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# Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School Boys

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Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School  
Boys

by  
Teleshia Mincey-Jones

An Applied Dissertation Submitted to the  
Abraham S. Fischler College of Education  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Education

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## Approval Page

This applied dissertation was submitted by Teleshia Mincey-Jones under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

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## Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

Where another author's ideas have been represented in this applied dissertation, I have acknowledged the author's ideas by citing them in the required style.

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Teleshia Mincey-Jones

Name

November 17, 2017

Date

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And we know that all things work together for good to those who love God, to those who are called according to His purpose (Romans 8:28).

## **Abstract**

Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School Boys. Teleshia Mincey-Jones, 2016: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: academic achievement, achievement gap, elementary education, reading readiness, gender differences

Reading mastery is essential for academic success. As an emphasis is placed on more rigor in education, some boys are being left behind in the area of reading. School districts are adopting new rigorous standards and transitioning to produce students who are career and college ready upon graduation. Girls are responding positively and thriving academically; yet, boys continue to underperform girls at the district, state, national, and global levels.

The gap between girls and boys in reading is three times greater than the gap in reading between Whites and Blacks, reported by the National Center for Education Statistics (2013b). This dissertation explored the achievement gap in reading between elementary school boys and girls from the perspectives of elementary school teachers' lived experiences derived from a temporality of their past, present, and future lifeworld existentials. Seven teachers were interviewed and provided their lived experiences on the reading gender gap. The findings indicated that boys need to read more to increase stamina and fluency when reading. Society has embraced the boy code and it is deemed acceptable that boys are not reading as much as girls. Teachers in this study recognize that reading comprehension is a life skill and the gap has to be closed in the elementary grades. If not, boys run the risk of widening the gap to a point in which they may lose all interest in catching up.

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## Chapter 1: Introduction

Reading is the foundation by which learning is developed and is an essential skill for all students to master to become academically successful (Connor et al., 2011; Cooper, Moore, Powers, Cleveland, & Greenberg, 2014; Duke & Block, 2012; Hernandez, 2011; Hoffert & Sandberg 2001; La Paro & Pianta, 2000; Wolter, Braun, Hannover, 2015). The gender gap that exists in reading, typically appearing early in elementary school, suggests that boys are at risk of falling behind girls. Due to this disparity, boys are starting elementary school at a disadvantage. This gap only widens as boys and girls progress through school (Clark & Burke, 2012, Gill, 2005; Parsons, 2004; Robinson & Lubienski, 2011).

During the 1990s and continuing into the new millennium, many aspects of the elementary classroom transformed to include a curriculum shift toward reading readiness for all students (Ingersoll & Merrill, 2010; Kenney, 2011). However, the emphasis on reading readiness highlighted boys' weaknesses and girls' strengths (Mead, 2006; Robinson & Lubienski, 2011; Sax, 2001; Whitmire, 2010). The premise found in these studies that highlighted differences between genders is that boys' and girls' brains are wired differently (Connor, 2013; Gurian, 2011; Ingahalikar et al., 2014; O'Connor, 2013; Sax, 2005). The neuroanatomical differences between the genders can be categorized as either differences in the maturity of the brain structures or neuroanatomical and neurophysiological sex differences that appear in the brain at an early age and continue into adulthood (O'Connor, 2013; Sax, 2001, 2006).

The average boy is less mature than a girl of the same age (Bramen et al., 2011; Gurian, 2011; McIntosh, Reinke, Kelm, & Sadler, 2012). Young girls are said to possess

more literacy skills than young boys (Baron-Cohen, 2003; Coley, 2001; Eriksson et al., 2012; Gurian, 2009; Matthews, Kizzie, Rowley, & Cortina, 2010; Maynard, 2002; Tyre, 2008). Girls demonstrate superior verbal skills at an earlier age, which leads to girls articulating earlier with greater proficiency and greater complexity than boys of the same age (Chenoweth, 2012; Eriksson et al., 2012; Gurian, 2009; Maccoby, 1966; Tyre, 2008).

Throughout the 21st century, data collection and research have targeted boys and literacy across the globe, including Canada, the United Kingdom, Australia, New Zealand, and the United States (Alloway & Dalley-Trim, 2006; Farris, Werderich, Nelson, & Fuhler, 2009; Mullis et al., 2012; Robinson & Lubienski, 2011; Skelton & Francis, 2011). The literature portrayed the principle that boys are less engaged in literacy learning than their female peers (Lam et al., 2012; Senn, 2012; Vantieghem, Vermeersch, & Van Houtte, 2014). Research substantiated claims of the national reading gap between genders (Bozack, 2011; Conlin, 2003; Gambell & Hunter, 2000; Legewie & DiPrete, 2012); however, this is not a gender generalization. Not all boys are lagging behind, and not all girls are doing well in reading (Alloway & Dalley-Trim, 2006; Martino, 2008; Sommers, 2013).

### **Statement of the Problem**

This phenomenological study explored the perspective of elementary school teachers on the reading achievement of boys in third through fifth grade. The study focused on teachers in a Florida school district. On average, elementary school girls, regardless of racial background or socioeconomic class, are outperforming boys academically in the area of reading. Nationally, more girls have achieved proficiency on standardized reading tests in all 50 states (National Center for Education Statistics [NCES],

2013a, 2015b; Orekoya, Chan, & Chik, 2014). According to data from the NCES (2013c), from 2009–2013, the reading assessment scores have shown a 7-point difference between genders favoring girls. Based on the available recorded data, since 1971, this gap increases as students progress to middle school (NCES, 2013c). The NCES (2015b) publicized that in 2015, 33% of male and 39% of female fourth graders achieved proficiency in reading. An even larger gap was shown in Grade 12, with 20% of males and 39% of females achieving proficiency in reading (NCES, 2015b).

The initial Florida Comprehensive Assessment Test (FCAT) was administered in 1998 as part of the state of Florida's strategy to increase student achievement by implementing higher standards (Florida Department of Education [FLDOE], 2015). This initiative was a direct response to the provision of the No Child Left Behind Act (NCLB) requiring states to demonstrate adequate yearly progress through standardized testing (Kaufman & Blewett, 2012). This criterion-referenced assessment was administered in Grades 3–11 in mathematics, reading, science, and writing. The score measured the student's mastery of Florida's Sunshine State Standards benchmarks (FLDOE, 2015). The FCAT 2.0 was introduced during the 2010-2011 school year to align with the Next Generation Sunshine State Standards in reading and mathematics (FLDOE, 2015). Until 2015, students in the researcher's district were assessed yearly using the FCAT or FCAT 2.0 (FLDOE, 2015). Based on district scores from the FCAT 2.0, elementary school girls were outperforming elementary school boys throughout the district in reading. The FCAT 2.0 data retrieved from the FLDOE (2014) revealed that girls had scored higher on the reading portion of the FCAT 2.0 in Grades 3 through 5 since its implementation in 2011.

Florida's state data are consistent with data from the researcher's district; elementary school girls are outperforming elementary school boys statewide. From 2011–2014, FCAT 2.0 state-level data revealed the percentage of elementary school girls achieving proficiency ranged from 60–64%, compared to 52–59% for boys. In the researcher's district, similar data showed the percentage of elementary school girls achieving proficiency ranged from 59–65%, compared to 51–59% for boys (see Appendix A for highlights for the district-level and state-level data by gender) (FLDOE, 2014).

The gender gap in reading favoring girls is consistent at the national level. The NCES reports national reading scores for students in Grades 4, 8, and 12. Students in these grades are assessed every 2 years, and the data are reported on the Nation's Report Card (NCES, 2013a, 2013c, 2015b). The Nation's Report Card gives aggregated data (i.e., grade, gender, and jurisdiction) of the average scale scores for reading for each assessment year. The national statistical data presented in the Nation's Report Card for public schools were consistent with the Florida state-level data and the district-level data. The results from 2009, 2011, and 2013 national reading assessment showed that girls outperform boys in U.S. public schools and Florida public schools by 6 to 7 points (see Appendix B for highlights for national data by jurisdiction).

