Cohen et al. (2007) describe that such assent and informed consent is based on the subject’s freedom and the right to
self-determination: parents or guardians and participants should comprehend the study and voluntarily agree to participate.

Parents and guardians of participants were given letters that include a detailed description of the study, an indication that the study is voluntary, and assurance that participants may leave the study without fear of penalty, and a guarantee that the findings will be available to participants (See Appendix D). Parents or guardians signed and dated the informed consent form for their student to be a participant in the study (Mertler, 2014). After reviewing the study with the members of the class, they were given a letter and form to sign (See Appendix E). The assent form will contain all the components of the informed consent form but was written in a style and with language easy for a fifth-grade student to understand (Mertler, 2015). In addition, the assent form was read aloud to the class, and there was a time given for any questions to be asked. Both the signed letters of consent and assent forms were kept locked in a location only accessible to the participant-researcher.

**Participant privacy.** When completing research, anonymity, and confidentiality are part of a participant’s right to privacy. Data on student learning outcomes will not be anonymous to the participant-researcher because the students are known to the participant-researcher (Cohen, et al., 2007). However, all data should be kept confidential. To do so, each student participant was given a randomly assigned number. The master list of numbers was kept under lock and key as a hard copy, where only the participant-researcher would be able to access them (Mertler, 2014).

Anonymity must be preserved when the results of the action research study are shared. Teacher-researchers must comply with the Family Educational Rights and
Privacy Act (FERPA) when disclosing any information about a student’s educational records (Dana & Yendol-Hoppey, 2014). The teacher researcher has not included any unnecessary information about past academic performance or descriptions that could identify students. No specific students are referred to within the present action research study with any identifying information (Mertler, 2014).

**Conclusion**

Teacher-centered instructional methods have led to a prevalence of passive learning in social studies classrooms. The action research study sought to examine the effects of implementing historical role-playing into the curriculum of a seventh-grade IBMYP social studies classroom. Previous research suggests that role-playing could have positive benefits in the classroom. The research question that guided the study is: *what is the possible impact of role-playing on student achievement?* The question will be answered by using action research methodology as described by Mertler (2014). Through the phases of planning, acting, developing, and reflecting, a study was designed and carried out in order to collect and analyze data that can answer the aforementioned research question. In addition, the results of the study will be shared in the form of an Action Plan where the effectiveness of the study and future implications of the results will be discussed.
CHAPTER 4

FINDINGS

This was an action research study for a dissertation in practice (DiP). The problem of practice (PoP) for the study was identified by the participant-researcher as a deficit in student achievement in her middle school (7th grade) social studies classes, possibly resulting from passive, teacher-centered instruction. The participating school, Jacobs Elementary School (a pseudonym), is in the process of becoming a Primary Years Programme school within the International Baccalaureate (IB) program. The PYP curriculum emphasizes the value of student-centered pedagogy and the purpose of this study was to evaluate the effectiveness of one such student-centered instructional approach in improving student achievement in social studies. Specifically, the study evaluated the impact of student-centered role-playing historical simulations in 5th grade IBPYP social studies classes. The research question addressed in this study was this: What is the possible impact of historical simulations on student achievement?

The study used a quantitative methodology and a quasi-experimental pretest-posttest nonequivalent control group research design. The independent variable was instructional method, with two levels: (a) a control condition (n = 19 students) emphasizing instructor-centered instruction through lectures, and (b) a treatment condition (n = 20) consisting of instruction that utilized a student-centered historical role-playing simulation. One of the participant researcher’s social studies classes was assigned to the control condition and one more was assigned to the treatment condition. The

61
dependent variable consisted of student achievement as determined by a test generated by the participant-researcher. This test consisted of multiple-choice items. The test consisted of items drawn from a database of released questions from a variety of state end-of-course exams and were chosen to measure concepts from the South Carolina Social Studies standards for fifth grade social studies. The test was administered to both control and treatment groups in a pretest-posttest fashion, that is, both before providing instruction over the subject material being tested and again following instruction. The participant-researcher used descriptive statistics to describe the performance of each individual class and inferential statistics to compare control group and treatment group performance on posttest scores after statistically adjusting those posttest scores for pretest performance.

This chapter begins by briefly reviewing the manner in which the data was prepared for analysis. Reported next are the descriptions of each group’s level of students achievement and the results of the data analyses. A discussion of the findings is provided next with special attention paid to limitations of the study, reflective practices, and prior research studies that dealt with a similar topic. Finally, the chapter concludes with a summary and overall conclusions.

**Review of Data Processing and Analysis**

Students’ performance (correct or incorrect) on the individual items of the multiple-choice test that was used to determine the dependent variable of student achievement at pretest and posttest. When analyzing both the descriptive and inferential statistics, any references to the pretest and posttest refer to a 20-item multiple choice test. The data from the pretest and posttest was recorded in an Excel file. The Excel data file
was imported to IBM SPSS. Each group’s level of student achievement was determined by performing data calculations for descriptive statistics: mean, median, and mode. IBM SPSS was then also used to perfume all data manipulations and analyses that resulted in the results of the paired samples t-tests, and an unpaired samples t-test.

**Results of the Study**

The findings of the study are broken into multiple sections: a discussion of the statistical assumptions, findings from the control group, findings from the treatment group, and a comparison between the two groups.

**Statistical assumptions.** Prior to beginning the statistical analysis of analysis of the data, it was determined that the data was continuous, independent, and had no outliers. If statistical assumptions were ignored, the findings of the study could be erroneous or misleading. However, the following statistical assumptions were met: the dependent variable is continuous, the scores on the pretest and posttest are individual, and a lack of outliers present in the data set.

**Dependent variable as continuous.** Student achievement was measured through a 20 question multiple choice test. Since students’ scores reflected the number of items answered correctly, with 0 indicating no correct answers and each additional score point reflecting one additional item answered correctly up to 100 indicating 20 correct answers, scores on the test were treated as a ratio scale variable (Cohen, Swerdlik, & Sturman, 2010).

**Independence of observations.** While the independence of student-participants is not testable, it is reasonable to assume that the scores of participating students are independent of each other.
**Outliers.** Outliers are unusually high or low scorers. Outliers are not only unrepresentative of the samples being examined, they exert a disproportionate effect on statistical outcomes. Outliers were visually looked for within the posttests for each control group by creating box and whisker plots of the data of both sets. No outliers were identified in this manner; figure 4.1 shows the representation of the data set.

![Box and whisker plots](image)

*Figure 4.1.* Box and whisker plots of posttest scores for the control group (top) and the treatment group (bottom).

**Findings from the control group.** Students in the control group completed a pretest prior to instruction, with a mean of 26.5% on this pretest. This performance level was not unexpected because, as identified in the South Carolina Social Studies Support
Document for 5th grade, students would not have a background in much of the knowledge found on this pretest based on standards and topics taught in South Carolina social studies classroom prior to 5th grade (South Carolina Department of Education, 2012). After instruction, students completed an identical posttest to determine student achievement, with a mean of 71.84% on this posttest. Table 4.1 shows the results of the pretest and posttest for the control group.