**Phenomenon of interest.** When comparing the achievement gap between subgroups, the NCES (2013b) showed the current gap between girls and boys in reading is greater than the current gap between Whites and Blacks in reading by 300%. The reading gap is not unique to a particular country. The Program for International Student Assessment's (PISA) findings revealed girls outperformed boys in all 43 of the Organisation for Economic Co-operation and Development (OECD) countries surveyed (Cappon, 2011).

As a global problem, boys are falling behind girls in the area of reading achievement (Cappon, 2011; Haupt & Clark, 2003; Mullis et al., 2012; OECD, 2010, 2012). As a result, interventions (i.e., a boy-friendly curriculum, more male teachers, and gender-specific classrooms) have been implemented to address the gender gap (Bozack, 2011; Martino, 2008; Piechura-Couture, Heins, & Tichenor, 2013).

**Setting.** This study took place in a large Florida school district. There are 184 schools within the district educating approximately 184,000 students and employing over 12,000 instructional staff, based on 2012 data. The district includes 123 elementary schools with over 81,000 elementary students. Each school is assigned to one of five learning communities. For this study, the focus was on 6 of 24 elementary schools assigned to one learning community; each of these schools increased its 2012 school grade from the previous school year.

Approximately 2,300 students are attending the six schools that were expected to participate in the study. Of these students, 70% are Black, 25% are White, 2% are Asian, 2% are multiracial, 1% are Native American, and 1% are Pacific Islander. There are 283 instructional staff employed across the six schools and 70 of these teachers are assigned to Grades 3 to 5. The years of teaching among the group are as follows: 6% are first-year teachers; 29% have taught for 1–5 years; 40% have taught 6–14 years; and 25% have taught for 15 or more years.

**The researcher.** The researcher has been employed with the district since 2007 and serves in an instructional resource position (i.e., instructional coach, reading coach, curriculum resource teacher, and assessment coordinator) at the school level. Previous positions held by the researcher include reading specialist and secondary classroom

teacher. The researcher is seeking a doctorate in educational leadership.

**Causes related to the reading gap.** While a common consensus of the gender differences exist in reading, there is limited understanding as to external aspects affecting this phenomenon (Mead, 2006). Some researchers have claimed various biological, developmental, and educational factors affect student achievement in school (Gong, He, & Evans, 2011; Keenan & Shaw, 1997; Kenney-Benson, Pomerantz, Ryan, & Patrick, 2006; Knickmeyer, Baron-Cohen, Raggatt, Taylor, & Hackett, 2006; Lenroot & Giedd, 2010; Logan & Johnston, 2010; McIntosh et al., 2012). Other researchers have maintained aspects such as the socioeconomic status and geographical location potentially affect educational performance and participation among specific groups of both boys and girls (Betrand & Pan, 2011; DiPrete & Jennings, 2012; Graue & DiPerna, 2000; Huber, 2008; Legewie & DiPrete, 2012; Spelke, 2005). Another posited the cause of the reading gap is that boys will be boys, termed the boy code (Kimmel, 2010; Miedzian, 2002; Pollack, 1998). Further, the culture of the school is shaped by the gender of the educators (Brophy & Good, 1973; Cornwell, Mustard, & Van Parys, 2013; Johnson, 2008; Legewie & DiPrete, 2012; Martino & Kehler, 2006). These are some of the causes attributed to the current reading gap between genders.

**Background and justification.** A review of elementary and secondary education achievement data from the National Assessment of Educational Progress (NAEP) reported that boys across ethnic and racial groups are lagging behind girls in reading (NCES, 2015b). In 2011, 30% of boys were ranked in the bottom quarter of standardized tests, compared to only 19% of girls (Cappon, 2011). Pollack (1998) wrote when boys are not successful in school, their confidence is impaired. Consequently, they are more likely

to create disciplinary problems, be suspended from classes, or drop out of school (Bertrand & Pan, 2011; Kristoff, 2010; Pollack, 1998).

Entwisle, Alexander, and Olson (2007) provided three steps in the reading and language issues affecting boys. First, boys and girls start grade school with roughly comparable reading scores. However, through the course of elementary school, a significant gender gap is developed. By the close of elementary school, girls are outscoring boys typically by several points, and the parity that once existed in reading achievement at the start of elementary has faded over the course of five years.

The six schools in the study have experienced the phenomenon of boys lagging behind girls in reading. FCAT 2.0 data from the 2012-2013 school year revealed a greater number of girls scoring proficient (level 3, 4, or 5) on the standardized assessment than boys (FLDOE, n.d.b). During the 2013-2014 and 2014-2015 school years, five of the schools had a greater proportion of girls scoring proficient on the standardized assessment than boys. During the 2014-2015 school year, in one school, School F, the boys outperformed girls; however, that year, 56.8% of girls scheduled for the assessment were not tested and 25.6% of boys scheduled for the assessment were not tested (FLDOE, n.d.b). For the 2013-2014 school year, the percentages of girls and boys who were not tested was not available for School F.

**Deficiencies in the evidence.** The available research related to the gender gap in reading has been contradictory. Data have supported claims that boys and girls learn differently (James, 2007, 2009; Kaufmann, 2007; Sax, 2007). Further, there is controversy in the literature as to whether the gender gap that exists in reading is sufficient to be considered a crisis or a troublesome situation. Questions are left unresolved by the available

research on the gender gap in reading. The social or political plans of researchers on the gender gap may hinder their ability to draw a practical conclusion on the issue (Mead, 2006). Consequentially, controversy remains on the true impact on the scope of the reading gap between genders (Stoet & Geary, 2013). The intent of this study was to explore the reading gap from the perspective of the elementary school teacher. The goal of the study was to engage teachers, principals, learning communities, and school districts in a conversation and an action plan to close the gap in reading between boys and girls.

**Audience.** This study could be beneficial to parents, educators, and policymakers. This dissertation contains data from educators about the gender gap in reading, which could potentially serve as a blueprint for programs related to reading achievement for elementary school boys. Having a clear understanding of the differences that exist between genders can provide educators and policymakers the information to meet the needs of all students (Moore & Slate, 2011).

Sui-Chu and Willms (1996) believed greater parental involvement directly impacts factors (i.e., reduced absenteeism or tardiness, reduced dropout, improved homework) associated with a student's academic achievement. A meta-analysis conducted to synthesize the quantitative literature about the relationship between parental involvement and a student's academic achievement revealed a small to moderate relationship between parental involvement and academic achievement. The strongest relationship was that of a parent's aspiration for the child's educational success (Fan & Chen, 2001). Parental involvement in education is a key component of student success (Auerbach, 2007; Galindo & Sheldon, 2012). As a result of the positive correlation between parental involvement and a student's academic achievement, parental involvement is viewed by society as the

remedy for many educational problems (Fan & Chen, 2001; Jeynes, 2012).

Educators seek resources to enhance student learning in the classroom. The expectations for primary grades are greater than ever. Meanwhile, the time students spend in school has remained virtually unaffected for generations (Duke & Block, 2012). Academic expectations profoundly affect teaching and learning. Understanding this expectation is a critical component to students' success in schools. Educators are responsible for creating learning environments that nurture the growth and development of the student while simultaneously engaging the student in positive interaction and age-appropriate instruction (Rothbart, 2011; Willer & Bredekamp, 1990).

Policymakers have the responsibility to make important decisions for the educational system. Some of these decisions include, but are not limited to educational funding, school and class size, school choice, teacher education and certification, teaching methods, curricular content, graduation requirements, school infrastructure investment, school ethics and values, and standardized testing (Aydeniz & Southerland, 2012). Salisbury and Riddell (2000) stated that gender equality is a major topic of educational policies among others (e.g., marketization). Francis and Skelton (2005) advocated for educational policies that go beyond a fundamental mentality on gender differences.

### **Definition of Terms**

For the purpose of this applied dissertation, several terms are defined to provide a clear and concise understanding of terms used in this study.

**Achievement gap.** This term refers to a difference in scores between two groups of students where the difference is statistically significant, meaning larger than the margin of error (NCES, 2015a).

**Axon.** This nerve fiber transports all data used to access the environment and carry out behaviors. For the nervous system to operate properly, neurons must lengthen their axons during development to reach their targets (Goldberg, 2003).

**Boy code.** This term refers to a set of gender stereotypes that outline rules and expectations for boys' behavior (Pollack, 1998).

**Boy crisis.** This term refers to an indication that boys are in trouble due to them falling behind girls across multiple dimensions, such as in reading (Husain & Millimet, 2009).

**Gender.** "The personal traits and position in society connected with being male or female" (Carl, 2012, p. 27).

**Glial cells.** These nonneural cells perform housekeeper functions such as clearing out debris and excess materials. These cells support neurons by providing support and nutrition (Nevills, 2011).

**iready.** An adaptive diagnostic and progress monitor online program based on the Common Core standards geared to increase reading and math achievement (Curriculum and Associates, n.d)

**Learning styles.** This term refers to the "cognitive, affective, and physiological traits that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (O'Keefe & Nadel, 1978, p. 32).

**Lifeworld existentials.** This element, as defined by van Manen (1990) refers to the experiences of everyday life. These everyday experiences are divided into basic themes, lived space, lived time, lived objects and things, lived body and lived human relation (van Manen, 1990; van Manen, 2014).

**Magnetic resonance imaging (MRI).** The process in which radio waves “disturb the alignment of the body’s atoms in a magnetic field to produce computer-processed, high-contrast images of internal structures” (Sousa, 2003, p. 287).

**Multi-Tier System of Supports (MTSS).** A framework for all students based on levels of support and interventions resulting from data-based problem-solving process use to provide and evaluate the effectiveness of multiple tiers (i.e., integrated academic, behavior, and social-emotional instruction) based on student needs and alignment to educational outcomes/standards (Dorman, n.d.).

**Myelination.** Myelin coats the nerves of the brain (Sax, 2007).

**Next Generation Sunshine State Standards.** This term describes Florida state content standards that replaced the Sunshine State Standards in 2008 to provide more challenging educational public school instruction (Smith, 2014).

**Program for International Student Assessment (PISA).** An evaluation method used for measuring the international educational system by assessing 15-year-olds to determine their skills and knowledge using a triennial international survey. This survey is administered in approximately 70 countries belonging to the OECD (2010).

**Progress in International Reading Literacy Study (PIRLS).** A study of fourth grade students conducted on a five year cycle to monitor the trends of reading achievement that exist at an international level (Mullis, Martin, Foy, & Drucker, 2012).

**Rasch-estimate score.** This score is derived using an item analysis fit test referred to as the Rasch model that is based on a comparison between difficulties estimated from different score groups and overall estimates (Andersen, 1973).

**Reading gender gap.** An achievement gap in the area of reading in which one

gender (i.e., female students) statistically outperforms another gender (i.e., male students) (Loveless, 2015).

**Reading male role models.** Men who read and serve as an example for boys by promoting masculinity in reading to encourage boys to read (McKee, 2014).

**Sunshine State Standards.** Educational standards approved by the Florida State Board of Education in 1996 to identify academic expectations for student achievement in Florida's public educational institution in kindergarten through Grade 12 (Smith, 2014).

**Title I.** Part A of Title I provides elementary and secondary schools additional resources to ensure that schools with a large percent of the student population that live in low-income families are assisted with meeting state standards (U.S. Department of Education [USDOE], 2014).

**Title IX.** This section of the Educational Amendment of 1972 prohibits discrimination based on sex in any educational program or educational activity that receives federal funding (U.S. Department of Justice, 2015).

**Zone of proximal development.** Vygotsky (1978) defined this zone as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers” (p. 86).

### **Purpose Statement**

The purpose of this phenomenological study was to explore the gender gap that exists among boys, explicitly in the area of reading from the perspectives of elementary school teachers' lived experiences derived from a temporality of their past, present, and future lifeworld existentials.

## Chapter 2: Literature Review

### Overview of Study

The academic achievement of girls, which has come at the expense of boys, is perceived by some as a crisis in the education of boys (Bertrand & Pan, 2011; Cappon, 2011; Orr, 2011; Pollack, 1998; Sadowski, 2010). To address the issue of the achievement gap that exists between genders, a shift is necessary for the educational policies of the public school system (Cleveland, 2011; Timar, Maxwell-Jolly, 2012; Whitmire & Bailey, 2010). According to Sax (2001), boy's brains are wired differently from girls', and a solution is to employ differentiated teaching strategies to increase boy-specific strategies in traditional and gender-specific classrooms where instruction is considered boy friendly (Hodgetts, 2010; Keddie & Mills, 2009; Porter, 2015; Stoet & Geary, 2013). The issue of boys' academic achievement has brought about significant research data suggesting boys are falling behind in the area of reading (Clark & Burke, 2012; Finley, 2011; Huang, Liang, & Chiu, 2013; Tyre, 2013; Watson & Kehler, 2012). Although this cannot be generalized for all boys, the data show that, overall, girls are outperforming boys in reading (Bozack, 2011; Martino, 2008; NCES, 2013a, 2013c, 2015b; OECD, 2010).

This literature review covers the conceptual framework and discusses the NLCB that allowed for single-sex school to provide gender specific strategies (Porter, 2015; Strain, 2013). It reviews the reading gender gap that exists in the United States and abroad. Additionally, it addresses reading readiness of elementary students, brain-based research related to gender differences, and pedagogy and methodology of reading instruction.

## **Conceptual Framework**

A theory explains an observed relationship between phenomena (Odi, 1982). The theoretical grounding for this study is Dewey's (1997) theory of experience, Bruner's (1960, 1966) learning theory on teaching, and Vygotsky's (1978) zone of proximal development. Also included is Moss and Brookhart (2012), the theory of action to build capacity.

**Dewey's theory of experience.** Based on Dewey's (1997) theory of experience, the experience comprises two principles: continuity and interaction. The principle of continuity suggests that experience affects humans. The principle of interaction is built upon the principle of continuity and explains how experience is created based on past and present familiarities. Dewey (1997) suggested that educators should take into account a student's past experience when designing instruction or subject matter to fulfill the student's potential.

According to Dewey (1997), all genuine education is derived from experience. However, this does not describe whether the experience is authentic or similarly educative. For this reason, education and experience are not parallel to one another. The same goes for the experiences themselves, as experiences may be disconnected from each other, which give a noncumulative effect. Dewey (1997) noted that students have experiences in school during the learning process; however, the quality of the experience is important. The quality of experience has two categories: (a) the instantaneous facet of agreeableness and disagreeableness and (b) the impact on later experiences (Dewey, 1997). For this reason, Dewey stated that educators must promote desirable experiences,

which show immediate gratification and influence a positive future experience. Therefore, “every experience lives on in future experiences” (Dewey, 1997, p. 27), and the subsequent experiences should be productive and imaginative.