Table 4.1

Control group student data on the pretest and posttest

<table>
<thead>
<tr>
<th>Student</th>
<th>Pretest (%)</th>
<th>Posttest (%)</th>
<th>Raw Gain (points)</th>
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<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>100</td>
<td>95</td>
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<tr>
<td>19</td>
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</tbody>
</table>

Mean          26.05       71.84       47.89
Median        25          75
St. Dev.      14.96       14.55
Min.          5           45
Max.          55          100
While some students showed larger gains than others did, all students exhibited growth from the pretest to the posttest. Some interesting results included that some students who scored among the lowest on the pretest, scored at the top of the range of scores on the posttest. For example, student 1 scored a 5% on the adjusted pretest but a 100% on the adjusted posttest. In addition, students 9 and 11, who both scored a 5% on the pretest, both grew by 70 points to score a 75% on the posttest.

A paired samples t-test was used to analyze student achievement before and after instruction to test if the instruction had a significant effect on student achievement. Student achievement, as measured by a multiple-choice test, before teacher-centered instruction was lower (26.05 ± 14.96 points) compared to student achievement after teacher-centered instruction (71.84 ± 14.55 points). With a p-value of less than .0001, there was considered to be a statistically significant increase in student achievement of 47.89 points on average.

In addition a simple test of effect size was calculated using the formula: effect size = \(\frac{M_{\text{post}} - M_{\text{pre}}}{SD_{\text{pooled}}}\). The pooled standard deviation is a weighted average of the standard deviation based on sample size. The pooled standard deviation was calculated using Excel. The effect size of the teacher-centered instruction intervention on the control group was 4.89, which indicates a large effect.

**Findings from the treatment group.** Students in the treatment group also completed a pretest prior to instruction, with a mean of 20.24% on this pretest. After instruction, students completed an identical posttest to determine student achievement, with a mean of 76.67% on this posttest. The results of the pretest and posttest for the treatment group can be seen in table 4.2.
Table 4.2

*Treatment group student data on the pretest and posttest*

<table>
<thead>
<tr>
<th>Student</th>
<th>Pretest (%)</th>
<th>Posttest (%)</th>
<th>Raw Gain (points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>95</td>
<td>90</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
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<td>80</td>
</tr>
<tr>
<td>21</td>
<td>25</td>
<td>75</td>
<td>50</td>
</tr>
</tbody>
</table>

**Mean** 20.24 76.67 56.43  
**Median** 20 80  
**St. Dev.** 12.60 13.35  
**Min.** 5 45  
**Max.** 55 100  

While some students showed larger gains than others did, all students exhibited growth from the pretest to the posttest. Some interesting results included that some students who scored among the lowest on the pretest, scored at the top of the range of scores on the posttest. For example, student 1 scored a 5% on the pretest but a 95% on the
posttest. In addition, students who scored 5% on the pretest showed great gains by the posttest with students 10 and 18 and scoring an 80% and an 85% respectively on the posttest.

Similar to the control group, a paired sample t-test was used to analyze student achievement before and after instruction to test if the instruction had a significant effect on student achievement. Student achievement, as measured by a multiple-choice test, before student-centered instruction was lower (20.24 ± 12.60 points) compared to student achievement after teacher-centered instruction (76.67 ± 13.35 points). With a p-value of less than .0001, there was considered to be a statistically significant increase in student achievement of 56.43 points on average.

The effect size was also calculated for the treatment group. The effect size for the treatment group was 4.01 and was calculated using Excel to determine the pooled standard deviation for both the pretest and posttest of the treatment. Then the mean of treatment pretests by subtracted from the mean of the treatment posttest and divided by the pooled standard deviation.

**Comparison between the control and treatment group.** Descriptive statistics for pretest and posttest are provided in Table 4.3 and means for the control and treatment group at pretest and posttest are graphed in Figure 4.4. At pretest, control group students scored 5.81 points higher on average than treatment group students, but by posttest, treatment group students were scoring 4.83 points higher on average than control group students. Students in the treatment group who received student-centered historical role-playing simulation instruction gained 56.43 points on average from pretest to posttest, while students in the control group who received teacher-centered lecture-based
instruction gained only 47.89 points on average. While students receiving student-centered historical simulations outgained students who received teacher-centered lecture-based instruction, Figure 4.4 shows that the difference between groups in the gains made from pretest to posttest were relatively small in comparison to the overall pretest-posttest gains.

Table 4.3

\textit{Descriptive statistics at pretest and posttest}

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Control Group</td>
<td>5.00</td>
<td>55.00</td>
</tr>
<tr>
<td>(n = 19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Group</td>
<td>0.00</td>
<td>45.00</td>
</tr>
<tr>
<td>(n = 20)</td>
<td></td>
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</tr>
</tbody>
</table>

\textit{Figure 4.2.} Line graph showing mean test scores at pretest and posttest for control and treatment groups.

An unpaired samples t-test was used to analyze student achievement on the posttest by students in the control and treatment groups. Student achievement, as measured by a multiple-choice test, was higher for students in the treatment group (76.67
± 13.35 points) compared to the control group (71.84 ± 14.55 points). However, the results of this analysis determined that this difference was not statistically significant ($t(39)=1.03, p=.30$).

**Interpretations of Findings**

The data collection and analysis for this study resulted in information related to achievement gains for the control group, achievement gains the treatment group, and a comparison of posttest scores for both groups. This section discusses how these results can be interpreted in light of previous research and what these results mean for a reflective practitioner. All of these combined serve to provide information about the efficacy of using historical simulations in the 5th grade social studies classroom as a mode of student-centered learning. Overall, while the results of the comparison between the control group and the treatment group were not statistically significant, they are considered suggestive by the participant-researcher.

As previously stated, the research question at the heart of this action research study was: *What is the possible impact of historical simulations on student achievement?* The data collected during this action research study support the assertion that student achievement was impacted by participating in historical simulation. However, the data also show that students in the control group similarly showed growth in student achievement, even if by a smaller amount. Furthermore, the data was not as clear on if students who participated in a historical simulation were more greatly impacted as students who participated in teacher-centered instruction. Based on these findings, the participant-researcher also felt the need to consider the course of instruction with the control and treatment group by reflecting on the research journal kept throughout data
collection process. This journal contained reflections of each lesson along with relevant information related to student reactions to the lessons and student behavior during the class period.

The results of the present-action research study are clear that both the control and treatment interventions resulted in a gain of student achievement. However, when considering the overwhelming evidence of how history is taught in the United States, it is not surprising that students in the control group had a statistically significant difference between their posttest scores, and their pretest scores that showed a normal distribution. Students are used to learning with teacher-based instructional methods, such as lectures because this is largely how they have been taught and how they have learned in previous classes (Chiodo & Byford, Zhao & Hoge, 2005). These students know what to expect and what to do when they enter the classroom; everything is familiar. This was clear through the journal of the participant-research which noted how few questions that students in the control group had. They generally knew exactly what to do for each aspect of instruction and activity in the control group. The majority of questions asked in relation to the assignments given in the control group could be termed to deal with “compliance” with the assignments. Questions recorded in the participant-researcher’s journal included questions about the requirements for assignments (length requirements, a need for complete sentences, etc.) and the nature of the assignment (whether it was for a grade or not).