The principle of continuity of experience or the experimental continuum is defined as every experience is influenced by past experiences, and in essence, future experiences are appropriately altered as a result of this influence. Intellectual development is one characteristic of the principle of continuity. Every experience is a moving force, which can only be measured by the direction of the move. Educators must account for this directional move to provide insight as to what the students are thinking during the learning process. The second aspect of the principle of continuity of experience states that all experiences are influenced by prior experiences, and prior experiences will influence future experiences. Recognizing these extraneous factors and their relationship to the learning process is a way to channel the direct experiences of students. A primary responsibility of educators is to understand the shaping of experience and acknowledge those environmental criteria that lead to experiences that ultimately lead to growth and development (Dewey, 1997).

Dewey (1997) stated that interaction is the “second chief principle for interpreting an experience in its educational function and force” (p. 42). In this case, objective and internal conditions have equal measures of both the educational function and force. A situation emerges when the two principles, continuity and interaction, are presented together or when they interact. The principles of continuity and interaction are not individual principles. According to Dewey (1997), these principles coincide with one another, and the

experience from one situation carries over to the intellectual development, which accounts for experiences made in future circumstances and interactions. Together, continuity and interaction provide a degree of educative importance and adds value to the experience. The concern for educators is the situation in which the interaction takes place. The educator has full control over “objective conditions” (Dewey, 1997, p. 45) enabling him or her to directly influence the educative experience in a way that creates a worthy experience. With objective conditions comes the responsibility of the educator to understand the needs of the students and generate a quality educative experience for a given student at a given time. Dewey (1997) stated,

The principle of interactions makes it clear that failure to adapt the material to need and capacities of individuals may cause an experience to be non-educative as much as the individual to adapt himself to the material being presented. The principle of continuity in its educational application means, nonetheless, that the future has to be taken into account at every stage of the educational process (p. 47).

**Bruner’s learning theory.** Bruner’s (1966) theory of social constructivism incorporates the social and cultural aspects of learning. It emphasizes early child development, which is an essential part of student learning, and suggests that language development is a result of the student’s experiences. Language acquisition plays a role in reading, and the social interaction that results in language acquisition is equally as important as language acquisition itself. One of the essential characteristics of a human being is the ability to learn, which is culturally embedded to the point in which it becomes automatic. Humans build upon past learning experiences that Bruner (1966) referred to as intrinsic motives for learning. In this case, the motive is not dependent upon the reward connected to the

activity. Bruner (1966) wrote “in the process of teaching a skill the parent or teacher passes on much more. The teacher imparts attitudes toward a subject and, indeed, attitudes toward learning itself” (p. 123).

Culture is a set of values, skills, and ways of life, which cannot be mastered by an individual member of the society (Bruner, 1960). Bruner (1966) stated that in what are considered better high schools, the development of discussion is focused on the reciprocal “give and take,” which becomes “the vehicle of instruction” (p. 126). A key component of this discussion is the fact that although there is reciprocity, students are not expected to learn or to behave in the same manner. Bruner (1966) further stated, “if reciprocally operative groups are to give support to learning by stimulating each person to join his [or her] efforts to a group, then we shall need tolerance for the specialized roles that develop” (p. 126).

Bruner (1960) introduced three basic ideas: the process of intellectual development in children, the act of learning, and the spiral curriculum of learning. There are two stages of intellectual development. The first stage ends when the child is 5 or 6 years of age. The mentality of the child deals with relationships that exist between experiences and actions, and the child learns to experience the world through action. Language development begins during this stage as the child learns to manipulate symbols. The child learns from trial and error as he or she is able to distinguish between goal and methods used in obtaining the goal. Within this timeframe, concept transmission from teacher to a child is very limited. During the second stage of development, concrete operation, the child is of school age. Operation in this stage refers to an action used during internal ma-

nipulation in one's mind. Unlike the previous stage of development, trial and error are reversible and internalized, meaning the child is able to think through the concept of trial and error without carrying out the physical task of it. During the learning of concepts, the child is able to move from concrete thinking to concept utilization (Bruner, 1960).

When learning a new subject, a child will experience three almost simultaneous acts of learning. The first process is an acquisition of new information, in which prior knowledge is either enhanced or replaced. Second, the process of transformation occurs when new knowledge is unveiled and transitioned into a new formation. Third, a child conducts an evaluation of the information to determine its appropriateness to the task. Learning occurs over a series of episodes, short or long, in which all three aspects of the acts of learning are present. Through the course of instructional preparation and materials, learning episodes are manipulated with an intent of increasing the duration a child may experience a learning episodes to shape learning (Bruner, 1960).

The spiral curriculum is the final piece of Bruner's philosophy on the process of education. According to Bruner (1960), all children can learn at various stages of development, with a gradual release of less complex information being taught during the earlier years. As the child develops and is more equipped to process the information, the child is reintroduced to the topic or subject. The process is named spiral curriculum, and it enables the child to be mentally able to process the information being presented. The spiral effect is provided as the curriculum is taught at varying grade levels with increasing difficulty at each grade level as the topic or subject is reintroduced to the student (Bruner, 1960). The new learning is bridged with the old learning throughout the process (Johnston, 2012).

**Vygotsky's zone of proximal development.** When a child learns in school, the learning is based on prior knowledge. From the beginning of school, the learning and development of a child are interconnected. Vygotsky (1978) introduced the concept of zone of proximal development (Robinson, 2017). According to the theory of the ZPD, learning should correspond with the developmental level of the child. During learning, progress may vary to some degree for children with the same mental development level. Although these children are of the same mental development level, they are not of the same mental age (Vygotsky, 1978). Mental age is determined by the age group a child is able to perform a series of the task with increasing level of difficulty as measured by an intelligence test (Kuhlmann, 1912), whereas the actual age refers to the chronological age of a child. This theory is the source for the ZPD (Vygotsky, 1978).

The mental development of a child can be categorized into two levels: the actual development level and the zone of proximal development. The ZPD as proposed by Vygotsky (1978) is the essential feature of learning. At internalization of the ZPD, the child has achieved his or her independent development. The ZPD is the process of maturation a child goes through. The functions at this development level are considered not matured; however, they may potentially mature in the future. In comparison, the actual developmental level is retrospective, whereas the ZPD level is prospective. The relationship between the developmental and learning process can be quite intricate, and the relationship between subjects may vary as a child progresses from stage to stage. The ZPD is a result of the developmental process lagging behind that of the learning process (Vygotsky, 1978).

**Moss and Brookhart, the theory of action to build capacity.** Moss and

Brookhart (2012) described the essence of the theory of action as “the most efficient teaching and the most meaningful student learning happens when teachers design the right learning target for the day’s lesson and use it along with their students to aim for and assess understanding” (p. 2). The theory of action is defined as a “mental map” (Moss & Brookhart, 2012, p. 1), which should be explicit to move toward the desired effect (Fullan, 2007). It requires a level of practical knowledge to execute professional task work (Sanders & McCutcheon, 1986). The Theory of action affects both teachers and students through its design to build capacity and use research-based strategies to increase effective teaching. It emphasizes the importance of teaching and learning elements such as educational content knowledge, classroom management, understanding of the social and economic background of students, and understanding the essential aspects of educators related to effective teaching (Core Education, 2011). The premise of the instructional capacity-building theory of action is that if local schools and the district invest in building the capacity of teachers with an emphasis on effective teaching, the result is increased student achievement and ultimately narrowing the achievement gaps (Core Education, 2011).