On the other hand, the participant-researcher noted that directions had to be explained in more detail or modeled in the treatment group. In addition, students had more questions that struck at the core of how to engage in the assignment (how to analyze
or interpret information, how to record their observations, and how to know if they were doing something correctly). When comparing the pretest and posttest scores of the two groups, the treatment group scored on average lower on the pretest than the control group and higher on the posttest than the control group, showing a greater growth in scores.

The lack of observed statistical significance in these findings could be attributed to the small difference in average scores and the small sample size. However, the observed differences in students’ abilities to complete assignments independently could help explain this statistically insignificant difference in achievement when comparing the treatment and control groups: while the control group was in familiar territory, the treatment group had been pushed out of their comfort zone. In addition to learning the material about the Industrial Revolution, they were also learning how to be students who were “doing history.” A further reflection on this data collection journal, revealed other aspects of the action research study that the participant researcher felt could not be ignored in light of the results of the data analysis.

The participant researcher also interpreted a pattern in the data collection journal that seemed to suggest that students in the treatment enjoyed participating in the role-playing exercise more than students in the control group enjoyed participating in the teacher-centered activities. This supports finding in the literature with implications for student achievement. Otten, et al. (2004) found that in a study of 440 6th graders who had participated in the 5th grade in a program where historical events were dramatized had higher scores on a multiple-choice test that tested knowledge of three topics covered by the dramatizations. However, in addition, the researchers asserted that the students may have performed better because they enjoyed learning history through the dramatized
program than students who had experienced a more traditional mode of instruction in the 5th grade. While the sample size and statistical significance of the findings differed greatly from the findings of the present action research study, some commonalities emerged from a reflection on the journal of the participant-researcher. Otten, et al. (2004) described how “students enjoy such [dramatized] instruction more than traditional approaches and that this enjoyment helps foster the increase in comprehension” (p.201).

The interpretation that students in the treatment group enjoyed learning history more than their counterparts in the control group is based on the number of redirections that students in each group needed throughout the data collection process: overall, the behavior of the treatment group was more on-task and required less redirections. In observations about the collaboration between members of the control group, students were often engaged in discussions while completing work, but they regularly had to be redirected to make sure their conversations were on task. Their collaboration regularly slipped into simple socializing. On the other hand, a review of notes on the types and modes of collaboration between students in the treatment group, revealed a pattern of deeper and more meaningful collaboration on the work. Students were regularly engaging in discussions about their beliefs about what would or should happen as the simulation exercise continued, presenting differing viewpoints to one another, and offering their opinions to their classmates about the guiding question.

To the participant-researcher, this difference in collaboration suggested that students were more interested and enjoyed the lesson material of the role-playing exercise as compared to those students who received traditional instruction, and this difference could account for improved student achievement. In addition, after the interventions were
over, students from the treatment group continued to ask when they would be able to participate in such a project again. This repeated request certainly does suggest that students enjoyed participating in the role-playing exercise. The increase in scores from the treatment group’s pretest to posttest along with the observed behavior of students and the added conclusions from Otten et al. (2004) about the effect of enjoyment on achievement with social studies does support the idea of using student-centered lessons, such as historical simulations, to improve student achievement.

The data collection journal also suggested differences in attitudes towards the subjects being studied in the control and treatment group. Research suggests that students who are able to put themselves in the shoes of groups from historical events can better understand the course of the events in history. In another action research study, a social studies teacher compared the effectiveness of instruction when the treatment group used activities designed to get students more interested in the subject of history, including historical simulations, and the control group used a more traditional lecture format for learning the same concepts (Savich, 2008). Savich (2008) concluded that students who had participated in the interactive lessons had a greater understanding of history because activities such as historical simulations helped the students develop empathy and understanding for the people involved in the historical content. Savich (2008) measured this level of understanding through tests and assignments graded via rubrics with the result of the students who specifically participated in role-playing activities scored much higher than students that had not. While the difference in scores was much smaller in the present action research study, a similar empathetic result was seen in the treatment group of the present action research study when participants interacted with real images and
accounts of child labor during the Industrial Revolution in the United States. The students in the control group had a more visceral reaction to the stories they encountered of these child laborers than the treatment group did based on the notes and secondary sources that they encountered during their lessons. The students in the control group expressed disbelief and anger as they came to learn about the realities of child labor through a more personal account of history.

However, students in the control group did not experience history in this up close and personal way. Instead, they engaged with the content through layers that further divided them from the real people that experienced the positive and negative changes of the Industrial Revolution. They had little to no reaction to some of the more grim realities for child laborers as they were taking notes, reading, or viewing informational videos.

By looking at the reactions of students as they were learning material that should be shocking and disturbing, the participant-researcher was able to see firsthand the nature of how students can gain a greater perspective through role-playing exercises. The combination of these observations along with the results of the treatment group on the posttest does suggest that the students were able to internalize the information that they were exposed to during the historical simulation.

As a reflective practitioner, the results of the data analysis combined with a reflection on the data collection journal were encouraging to the participant-researcher even if they were not entirely conclusive. Instead of simply moving on from the results of the present-action research study as not significant, the participant researcher is still highly motivated to continue seeking out ways to use role-playing simulations to improve
student achievement in social studies and optimistic about what the future holds for the use of student-centered instructional practices in the social studies classroom.

**Conclusion**

The purpose of this study was to evaluate the efficacy of student-centered role-playing exercises, specifically historical simulations, in enhancing student learning of the content of a 5th grade social studies class. A quasi-experimental pretest-posttest nonequivalent control group research design was used in comparing two groups of students: (a) a control group consisting of 19 students whose instruction was teacher-centered and lecture-based, and (b) a treatment group consisting of 21 students whose instruction included student-centered role-playing simulations. The independent variable was instructional method with two levels, teacher-centered and student-centered instruction. The dependent variable, measured at pretest and posttest, was a multiple-choice test constructed by the participant-researcher whose students served as research participants in the study. Items on the test were drawn from a database of released questions from state end-of-course and academic achievement exams.

Paired sample t-tests were used to determine both the treatment and control groups’ scores from pretest to posttest were influenced by the instruction students received. However, an independent samples t-test determined that the difference in student achievement of the treatment group compared to the control group was not statistically significant, that is could not be determined if the difference was the result of the intervention or of chance.

Upon reflecting on the findings of the present action research study, the journal of the participant-researcher from the data collection process, and relevant literature, it was
concluded that further studies with larger samples sizes would be useful in clarifying the
effectiveness of student-centered instruction through the use of role-playing simulations.
Furthermore, these findings and interpretations will be used to inform an action plan that
will be discussed in Chapter 5. To set the stage for this action plan, Chapter 5 will begin
with a review of the rationale and methodology of the present action research study
before also discussing the nature of the participant-researcher’s role as a curriculum
leader and the implications for further study brought about by this action research study.
CHAPTER 5
IMPLICATIONS AND RECOMMENDATIONS

This study used an action research paradigm to improve the teaching in a 5th grade social studies classroom. The problem of practice for this study was to determine the impact of using historical simulations as a student-centered, active learning strategy on student achievement. Chapter 1 of the present action research study was used to explain the problem of practice in greater detail, give background to the topic, and introduce the study. Chapter 2 then laid the theoretical, conceptual, and instructional framework for the current action research study along with an examination of the curriculum of the Primary Years Programme and the use of historical simulations.

To evaluate this problem of practice, the participant-researcher used a quasiexperimental design where a control group received instruction using teacher-centered methods, most notably including lecture, note-taking, and review questions. At the same time, a treatment group received instruction that used a historical simulation exercise where students role-played the role of muckrakers during the Industrial Revolution to write an expose on the truth of industrialization.

To quantify the efficacy of the historical simulation and its resulting impact on student achievement, students were assessed with a pretest and identical posttest before and after instruction, respectively. The score on the posttest was used to represent student achievement. Data was then collected over a period of two weeks from a treatment and control group of 5th grade social studies students where the treatment group received an
intervention of instruction through historical simulation while the control group was taught using traditional teacher-centered methods. The collection of this data was described through Chapter 3 when the methodology was explained in greater detail and a rationale was presented for choices related to data collection. In Chapter 4, the analysis of the data was discussed. For the pretest-posttest method, student scores were collected on through a teacher-created test that was based on the SCPASS test that students will take at the completion of 5th grade social studies. Simple statistics and gains were calculated with student scores on each assessment for both the pretest and the posttest. Inferential statistics were then used to analyze the significance of the differences between the pretest and posttest for each group and to analyze how the two groups compared to one another on the posttest.

**Major Findings**

When comparing the respective pretests and posttests for the control and treatment groups, both groups showed a large effect size and statistical significance that the respective mode of instruction was the cause of the gains in student achievement. The control group gained on average 47.89 points from the pretest to the posttest while the treatment group gained on average 56.43 points from the pretest to the posttest.

However, the findings of the study did not yield statistically significant results when comparing student achievement as measured by comparing the posttest between the control and treatment group.

Even so, when the overall findings were compared with the literature on the topic and the data collection journal of the participant-researcher, the findings were suggestive that there could be a positive impact from utilizing student role-playing activities in a
social studies classroom. The participant research noted through observations in journal maintained through the present action research study that students in the treatment group were pushed out of their comfort zones and had an important struggle to contend with as they experienced the historical simulation. In addition, they were engaged in the learning process of the historical simulation as evidenced by collaboration, a desire to take part in such a similar exercise again, and their perhaps newfound understanding that history happens to real people that lived real lives and not just as a words on the pages of a textbook.

From the suggestive while not statistically significant nature of these results, the participant-researcher is prepared and excited to continue working in the iterative process of action research to continue to improve their practices as an educator and outcomes for students. Overall, the findings of this study emphasize the importance of undertaking action research in order to make and then evaluate instructional decisions that can impact one’s own classroom.

**Reflective Stance**

Action research does not have designated stopping point; instead it is cyclical in nature and the participant-researcher is able to apply what they have learned throughout one cycle while continuing to seek answers and best practices. Because of this iterative nature of action research and the present action research study, it is important to reflect on the various stages of the present action research study as an action plan is considered (Mertler, 2009).

During the initial phase of the present action research study, the participant researcher not only evaluated her own personal beliefs and observations in the classroom,
but they also sought input from colleagues. As a result, it is important to view the action plan as not just the plan of or for the benefit of the participant-researcher. Instead, the action plan developed after the findings of the present action research study involves a community of practice. Such a community involves a group of people with a shared interest in the improvement of practices through interaction and the use of peer to peer professional development that is both transformative and open for discussion (Wenger, 2011). Because all of JES is involved in the move to a curriculum and the use of instructional practices based on the PYP, the inclusion of other teachers, administrators, and instructional support staff in the resulting community of practice makes the most sense. Therefore, the action plan was developed based on input of teachers, administrators, and instructional support staff.

During the acting phase, the participant researcher collected data from both a control and treatment group in order to determine the impact of student achievement. While the action plan does not require this quasi-experimental design to continue, it will require active data collection from teachers, administrators, and other stakeholders. Much of this data collection is no different than what teachers do regularly in their own classrooms as they look at quantitative data to determine mastery and to make instructional decisions. However, the action plan informed by the results of the present action research study also takes into account the importance of qualitative data through observations for making instructional decisions.

In the developing phase, an action plan was created based on the findings of the present action research study. The action plan, as described in Table 5.1, was developed to not only continue to evaluate the impact of historical simulations on student
achievement but also to improve the instructional framework of using historical simulations.

The present action research study represented my first attempt to systematically and holistically use a role-playing exercise to teach over an extended period of time. Based on the results of the present action research study, the participant-researcher will be able to share the findings of the present action research study, work with colleagues, and continue to evaluate the practice of using role-playing exercises in increasing student achievement.

Table 5.1

*Action plan developed from study*

<table>
<thead>
<tr>
<th>Element of Plan</th>
<th>Staff Member Responsible</th>
<th>Timeframe</th>
<th>Evidence of Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share findings of study to inform the development of a professional learning community</td>
<td>PYP coordinator</td>
<td>April-May 2019</td>
<td>Agenda of meeting</td>
</tr>
<tr>
<td>Develop instructional norms and guidelines for historical simulations</td>
<td>PYP Coordinator, Instructional Coaches, Classroom Teachers</td>
<td>May-June 2019</td>
<td>Document shared in instructional resources drive</td>
</tr>
<tr>
<td>Create developmentally appropriate simulations for upper grades</td>
<td>PYP Coordinator, Instructional Coaches, Classroom Teachers</td>
<td>June-July 2019</td>
<td>Inclusion of historical simulations in updated curriculum alignment guides</td>
</tr>
<tr>
<td>Lead professional development to increase the utilization of historical simulations</td>
<td>Administrator, PYP Coordinator, Instructional Coaches, Classroom Teachers</td>
<td>August 2019</td>
<td>Presentation, Sign-in sheet</td>
</tr>
<tr>
<td>Monitor and analyze the use of historical simulations</td>
<td>PYP Coordinator, Instructional coaches, Classroom teachers</td>
<td>2019-2020 School Year</td>
<td>Lesson plans, Quantitative Data, Qualitative Data, Meeting agendas and minutes</td>
</tr>
<tr>
<td>Reflect on practice of using historical simulations</td>
<td>PYP Coordinator, Classroom teachers</td>
<td>Ongoing</td>
<td>Completed PYP Unit Planners,</td>
</tr>
</tbody>
</table>
**Action Plan**

The action plan developed from the present action research study involves sharing the results of the study, improving the use of historical simulations to most benefit students, modifying the curriculum to include the use of historical simulations, and continually reflecting on the impact of using historical simulations to keep improving how the use of simulations and to make informed instructional decisions revolving around the use of simulations.