The theory of action as explained by Learning Forward (2011) is that effective schools are found in districts with “strong system-wide guidance” (p. 2). Various elements in such districts include a common curriculum, professional development, a monitoring system, and student data-based decision making (Learning Forward, 2011). The following seven premises are provided for theories of action with merit (a) a focus on motivation, (b) capacity building with a focus on results, (c) learning in context, (d)

changing in context, (e) a bias for reflective action, (f) tri-level engagement, and (g) persistence and flexibility in staying the course (Fullan, 2007). Each of these premises brings an important piece to the theory of action. Motivation leads to building capacity, resulting in closing the gaps in student learning by increasing knowledge and competencies, motivation, and resources. Motivation and capacity complement one another and lead to the third and fourth premises, which are learning in context and changing context. Once learners have the opportunity to learn within their context, the capacity must exist in a larger context to incorporate other premises. The final three premises, a bias for reflective action, tri-level engagement, and persistence and flexibility in staying the course, provide opportunities for the first four premises to mature within the theory of action. Tri-level reform references three educational systems: school and community, district, and state. Each of these premise's success impacts the persistence to stay the course and maintain flexibility (Fullan, 2007).

According to the Center Educational Leadership, the theory of action should be on a continuum of testing, revising, and refining of instructional practice to move toward increased student learning (University of Washington Center for Educational Leadership, 2014). Florida school systems use a protocol system that closely aligns to Learning Forward and its basic principles of the theory of action, which include coherence, personalization, a systemic approach, focus on results, continuity, and capacity building and sustainability. Learning Forward's theory of action reported that the professional development of educators is related to improved student performance through more efficient instructional and classroom practices (Learning Forward, 2011).

**Summary.** The theoretical framework presented in this chapter consists of an

overview of the theories presented by Dewey, Bruner, Vygotsky, and Moss and Brookhart, which provides an educational concept related to teaching and learning. The philosophers identified as part of the theoretical discussion have made significant contributions in the field of education and have some influences on how students are taught. The theoretical framework being presented supports the belief that learners construct new ideas or concepts based upon existing knowledge.

### **No Child Left Behind**

NCLB legislation was enacted in early 2002 with an objective to have all students reading at grade level by the end of third grade (Duke & Block, 2012). The focal points of educational reform for the 21st century were accountability and choice. As these became the foundation for Former President Bush's NCLB, standardized testing became the measure of school quality across the nation. Although the original act had elements embedded to measure students, teachers, principals, and schools, it lacked measures for curriculum and standards (Ravitch, 2010). NCLB was designed to eliminate existing achievement gaps by the year 2014. By means of accountability, high standards, annual academic assessments, and consequences for schools who fail to meet adequate yearly progress, Former President Bush sought to reform the educational system. States are held accountable for the achievement of the following groups of students: (a) economically disadvantaged students, (b) students from major racial and ethnic groups, (c) students with disabilities, and (d) students with limited English proficiency (NCLB, 2002). Additionally, the requirements apply to states that receive Title I funding. These states were required to participate yearly in the NAEP for students in Grades 4, 8, and 12 in both reading and math. NAEP uniformly assesses students using the same sets of test booklets

in the assessment areas across the nation. In the area of reading, the students are expected to read at grade level passages and answer questions to measure their comprehension of the text. In the area of math, the students are assessed on their mathematical knowledge and skills and their application of problem-solving in a given mathematical situations. Participation in the other 10 assessment subject areas (i.e., writing, science, art, civics, technology, and engineering, etc.) is voluntary (NCES, 2005).

Student test scores are critical in determining a school's adequate yearly progress under NCLB. One component of NCLB includes single-sex classes and schools. This component came in opposition to Title IX, as it proposed changes to the federal law prohibiting sex discrimination in education. Educational institutions were encouraged to establish public single-sex schools and classes for both genders (Strain, 2013).

One key component of the NCLB called for nationwide early reading instruction (Coburn, Pearson, & Woulfin, 2011; Vinovskis, 2008). The Early Reading First initiative established reading programs for preschoolers that provided early intervention in an effort to prepare children to begin reading instruction in kindergarten. This initiative is a component of the Reading First program, in which states and school districts are funded to use scientifically based reading research (i.e., instructional material and progress monitoring) to increase student proficiency in reading by the close of the third grade (USDOE, 2009). NCLB required school districts to look at students with a history of falling behind in reading and provide appropriate intervention to ensure these students become proficient in this area (Hayes, 2008; Lee & Reeves, 2012).

**Interventions.** Interventions are an essential part of a teacher's repertoire of teaching methods to ensure that struggling readers are learning the grade level reading

skills and strategies. A study conducted by Wanzek, Wexler, Vaughn, and Ciullo (2010) synthesized reading interventions for upper elementary students. The study consisted of 24 research studies, revealing cumulative data pointing to reading interventions that were most effective when the students were explicitly and systematically taught foundation skills (i.e., phonological awareness and phonics) and higher level reading tasks (i.e., fluency, word meaning, and understanding). Phonemic awareness, phonics, fluency, vocabulary, and comprehension were identified as the five instructional tasks that make up the major reading acquisition. Mastery of this instructional task weighed heavily on student mastery of the reading process. There is no one-size-fits-all approaches to mastery of the reading process; reading comprehension should always be the ending focus. An essential component to determining the instructional time and task is to have a clear understanding of differences that exist among learners (Rupley, Blair, & Nichols, 2009). Mahdavi and Tensfeldt (2013) states that improved comprehension occurs as students received the support to learn strategies to interact with the text as readers.

Interventions must be specific and based on the needs of the student receiving the intervention as identified by progress monitoring (Gelzheiser, Scanlon, Vellutino, Hallgren-Flynn, Schatschneider, 2011; Lipson & Wixson, 2012). Progress monitoring is essential to the intervention process because it provides the teacher feedback in determining the success of the intervention being used. Lipson and Wixson (2012) state that “effective interventions must be aligned with the core instructional program” (p. 112).

Intervention requires a multifaceted process of implementation (Lipson & Wixson, 2012). Good intervention programs included a strong teacher with small teacher-led groups (Pikulski, 2012). Schools in Florida use Multi-Tiered System of

Supports (MTSS) as a method for identifying appropriate intervention for students. This framework includes three tiers. The first tier is considered universal because all students received the same instruction. Tier 2 is for the students who may need a few extra supports while also receiving Tier 1 services. For this reason, it is referred to as supplemental. Tier 3 involves intensive interventions that are individualized to meet the need of the student. Many of the students require the individualized student interventions (Dorman, n.d.; Dulaney, Hallam, Wall, 2013). The MTSS process provides a multitiered approach to intervention in which data are intricate parts of the process. Closing the achievement gap using multitiered academic supports requires teachers to know and understand the student's academic needs (Benner, Kutash, Nelson, & Fisher, 2013).

### **Brain-Based Research**

The brain continues to grow and develop from the point of conception. Although differences (developmental and structural) occur in the latter part of childhood, these differences occur throughout the brain's growth. Efficient operation of the brain occurs because of myelination of axons. The pathway to reading decoding reaches maturity when the glial cells are myelinated. This completes the process of reading, which means that reading becomes automatic (Nevills, 2011). According to James (2007), scientists investigated the theory of brains being a gendered organ. Research has shown that the brains of girls and boys develop similarly in various areas of the brain. However, in most cases, girls' brains mature earlier than boys' brains do (Sax, 2007). One example occurs during the later stage of brain development growth to adulthood, which includes the process of myelination. This allows electrical impulses to travel the nerve to the brain. Myelination

continues in females until approximately the early 20s; however, it continues in male until approximately age 30 when the brain reaches physical maturity (Sax, 2007).