Based on the aforementioned action research plan, results of the study will be shared with colleagues through the development of a community of practice through a specific professional learning community (PLC) about historical simulations that is made up of administrators, the PYP coordinator, instructional coaches, and interested classroom teachers. By opening up membership in this PLC to teachers who are interested in using historical simulations in their classrooms instead of forcing membership on a specific subject area or grade level, the efficacy of the PLC should be improved because the members will have a shared and vested interest in the purpose of the PLC (Andrews & Lewis, 2007). After sharing the results of the study, members of the PLC will be able to explore the possibilities of using historical simulations through collaboration, inquiry, and the sharing of instructional practices. The use of a PLC to introduce such collaboration, inquiry, and sharing will have the goal to not only further understand how historical simulations can be used within an IBPYP school, but also to continually enhance teaching and learning at JES for the benefit of students (Astuto, Clark, Read, McGree, & Fernandez, 2007). After members of the PLC feel comfortable
with their understanding of historical simulations and how to implement them into a classroom, the next phase of the action plan will begin.

In the second phase of the action plan, a set of norms will be created that establish how historical simulations should be implemented into the IBPYP classroom. This will allow the PYP coordinator, instructional coaches, and classroom teachers to be able to integrate the requirements of the IBPYP curriculum into how historical simulations will be used at JES during social studies. Some guidelines that will be given to the stakeholders who will be writing these norms include key points from the PYP curriculum, such as an emphasis on inter and transdisciplinary learning, the importance of students taking on a role that requires decision-making, the use of collaborative groups, and a period to debrief or reflect at the conclusion of the simulation (International Baccalaureate, 2009).

After these norms are developed, the third phase of the action research plan can begin: the creation of specific historical simulations for grades 3-6. These grade levels were chosen based on the current South Carolina Social Studies Standards because it is in 3rd grade that students begin studying social studies with an emphasis on historical knowledge and events. In order to effectively implement historical simulations, the participant-researcher believes that students should be given multiple opportunities in each grade level to participate in a role-playing exercise. This will enable students to become increasingly comfortable with the skills utilized during the historical simulations and to build on their thinking, analysis, and evaluation abilities as they progress through the units of study each year. By having specific historical simulations developed prior to the next school year beginning, teachers will be able to see how these simulations can fit
into their overall curriculum without becoming overwhelmed at the thought of developing the simulations as the year progresses. At the conclusion of this phase, curriculum alignment documents will be updated with plans for historical simulations, suggested pacing guides, and resources needed to implement the simulations developed.

After the development of plans for historical simulations, a professional development workshop will be lead to walk unfamiliar teachers through the process of implementing historical simulations. The curriculum alignment document and any resources required will be made available to entire school staff at this time. It would be suggested that in addition to sharing the information to teachers, teachers could also experience an abbreviated historical simulation. By introducing the topic of historical simulations to members of the JES community who are not part of the PLC, the PLC can hope to foster a school environment where teachers feel comfortable making innovative changes within their classrooms (Bryk, Camburn, & Louis, 2003).

As teachers begin to implement historical simulations in their classes, the process and the results of the simulations will be monitored and analyzed. Teachers will be able to ask for assistance from the PYP coordinator, instructional coaches, or another teacher who has successfully implemented historical simulations in their class during the implementation. Teachers will also be asked to participate in informal, non-evaluative observations when their classes are working through a historical simulation. Because teachers are often wary of classroom observations and feedback is a necessary component of improved practices, it is recommended that these informal observations be conducted by peers instead of supervisors (Cordingley, Bell, Rundell, & Evans, 2003). This will enable a consistent collection of qualitative observable data. Teachers may also be asked
to record information from debriefing sessions as a means of gauging student reactions to the historical simulations. By reflecting on the use of historical simulations in debriefing sessions, teachers will be able to identify their own progress towards the goals of the use of historical simulations while also opening up a dialogue about the effectiveness of historical simulations (Cordingley, Bell, Rundell, & Evans, 2003). Quantitative data will continued to be collected through student scores on achievement measures such as tests and quizzes. This data can be looked at during the preexisting data dives that exist at JES to help determine the impact of historical simulations on student achievement.

Finally, the action plan will require continual reflection. By engaging in reflection the development and implementation of historical simulations will not be a static, one-time event but instead will be an evolving process where the needs of students may necessitate changes to the developed instructional framework. As such it is important to remember that PLCs and the instructional decisions that result from PLCs are fluid beings that can and should evolve as needed (Bolam, et al., 2005). Such changes will be welcomed and recorded through unit planners developed in accordance with the IBPYP.

**Suggestions for Further Research**

While the nature of action research is that its intended use is for a local population and the present action research did allow the participant-researcher to critically examine a problem of practice with a solution in mind, the present action research study was limited by significant factors. These significant factors include the small sample size, the limited time for the intervention to be conducted and data to be collected, the setting of the study, and the methodology utilized to carry out the study. These limitations do suggest a need for further research.
**Sample size.** Due to the small size of the sample used for the present action research study, the results cannot be generalized to larger population. Instead, they can only be used to look at this specific local population at this one point in time. Furthermore, the limited number of participants could have affected the statistical significance of the study: as the size of a data set increases, so does its likelihood that even a small difference will yield statistically significant results (Ellis & Steyn, 2003). In addition, the sample population of this study was not randomized; because the study was limited to pre-existing 5th grade social studies classes within JES, a convenience sample instead of a random sample was used. In order to truly investigate the use of historical simulations to increase student achievement and generalize this study to a larger population, the sample size would need to be much larger and truly randomized. As a result, further studies that involve larger sample sizes are suggested. Future studies may also benefit from looking at specific subpopulations, such as students classified at gifted and talented, students scoring at a specific level on the SC PASS test, or leveled classes.

**Time limits.** The present action research study took place within a short period of time and only looked at specific indicators that were scheduled to be taught at this time due to the pacing guide of the district. Further studies that can collect data over longer periods of time would be beneficial. In addition to looking at data from multiple units of study, it would be interesting and enlightening to look at the differences in student achievement across an entire year of social studies lessons. Future studies could also be modified to include results from the end of year standardized tests that the teacher-created test in this present action research study attempted to emulate.
**Setting.** This study took place in a 5th grade social studies classroom, and the participant-researcher is a certified social studies teacher in the state of South Carolina. However, in the participant-researcher’s role as an IBPYP coordinator at JES, the participant-researcher did not have their own classroom, and the classroom of another teacher was used. In the role of IBPYP coordinator, the participant-researcher regularly co-taught and modelled lessons in social studies classroom, including the 5th grade classroom as the center of the research study. However, due to the nature of action-research, it may be more beneficial to conduct research within a classroom for which the participant teacher is the regular teacher. In addition, further studies could use multiple teachers across multiple grade levels to understand how historical simulations impact student achievement as the complexity of the material increases.

**Methodology.** The present action research study used quantitative data to analyze the impact of historical simulations on student achievement. This decision to solely use quantitative data was largely the result of the time limitations put on the data collection. However, when discussing the findings of the data analysis, the participant researcher found it necessary and important to also add information taken from informal observations recorded in a journal maintained throughout the data collection process. In future studies, a mixed methods approach could offer qualitative data that could more effectively and definitively discuss students’ levels of enjoyment, engagement, or empathy developed through historical simulations alongside the impact of student achievement. Such inclusions would present a more holistic view of the topic of historical simulations. Furthermore, the addition of these variables could offer more conclusive findings about how historical simulations might be used to increase student achievement.
Conclusion

Throughout the present action research study, the impact of historical simulations on student achievement was examined through an action research cycle. The study was carried out at JES, a small suburban school in the south in a 5th grade social studies classroom in order to determine the impact of historical simulations on student achievement in this particular classroom. This cycle consisted of planning, acting, developing, and reflecting (Mertler, 2014).

During the planning phase, the problem of practice of overreliance on teacher-centered instructional practices due to the nature of standardized tests was identified. Based on this problem of practice, it was determined by the participant-researcher to focus on the use of a student-centered instructional strategy of historical simulations to combat this while allowing students to collaborate, consider multiple perspectives, and develop historical empathy as a means to improve student achievement. In addition this phase resulted in a review of relevant literature and research that grounded the study in a theoretical framework of progressivism and developed a conceptual and instructional framework that guided the resulting present action research study.

During the acting phase, data was collected to answer the research question *what, if any, impact does the use of historical simulations have on student achievement?* This data was collected from both a control group and a treatment group through a pretest before instruction and a posttest at the conclusion of the instruction. The quantitative data was then analyzed using descriptive and inferential statistics. The analysis of the pretest and posttest of the treatment group did reveal a statistical significance in the scores before and after the historical simulation. However, a comparison of the posttest scores of the
control and treatment group, revealed that while students in the control group did perform better on the posttest, the difference in scores was not statistically significant. By using the data collection journal of the participant-researcher, these results were interpreted in light of observations made during the data collection process. While implementing a historical simulation did not result in a statistically significant finding, the participant-researcher did consider the findings to be suggestive.

In the developing phase, the results of study were used to create an action research plan that could be implemented at JES. Through this action plan, the results of the study will be shared with colleagues, used to improve the instructional framework of historical simulations, and continue investigating the use of historical simulations on historical simulations.

While the findings of this study cannot be generalized to a larger population due to the nature of action research, the study does provide direction for future research studies that may specifically involve a larger sample size, different subsets of students, the use of qualitative as well as quantitative data, and an extended timeframe to carry out the research.

Even without the ability to generalize, the participant-researcher gained valuable information about making instructional decisions and leading for curricular change to improve the education setting for all students. Overall, the participant-researcher would recommend the use of historical simulations in the social studies classroom as a means to help students achieve an understanding of the standards using active learning, collaboration, and empathy.
REFERENCES


Marshman, R. (2010). *Concurrency of learning in the IB Diploma Programme and Middle Years Programme*. Cardiff, Wales: IBO


Akey, T. M. (2006). School Context, Student Attitudes and Behavior, and Academic Achievement: An Exploratory Analysis. *MDRC.*


Zhao, Y. & Hoge, J. D. (2005). What elementary students and teachers say about social studies. Social Studies, 96(5), 216
APPENDIX A

CONTROL LESSON PLAN

Essential Question: What were the causes and effects of the Industrial Revolution?

Standard(s) Addressed: The student will demonstrate an understanding of major domestic and foreign developments that contributed to the United States becoming a world power.

- Indicator 5-3.1 Explain how the Industrial Revolution was furthered by new inventions and technologies, including new methods of mass production and transportation and the invention of the light bulb, the telegraph, and the telephone.
- Indicator 5-3.4 Summarize the impact of industrialization, urbanization, and the rise of big business, including the development of monopolies; long hours, low wages, and unsafe working conditions on men, women, and children laborers; and resulting reform movements.

Objectives: The student will be able to…

1. Understand the importance of transportation, communication, and resources in the start of the Industrial Revolution in the United States
2. Identify new methods of mass production
3. Describe new inventions
4. Analyze the impact of these inventions on people in the United States
5. Analyze the impact on mechanization on farm and factory workers
6. Describe urbanization and its effects on the living conditions in cities
7. Explain the cause and effect of the reforms of the progressive movement

Estimated Timeframe: Eight 45 minute class periods

<table>
<thead>
<tr>
<th>Day</th>
<th>The teacher will…</th>
<th>The student will…</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1. Lead an introductory discussion. (What age do you think kids should be when they begin working a regular job? Why? What kinds of jobs could a 10- or 11-year-old really do?) (5 minutes) 2. Introduce vocabulary. (Industrial Revolution, textile, plant, factory, Fair Labor Standards Act, child labor,</td>
<td>1. Participate in discussion by raising their hand and adding their opinion. 2. Copy vocabulary into notebook. 3. Create a KWL chart based on their background knowledge and reading.</td>
<td>Observation</td>
</tr>
</tbody>
</table>

106
<table>
<thead>
<tr>
<th>1</th>
<th>Lead PowerPoint presentation for students to copy notes into their notebook. (20 minutes)</th>
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<tbody>
<tr>
<td>2</td>
<td>Play Industrial Revolution BrainPop &amp; Assembly Line Videos. (10 minutes)</td>
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<tr>
<td>3</td>
<td>Go over BrainPop questions. (10 minutes)</td>
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<tr>
<td>4</td>
<td>Go over KWL Charts. (5 minutes)</td>
</tr>
<tr>
<td>3</td>
<td>1. Read and annotate “Industrial Revolution” 2. Complete inventions timeline. 3. Add to KWL chart.</td>
</tr>
<tr>
<td>4</td>
<td>1. Complete Portraits of the Industrial Revolution activity. As students go to 5 stations, they will add a portrait of someone from the industrial revolution to their handout. As they read or watch a short video, they will write down how this individual was affected by the industrial revolution. 2. Add to KWL Chart</td>
</tr>
<tr>
<td>5</td>
<td>1. Add information to graphic organizer using Social Studies Weekly with information about life for child workers (jobs, dangers, school, what they did for) 2. Use graphic organizer to write a paragraph describing life for child workers. 3. Add to KWL chart.</td>
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</tbody>
</table>

agrarian, mass-produced, homemade, labor union) (15 minutes) 
3. Introduce KWL charts & shared reading (“Definitely Not Child’s Play”). (20 minutes) 
4. Go over KWL charts. (5 minutes) 

Observation 
Inventions timeline 
Portraits handout 
Paragraph
<table>
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<tr>
<th>5. Go over KWL chart. (5 minutes)</th>
</tr>
</thead>
</table>
| **6** | 1. Introduce vocabulary. (*The Gilded Age*, tycoon, prosperity, robber barons, dividends) *The Progressive Movement*, Progressives, welfare, skyscraper) (15 minutes)  
2. Assign roles for Fab 4 Reading Activity and monitor reading (15 minutes)  
4. Reading comprehension questions (10 minutes)  
5. Go over KWL chart (5 minutes) | 1. Copy vocabulary into notebook.  
2. Read (“The Gilded Age”) in small groups using active reading strategies. (Predicting, Questioning, Clarifying, and Summarizing.  
3. Completing reading comprehension questions.  
5. Add to KWL chart. | Observation  
Reading comprehension questions |
| **7** | 1. Go over reading comprehension questions (10 minutes)  
2. Share PowerPoint about urbanization. (10 minutes)  
3. Show pictures of life before and after the industrial revolution. (15 minutes)  
4. Go over t-Charts (5 minutes)  
5. Go over KWL charts. | 1. Correct reading comprehension questions.  
2. Copy notes into notebook.  
3. Create a t-chart showing positive and negative changes of industrialization.  
4. Share information from t-charts.  
5. Add to KWL chart. | Observation |
| **8** | 1. Go over directions for video (*Living During the Industrial Revolution*) and monitor students. (25 minutes)  
2. Monitor and help students complete crossword puzzle (20 minutes) | 1. Complete video viewing guide  
2. Complete crossword puzzle using notes and *Social Studies Weekly*. | Video Viewing Guide |
APPENDIX B

TREATMENT LESSON PLAN

Essential Question: What were the causes and effects of the Industrial Revolution?