According to Pence and Justice (2008), language acquisition and the communication, styles between genders are the most noticeable developmental differences. These differences lead to slower language development typically among boys, which in turn leads to academic differences when they are learning reading skills. Although a student's speech develops as a natural process for those without hearing deficiencies, reading is learned through explicit instruction. Reading develops as images in the visual center of the brain are received, recorded, and rerouted for identification. This process occurs in the temporal, parietal, and frontal lobes of the brain and originates from the eye. Girls have a greater density of neurons in the posterior temporal cortex, which is the area of the brain where language is established (Witelson, Glezer, & Kigar, 1995). Even with no visual difficulties, boys categorize information differently than girls (Sax, 2005). In boys, the retina is wired to track movement, whereas the retina of girls is wired for detail and color variation (Sax, 2006). Typically, boys are known for action (i.e., video games, sports, fast cars). Boys view items in motion quite well, and this could be attributed to issues some boys display in the classroom when they have less frequent or too little movement (Lutchmaya & Baron-Cohen, 2002). This causes off-task behavior as boys track moving targets over other targets, which may not be of interest to them—such as the teacher (Piechura-Couture et al., 2013). Teachers should be the focus of the classroom. However, boys tend to be drawn to movement and find other moving targets of greater interest. This shifts their attention, and they lose focus on the teacher or stop paying attention to the lesson. These behaviors are typical characteristics of boys labeled as having

attention deficit or emotional behavioral disorder (EBD) (Piechira-Couture et al., 2013).

Neurologists Charles E. Brown-Sequard (French) and Henry C. Bastian (British) found that the left hemisphere of the brain is related to language (Sax, 2007). This was based on the effects of a stroke on the brain. They concluded that when a stroke occurs on the left side of the brain, a male patient is more likely to experience loss of language functions when compared to a male who has suffered a stroke on the right side of the brain (Sax, 2007). Gender differences trace back as early as 1964 to Herbert Lansdel, who reported on anatomic sex differences in the organization of female and male brains (as cited in Sax, 2007). Sax (2007) further discovered that the male brain functions more in compartments than the female brain, in which information appears more universally distributed. Statistical evidence that language in men derives from the left side of the brain is based on damage caused to male and female brains. If a male damages the left side of his brain, he would show a loss in his language ability. If the same damage occurs to the right side of the male brain, there would be no loss of language proficiency. However, damage to either the right or left side of a female's brain would show some loss of language proficiency. This provides evidence that females utilize both the right and left hemisphere of the brain for language (Sax, 2007).

Burman, Bitan, and Booth (2008) concluded that difference in language acquisition is biological. In a study conducted in children 9–15 years of age, girls showed greater stimulation of the brain related to language processing. The difference of pattern activation associated with performance accuracy and reading skills of girls and boys could account for the sex difference in childhood language performance (Burman et al., 2008). The area of the brain associated with language works harder in girls than boys

while engaged in language-related tasks. In addition, when comparing the brains of boys and girls during language-related tasks, both genders utilized different parts of the brain when performing the task. Based on the results, Burman et al. (2008) concluded that language processing is sensory for boys, whereas it appears more abstract for girls. During the study, girls were able to use abstract thinking to process language tasks, and their accuracy was related to the level of stimulation in language processing. However, the accuracy of boys' processing depended on how hard areas of their brain worked, using visual areas when reading words and auditory areas when hearing the words (Burman et al., 2008; Dehaene et al., 2010; Lynn & Mikk, 2009).

The brains of boys and girls are wired differently, which results in a difference in behavior among the gender groups (Dehaene et al. 2010; Sax, 2007). A study conducted by Cambridge University and reported by Sax (2005) provided babies two options on the day they were born: (a) to view a dangling mobile model of a mother's face or (b) to see a live mother's face used as a model. The purpose of the study was to determine female superiority in understanding facial expressions and whether this was a result of social factors. The live mothers only were allowed to smile for the babies (Sax, 2005). According to the findings, the boy babies were twice as likely to prefer watching the dangling mobile model of a mother's face, whereas the girl babies were more likely to look at the face of the live mother. Sax's (2007) analysis of the finding suggested that boys are prewired to be interested in moving objects (i.e., dangling mobile model of a mother's face), and girls are prewired to be more interested in live faces. Sax (2007) translated these findings into sex differences in the anatomy of the eye.

Technological advancement in medical imaging devices such as MRI has confirmed as scientific fact the impact of gender differences in brain development in children's language development (Burman et al., 2008; Tian, Wang, Yan, & He, 2011). MRI and related imaging have provided some insight into the structural and functional differences that relate to learning (Gurian, 2003). The prefrontal cortex of the brain that controls verbal skills develops earlier in girls and appears larger (Sax, 2007). This brings to question whether boys' brains are developmentally ready for this earlier onset of verbal skills development. Across cultures, language-related problems tend to be more apparent in boys (Halpern, 2000). Hedges and Nowell (1995) conducted a secondary analysis of six large U.S. national datasets collected on verbal ability administered between 1960 and 1992. The datasets involved adolescents from age 15 to the early 20s and the results revealed that females performed significantly better than males on the test.

### **Gender Differences and Education**

Gender appears to be a determinant in literacy achievement (NCES, 2012). Educational research indicates that the academic contact a teacher makes with students correlates with student achievement. Leinhardt, Seewald, and Engel (1979) conducted a study to determine gender differences that account for elementary school girls being stronger in verbal achievement and weaker in quantitative achievement than elementary school boys. The study revealed that student performance increased with teachers who spent more instructional time on the academic material as opposed to other general information. In the study, teachers provided more reading academic contact with girls, more math academic contact with boys, and overall boys received more behavior management information (Leinhardt et al., 1979). The cumulative effect of teacher contact over years of school in

elementary classrooms could affect the student (Leinhardt et al., 1979).

Carl (2012) identified gender and sex as separate entities. Gender refers to personal traits that define one as male or female is based on specifications determined by society. Sex refers to the biological makeup of being male or female. Maccoby and Jacklin (1974) conducted a study on gender and sex difference. Their study of the psychology of sex differences was composed of 1,600 students across eight areas of achievement, personality, and social relationships. Based on findings from the study, Maccoby and Jacklin (1974) concluded that (a) girls have greater verbal ability than boys, (b) boys excel in visual-spatial ability, (c) boys excel in mathematical ability, and (d) boys are more aggressive.

Entering kindergarten, girls and boys are somewhat equal in their exhibition of social and academic skill. The reading proficiency of most students entering kindergarten is at a low level, and only a few boys and girls can read words or sentences by the start of school. Although the academic skills of kindergarten students are considered somewhat equally proportionate, girls demonstrate a slight edge in reading. Of the few girls and boys who are able to read words or sentences at the start of the school year, 70% of the girls and 62% of the boys can identify letters (Zill & West, 2000). A higher percentage of girls can identify the beginning sounds and ending sounds of words correctly, and 3% of boys and 2% of girls can read words by sight. With regards to developmental difficulties, the percentages favor boys over girls. Fourteen percent of boys in comparison to 7% of girls exhibit difficulties with enunciating words and interact with others (Zill & West, 2000). Eighteen percent of boys and 7% of girls have difficulties focusing for extended periods. Based on accounts from classroom teachers, girls are more likely than boys to

respond positively to structure learning activities are, are keener to learn, are more attentive in the classroom, and are usually the ones to finish assignments (Zill & West, 2000). Boys tend to delay kindergarten entry more than girls. This practice, commonly referred to as holding the child back, holding out, or redshirting, is applied to students whose maturity level is not school ready (Ackerman & Barnett, 2005).

In the 21st century, the number of leadership roles in education held by women has steadily increased (Mulvey, 2009). Some have proclaimed schools are becoming feminized (Brophy & Good, 1973; Driessen, 2007; Johnson & Weber, 2011; Sommers, 2000). The Men Teach Organization reported that less than 19% of elementary and middle-school teachers are men (Johnson, 2008), and less than 24% of teachers nationwide are men (National Education Association, 2012). The disproportional number of male elementary school teachers has led to an imbalance in gender demographics and could affect the perception of either gender-based or individual teacher differences (Wood, 2012). Sommers (2000) stated that schools were made more girl friendly as a result of complaints from feminists that girls were losing their voice in male-oriented classrooms. Boys and girls have characteristics that uniquely define them; therefore, understanding and accommodating these intrinsic characteristics, both masculine and feminine, are an essential component in the educational success of either gender (Rowan, Knobel, Bigum, & Lankshear, 2002). Educators have redefined boyish behavior as a behavioral disorder, which in feminized schools has caused many boys to get in trouble as they protest the traditionalism of the classroom (Sommers, 2000).