Standard(s) Addressed: The student will demonstrate an understanding of major domestic and foreign developments that contributed to the United States becoming a world power.

- Indicator 5-3.1 Explain how the Industrial Revolution was furthered by new inventions and technologies, including new methods of mass production and transportation and the invention of the light bulb, the telegraph, and the telephone.
- Indicator 5-3.4 Summarize the impact of industrialization, urbanization, and the rise of big business, including the development of monopolies; long hours, low wages, and unsafe working conditions on men, women, and children laborers; and resulting reform movements.

Objectives: The student will be able to…

1. Understand the importance of transportation, communication, and resources in the start of the Industrial Revolution in the United States
2. Identify new methods of mass production
3. Describe new inventions
4. Analyze the impact of these inventions on people in the United States
5. Analyze the impact on mechanization on farm and factory workers
6. Describe urbanization and its effects on the living conditions in cities
7. Explain the cause and effect of the reforms of the progressive movement

Estimated Timeframe: Eight 45 minute class periods

<table>
<thead>
<tr>
<th>Day</th>
<th>The teacher will…</th>
<th>The student will…</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>1</td>
<td>1. Ask students what they think the role of journalists in inspiring change is? 2. Explain “muckrakers” in the Industrial Revolution. 3. Distribute assignment sheets for newspaper article.</td>
<td>1. Brainstorm and share their responses 2. Read assignment. 3. Complete task analysis through KWLHA chart (What do I already know?, What do questions do I have about the assignment? What do I</td>
<td>Observation</td>
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<td>4.</td>
<td>Create cooperative groups &amp; assign roles (reporter, new arrival to city source, child labor source, factory foreman source, labor union source).</td>
<td>need to learn in order to be successful? How will I learn this information? What actions will I take based on what I will learn?)</td>
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<td></td>
<td>4. Read background information handout about the Industrial Revolution.</td>
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<td>5.</td>
<td>Lead students through task analysis.</td>
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<td></td>
<td>1. Discuss conducting research.</td>
<td>1. Select appropriate sources to build their identities within their cooperative groups.</td>
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<td></td>
<td>2. Provide primary and secondary sources for students to research their roles.</td>
<td>2. Take notes using sources.</td>
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<td></td>
<td>3. Create identity profiles (name, age, job description, Additional important information)</td>
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<td>3</td>
<td>1. Using identity profiles, present scenarios to the group about changes during the Industrial Revolution.</td>
<td>1. As scenarios are presented, work in jigsaw groups with how these changes would affect your character.</td>
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<td></td>
<td>2. Lead students in the creation of reporter’s notebook.</td>
<td>2. Create reporter’s notebook in cooperative groups.</td>
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<td></td>
<td>3. Monitor and assist as needed.</td>
<td>3. Add information to reporter’s notebook about the background to the industrial revolution and the effect of the changing times.</td>
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<td>4. Create ad for a new invention to be included in newspaper.</td>
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<td>4</td>
<td>1. Set up classroom to facilitate assembly line observations and factory interviews.</td>
<td>1. Participate in cottage industry versus factory work simulation.</td>
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<td></td>
<td>2. Explain group roles today.</td>
<td>2. Add to reporter’s notebook: observations from reporter as they watched, insights from factory workers, questions from labor union representative.</td>
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<td></td>
<td>3. Assist and monitor students as needed.</td>
<td>3. Research answers to questions unanswered.</td>
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<td>4. Create help wanted ad for newspaper.</td>
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<tr>
<td>5</td>
<td>1. Set up jigsaw groups for real-estate listings.</td>
<td>1. Go on audio &amp; visual tour of group members homes in jigsaw groups.</td>
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<tr>
<td></td>
<td>2. Explain group roles.</td>
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<td></td>
<td>Observation Real-estate listing</td>
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<td>Observation Help wanted ad</td>
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<td></td>
<td>Observation Invention ad</td>
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<td></td>
<td></td>
<td>Observation Identity profiles</td>
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<td></td>
<td>3. Assist and monitor as needed.</td>
<td>2. Return to cooperative groups to add information to reporter’s notebooks about the difference in lifestyles.</td>
<td>3. Create real-estate listing for newspaper.</td>
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<tr>
<td>6</td>
<td>1. Set up gallery walk and research stations.</td>
<td>1. Go on gallery walk in cooperative groups. Create questions that you would ask members of group.</td>
<td>2. Use research stations to research the questions to any answers that you cannot answer based on knowledge.</td>
</tr>
<tr>
<td>7</td>
<td>1. Review rubric requirements for newspaper.</td>
<td>1. Work in cooperative groups to write editorial piece where you defend or condemn the changes in the industrial revolution.</td>
<td>2. Assembly newspaper.</td>
</tr>
<tr>
<td>8</td>
<td>1. Set up newspapers for students to share.</td>
<td>1. Rotate through stations to read each groups newspaper. Leave a positive comment at each person's station.</td>
<td>2. Participate in a debriefing session by asking and answering open-ended questions.</td>
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<tr>
<td></td>
<td>2. Monitor and assist as needed.</td>
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<td></td>
<td>3. Lead debriefing session.</td>
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</table>
APPENDIX C

PRETEST AND POSTTEST

Industrial Revolution Test

1. Use the chart to answer the question that follows.

What event in American history was the result of the changes shown in the chart?
A. Immigration reform
B. The growth of big business
C. The election of Theodore Roosevelt
D. Women’s suffrage

3. Use the bar graph to answer the question that follows.

Which of the following provides the best explanation for the trend shown in the bar graph?
A. Increase of jobs in factories in Chicago
B. Chicago’s location on a river
C. Chicago’s nearness to gold fields
D. The number of banks in Chicago
2. Which of the following allowed the rapid industrialization of the United States of America to happen?
   A. Support for isolationism in America  
   B. The development of transportation and communication systems 
   C. Increased powers of the government 
   D. The growth of labor unions

4. What new power source from the Industrial Revolution led to changes in transportation on land and in water?
   A. Wood  
   B. Oil 
   C. Wind 
   D. Steam

5. Which invention allowed the workday of a factory worker to become longer?
   A. Conveyor belt  
   B. Light bulb  
   C. Steam engine 
   D. Steel

7. Use the photograph to answer the question that follows.

What was Lewis Hine's motivation for publishing this picture?
   A. To encourage people to donate to charity  
   B. To advertise for a glass factory 
   C. To promote the hiring of children 
   D. To expose the working conditions of children
6. Henry Ford made this statement in 1909: “I will build a motor car for the great multitude. It will be large enough for a family, but small enough for the individual to run and care for. It will be constructed of the best materials, by the best men to be hired, after the simplest designs that modern engineering can devise.” - Henry Ford, 1909

Which invention did Henry Ford introduce to make his promise a reality?
A. Interchangeable parts
B. Spinning jenny
C. Assembly line
D. Light bulb

8. Which of these statements best describes the life of factory workers in the late 1800s?
A. Workers often worked in dangerous conditions for very long hours.
B. Federal laws protected children from having to work in factories.
C. Federal laws made sure that workers were safe during the workday.
D. Wages were so high that factory workers were able to live in large, nice homes.