### **Pedagogy and Reading Instruction**

Francis and Skelton (2005) instructed teachers to grasp a deeper understanding of

gender in the classroom by self-reflecting on their assumptions of boys and girls and the implications of these assumptions on their pedagogical practices. Other researchers cautioned against focusing primarily on gender differences among students, but rather on the effectiveness of instructional strategies that may be linked to gender (Ontario Ministry of Education, 2004). Mortimore (1999) referred to pedagogy as “any conscious action by one person designed to enhance learning in another” (p. 3). According to Mehanna (2004), pedagogies are linked to student achievement and are highly regarded for epistemological and empirical reasons.

The seminal report, *Preventing Reading Difficulties in Young Children*, provided research-based recommendations for students in prekindergarten through the third grade to increase later success in Grade 4 and beyond (Griffin, Burns, & Snow, 1998). Based on their findings, the following recommendations were largely adopted in the area of reading pedagogy: increased access to early childhood education (prekindergarten and kindergarten) and greater attention to improving word-reading skills (Duke & Block, 2012). Other recommendations for reading skills (i.e., vocabulary knowledge, comprehension strategy use, and conceptual and content knowledge) point toward the underutilization of learning in the later grades (Griffin et al., 1998). Providing students with an opportunity to practice skills and strategies and incorporating the components of a balanced literacy approach are segments of effective instruction. Effective teaching is multifaceted and includes the explicit instruction with a balance of reading and writing components, continued progress monitoring, and a clear understanding of what students need to develop their skills as readers and writers (Denton, 2009).

**Differentiated instruction.** Teachers utilize a range of pedagogical strategies

based on prior experience to provide differentiated instruction for various new educational situations (Barrett & Green, 2009). Braunger and Lewis (1998) stated that clear communication and professional collaboration are key elements identified in achieving high standards in reading performance. This may look different across schools, but it should consistently include goal consensus and a shared vision among professionals (Braunger & Lewis, 1998). The school's vision is a guidepost for the school and community (Luneburg & Irby, 2006). Pedagogical knowledge involves instructional and classroom management strategies, whereas content knowledge involves a deeper understanding of the subject area (Barrett & Green, 2009). Context knowledge involves awareness of the learner (i.e., interest and motivation), standards, and expectations related to the discipline. In addition, concept development of content and pedagogy allows for implementing strategies for increased student achievement. This means preparing teachers with basic concepts in content and pedagogy, developing skills in implementing various teaching strategies, and understanding the ways in which student learning develops (Barrett & Green, 2009).

**Interest.** Dewey (1913) stated that to gain individual interest, the educator must first gain the student's attention. There are two general types of interest: situational interest and individual interest that are categorized into four phases. The first phase, situational interest, is focused on the moment in which a situation occurs that gains the students' attention. The student's reaction could be based on an environmental cue that triggers the student's attention based on the interest of the stimuli. If the student is continually engaged, the interest is then said to be maintained, which is the goal of the second phase of situational interest.

The second type of interest is individual, and it consists of emerging and well-developed interest. Emerging interest results when situational interest is triggered and maintained. This could emerge based on a personal experience the student had or a genetic tendency to reengage in a familiar enjoyment. Although this interest type may vary based on the student, the content and the environment are contributing factors to the development of this potential interest. When a student has a desire to reengage over a period of time, the content area of interest is said to be well-developed. This may or may not be a result of the emergent interest. However, it is a direct result of a positive experience or feeling related to the content of interest. This type of interest is internally driven and builds knowledge that leads to self-discovery and mastery of the content (Hidi & Reninger, 2006).

**Learning style.** According to Cleveland (2011), the reaching and teaching of underachieving males is less reliant on the gender of the teacher and more dependent on the teaching style of the teacher. The behavior exhibited by underachieving boys (i.e., acting out, disrespect, or shutting down) is believed to be related to the clash between teaching styles and learning (Erlauer, 2003). Teaching that incorporates learning styles in the classroom requires more preparation time from the teacher and requires the teacher to know and to understand the individual learning mode of each student (Erlauer, 2003). Guild (2009) stated that learners whose learning styles are accommodated more frequently in the classroom achieve more immediate success, whereas students who struggle with adapting to a way of learning that may be uncomfortable tend to underachieve.

**Single-sex schools.** Prior to the 20th century, it was believed that boys and girls in U.S. schools should be educated separately to fulfill their different roles as adults

(Datnow, Hubbard, & Woody, 2001). In the early 1900s, coeducation was derived from an economic need to preserve funding (Tyack & Hansot, 1990). In 1972, Title IX was passed and provided for gender equality in public education. This eventually became the vessel for equal opportunities for men and women (Datnow et al., 2001). For more than 30 years, Title IX has prohibited gender discrimination at any school that receives federal funding (Bigler & Signorella, 2011; Cohen & Levit, 2013; Stabiner, 2004). In 2004, provisions of NCLB provided that the USDOE publish regulations for single-sex education within the public school arena. Incentives were offered in the regulations to encourage schools in local districts to provide single-sex schools as opposed to only single-sex classrooms (Graham, 2004; Strain, 2013).

### **Reading Gender Gap**

Reading is an essential skill for academic achievement; therefore, the reading gap between genders is a likely contributor to boys earning lower grades throughout school (Eliot, 2009). Whitmire (2010) stated that today's educational system had moved forward without boys. National scores in reading assessments confirm the academic gap between genders, known as the achievement gap, which can be further defined as "when one group of students. . . outperforms another group and the difference is statistically significant" (NCES, 2015a, para. 1).

Since the late 1980s, the reading gender gap has consistently increased. Girls in fourth and eighth grades have continued to outperform boys in the NAEP in reading. At the secondary level, this gap widens (Clark & Burke, 2012, Gill, 2005; Loveless, 2015; Parsons, 2004). According to the fourth-grade results on the Nation's Report Card (NCES, 2015b), the average score of girls and boys indicated no substantial changes from

2009–2013; however, fourth-grade girls consistently scored an average of 7 points above boys' test scores. In 2011, test results for boys in the eighth grade showed a greater gain from previous years (1992–2011) than the gains of girls (NCES, 2012). Nonetheless, girls in the eighth grade scored an average of 9 points higher than boys in the eighth grade (NCES, 2012).

Entwisle et al. (2007) reported that the gender gap for boys could have significant long-term implications that could include a higher retention rate for these students. Additionally, boys who have low grades as early as first grade are twice as likely to drop out as their peers with better grades. Long term this could lead to lower lifetime earners for those who drop out (Jacob, 2002).

Based on the results of a longitudinal study conducted by the National Endowment of Arts (2007), individuals considered good readers have jobs that are more rewarding. This study was a comprehensive analysis of over 40 studies across the United States between 1985 and 2005 (National Endowment of Arts, 2007). Basic readers are considered average readers who possess the ability to read at grade level, and proficient readers are considered strong in their capacity to read the text and comprehend what was read (Moje, Overby, Tysvaer, & Morris, 2008; Urguhart & Weir, 2014). The breakdown of the National Endowment of Arts study concluded that over 60% of proficient readers have jobs in the areas of management, business, financial, or other areas within the professional sector, whereas only 18% of those employed in these fields are considered basic readers.