9. Use the photograph to answer the question that follows.

Which aspect of work in factories does this photograph best represent?
A. Factory owners planning to expand.
B. Workers bargaining at a union meeting
C. Workers completing the same task over and over
D. Buyers selecting from a wide variety of products

11. How did working conditions most negatively affect children?
A. High pay allowed new clothes and toys
B. Safety measures prevented accidents
C. Long working hours prevented attendance at school
D. Breaks allowed time to see family
10. How did the Industrial Revolution affect immigration to the United States during the early 1900s?
   A. More immigrants arrived looking for jobs
   B. Less immigrants arrived because of a lack of jobs
   C. Immigration was halted because there were no jobs
   D. Immigration laws kept skilled workers safe

12. Use the photograph to answer the question that follows.
   What change of industrialization is best represented by the photograph?
   A. Urbanization
   B. Rise of labor unions
   C. Women’s equality
   D. New forms of transportation

13. When did leisure activities become more popular in American society?
   A. As women’s roles changed
   B. As middle and working classes received more time off
   C. When food production decreased
   D. When unemployment decreased

15. How did muckrakers work to change American society?
   A. Writing in support of isolationism
   B. Writing in support of big businesses
   C. Writing about how life was for workers
   D. Writing to create political machines
14. Use the chart to answer the question that follows.

<table>
<thead>
<tr>
<th>Concerns of Progressives</th>
</tr>
</thead>
<tbody>
<tr>
<td>child labor laws</td>
</tr>
<tr>
<td>unsafe housing</td>
</tr>
<tr>
<td>?</td>
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</table>

Which phrase best completes this chart in order to describe the concerns of the Progressives?
A. Electricity usage  
B. International trade  
C. Stock market growth  
D. Dangerous working conditions

16. Which of these was a negative outcome of the industrial revolution?
A. Rise of monopolies   
B. Less jobs in factories  
C. A decline in unions  
D. More people moving to farms

17. How did the United States’ economy change during the Industrial Revolution?
A. The US economy became based on making goods in factories.  
B. The US economy became based on making food on farms.  
C. Less goods were produced.  
D. Goods became more expensive, and less people bought them

19. Use the graph to answer the question that follows.

Which statement best describes the trend shown in the graph?
A. A decrease in demand for goods  
B. An increase in minimum age laws  
C. An increase in laborers from other countries  
D. A decrease in charities that helped children.
18. Use the list to answer the question that follows.

- Poor pay
- Long hours
- Layoffs
- Dangerous conditions

Which tactic was most effective for changing these working conditions?

A. Riots
B. Boycotts
C. Unions
D. Monopolies

20. Which statement best describes a major positive result of the Industrial Revolution?

A. More products were produced at cheaper price making them available to more people.
B. Fewer products were produced making it difficult for people to buy them.
C. Fewer people lived in the cities because there were not jobs for them.
D. The number of farmers increased to provide enough food for growing populations.
APPENDIX D

LETTER OF CONSENT

October 1, 2017

Dear Parent or Guardian,

Our school and school district periodically asks students to complete tests, surveys, and questionnaires to gather information about various topics pertaining to curriculum and learning. During the upcoming social studies unit of study, your student will experience one of two teaching styles that are used to help students reach academic success in the classroom and on the SC PASS for Social Studies. By looking at these two different teaching strategies, valuable information will be gained about how student achievement can be increased in Social Studies.

This information will be used in my dissertation in practice for my doctoral degree at the University of South Carolina. Your agreement and your child’s participation in the study are completely voluntary.

Please read the following information about the study and sign the form below:

Test Content

The pretest and posttest that will be administered gather information on and about your child’s overall understanding of the unit content.

Voluntary

Your child does not have to take the pretest and posttest. Students who participate will only have to answer the twenty-three questions on the pretest and posttest. They may stop at any time without penalty. If they do not want to take the tests, they will not be penalized.

Anonymity and Confidentiality

The assessments will be kept confidential (not seen by others) and anonymous (no names will be recorded and/or attached to the tests or data—Students cannot be identified).

Benefit of the Study

The study will help teachers plan and/or learn more about how to plan instructional units that are student-centered.
Potential Risks

There are no known risks of physical harm to your child. Your child will not have to answer any questions unless s/he wants to.

Results

The results of the study will be available on or after January 21, 2018. In order to view the results of the study, please contact Anna Hasenkamp at ahasenkamp@fsd1.org or call 843-801-5051.

For any further information, please contact Anna Hasenkamp at ahasenkamp@fsd1.org or call 843-801-5051.

Thanks,

Anna Hasenkamp

PYP Coordinator

Please detach the bottom of this letter, initial by the option selected, sign the bottom, and return by Monday, October 8, 2016.

Name of Child: _________________________________________________

______ I do want my child to participate in the study.

______ I do not want my child to participate in the study.

Parent Signature: ______________________________ Date: _____________
APPENDIX E

LETTER OF ASSENT

October 8, 2017

Dear Social Studies Student,

Sometimes teachers use test scores to understand how their students learn best and what types of activities are the best to use in class to help students learn. For your next unit of studies in Social Studies, I will be collecting information about learning and different types of activities in social studies.

The information that I collect will be used in my dissertation in practice for my doctoral degree at the University of South Carolina. You only have to participate if you want to.

Please read the following information about the study and sign the form below:

**Test Content**
You will take a pretest and a posttest that will cover information learned in class.

**Voluntary**
You do not have to take the pretest and posttest. You will only have to answer the twenty-three questions on the pretest and posttest. If you want to stop while taking the test, you can. If you choose not to participate or decide that you want to stop taking the test, you will not get in trouble.

**Anonymity and Confidentiality**
The tests will be kept confidential (only I will see them) and anonymous (you will not write your name on the test, and no one will know that your test is yours).

**Benefit of the Study**
The study will help teachers plan and/or learn more about how to plan units of study that can help students learn.

**Potential Risks**
There are no known risks of physical harm. You only have to participate or answer questions if you want to.
Results

The results of the study will be available on or after January 21, 2018. In order to see the results of the study, please come to my office during your related arts period.

If you have any questions, feel free to ask at any time.

Fill out the form at the bottom to indicate if you do or do not want to participate in the study.

Your Name: ____________________________

_____ I do want to participate in the study by taking a pretest and a posttest.

_____ I do not want to participate in the study by taking a pretest and a posttest.

Your Signature: ___________________________ Date: _______________