Additionally, in comparison to basic readers, proficient readers are 2.5 times as likely to earn \$850 or more a week (National Endowment of Arts, 2007). During 2010,

males 25–39 years of age with a college degree earned approximately \$24.30 per hour, whereas males with only a high school diploma earned an average of \$14.70 per hour (Autor & Wasserman, 2013). According to the College Board (2015), over the span of a 40-year working period, an individual with a bachelor's degree would earn approximately 66% more in wages as compared to an individual with only a standard high school diploma.

Data from the Nation's Report Card substantiate claims of a reading gender gap (NCES, 2013c, 2015a). The Nation's Report Card includes data from all 50 states, the District of Columbia, and the Department of Defense schools; however, the reading gender gap is not unique to the United States. Across OECD countries, a reading gender gap exists where girls are also outperforming boys (Aydin, Erdağa, & Taş, 2011; OECD, 2010). In a 2009 PISA report on OECD countries, girls on average scored 39 PISA points higher in every participating country. This translates to an academic gap in reading of one proficiency level or one year of schooling (OECD, 2010).

Chiu and McBride-Chang (2006) conducted a study involving 43 countries with nearly 200,000 15-year-olds. The focus of the study involved the adolescents completing a reading comprehension test and questionnaires, which were both analyzed using a multilevel regression of Rasch-estimate scores. The purpose of the study was to analyze the data for a relationship between gender and context on reading and achievement among the students. The data were consistent among all 43 countries surveyed, and the results showed that girls outscored their male peers. Reading enjoyment constituted 42% of the gender effect. The outcome of the study supported data from the PISA 2009 report that

gender differences were not isolated to the United States. This phenomenon was internationally consistent. In the Chiu and McBride-Chang (2006) study, the gender differences varied from 6 points to 59 points, with a mean difference of 33 points across the countries surveyed. In addition, there was a univariate correlation of 0.14 with reference to gender and reading scores. Although a small correlation, it depicted a gender effect on reading scores. The percentage of poor readers were consistent with the scores of gender differences. In all 43 countries surveyed, boys' scores consisted of a higher portion of the poor readers. Further examination determined that in 90% of the 43 countries, boys were at least 50% more likely than girls to be poor readers (Chiu & McBride-Chang, 2006). The National Literacy Trust (2012) also reported an international trend in which girls are better readers than boys.

**Reading readiness.** Reading readiness, as defined by Ackerman and Barnett (2005), describes what is considered “good enough” (p. 14) in each reading domain and identifies inequality that may exist because of early development. Jensen (2008) stated that one develops reading skills as a baby. Movements of crawling, sucking on objects, and rolling are considered precursors for brain development for reading. According to Whitmire (2010), gender differences in reading are caused by the “erosion of verbal skills being a key component of reading readiness” (p. 31). The process of reading readiness has to start early because schools are now preparing students for a new global marketplace. In response to this calling, a push for earlier verbal skills development emerged within the school system (Whitmire, 2010). The ultimate goal is for students to read with fluency and comprehension, which occurs in upper elementary school and requires higher order thinking, such as advanced vocabulary development and rapid thought process

(Nevills, 2011). Theoretically, with the cultural shifts or transformation of beliefs and behaviors between generations, this is a natural educational progression. However, schools in the United States made the necessary changes to increase verbal skill requirements by mandating that teachers adjust their instructional strategies to ensure that all students were moving forward with the new requirements (Whitmire, 2010).

**Reading surveys.** Reading surveys have provided data on the phenomenon of the reading gender gap as it pertains to boys and girls. Clark and Burke (2012) conducted a survey with more than 200 respondents throughout January and February of 2012. Based on the results, 76% reported that boys are not performing as well in reading as girls in their school setting, and 82% have provided instructional strategies to address the issue of boys' underachievement in the classroom. When compared with girls, more boys reported being bored and stressed out by reading. Feedback from boys in the study exposed that, in their opinion, reading was not considered cool, and they were more likely than girls to struggle with reading. Additionally, boys were more likely than girls to show little to no interest in reading because they feel their reading choices were not respected in school (Clark & Burke, 2012).

Baker and Milligan (2013) completed a survey study in three countries—the United States, the United Kingdom, and Canada—involving parents of children born in the new millennium. The results revealed that parents of preschoolers spend more time on early literacy activities with their daughters over their sons. It is estimated that girls may receive up to 500 hours more of literacy activities over that which boys receive from their parents in the time leading up to their primary years of life. This could be a potential contributor to the reading gender gap that exist in the United States and abroad.

### **Lifeworld Existentials**

Van Manen (1990) proposed that the four fundamental themes—lived body (corporeality), lived space (spatiality), lived time (temporality), and lived other (relationality or communality) influence the lifeworld irrespective of their historical, cultural, or social background variations. These four themes referred to as existentials are vital to the understanding of the lifeworld or lived experience. Together the existentials “form an intricate unity which are called the lifeworld— lived world” and they relate to how each human being experiences the world (van Manen, 1990, p. 105). The lifeworld involves action, which is vital to the existence of the experience (Jung, 1966). Through the body, one can experience the world and the potential tangibility that one’s self may reveal within the world. Leonard (1989) states that “it is the body that first grasps the world and moves with intention in that meaningful world” (p. 48).

**Lived body.** The lived body is defined by the individual person in a given situation. The lived body is born into the world, and it assumes pre-existing conditions and actions of the world in which it occupies space by becoming familiar with the traditions and customs of the world. The lived body is the central component of the world combined with a sense of self. As the lived body experience bodily activities, its internal awareness of internal time connects to the external lived time. It becomes a dominant form of reality, and the individual exists in a biographically determined condition, which is based on previous experiences. The biographically determined condition provides an individual with a status in the world relative to physical and temporal space or lived space and relative to personal roles and values one may possess (Schütz, 1987 as cited by Santiago-De-

lefosse & del Río Carral, 2015). The world is known as a conscious familiarity with being in the world (Munhall, 1994) in which the lived body can become lost in meaning in the everyday life (Santiago-Delefosse & del Río Carral, 2015).

**Lived space.** The lived space or spatiality as referenced by van Manen (1990) is the felt space that we experience in our everyday life. Each person may experience lived space in different modalities (i.e., adults vs. children). This is due, a great deal, to the *cultural and social conventions* surrounding one's pre-existing experience within the space he or she inhabits. The nature of lived space varies from the mathematical concept of space that one may envision with regard to dimensions of length, width, and height. The concept of lived space references the space within or around oneself. Van Manen (1990) summarized the lived space as "a category for inquiring into the ways we experience or day to day existence... to uncover more fundamental dimensions of lived life" (p. 103). It is the intimacy or comfort that is experienced or felt within one's space similar to that of lived body and lived time.

**Lived time.** Lived time is felt time or time as it is experienced in the present moment. Van Manen (1990) characterizes lived time as the "temporal dimensions of past, present and future" (Van Manen, 1990, p. 104). Temporality, as described by van Manen (1990), is the subjective perception one has of time, unlike the objective measure of time one has when using a clock as a measure of time. The concept of lived time is not a stand-alone characteristic of the lifeworld as per Pinar, Reynolds, Slattery, & Taubman (1995) "to be attuned to time is to reside in one's lived time, in one's lived space, an embodied temporality" (p. 442). The lifeworld includes the view of an objective measure-

ment of time, as the temporalities of time from the past experience and present experiences that are used to shape future experiences (van Manen, 1997). Schrag (1963) states that experience is related to a past experience and potentially qualified by that yet to be experienced.

**Lived other (relationality).** The lived other reflects the lived relations of interpersonal significance one shared with others (van Manen, 1990; 1997). It constitutes the individuality and the intimacy felt in which Ricoeur (1994) refers to as “the selfhood of oneself implies otherness to such an intimate degree that one cannot be thought of without the other” (p. 3). When one meets others and interacts in a corporeal capacity, negative or positive lived experiences are evident based on the impression made. The four existentials—lived space, lived time, lived body, and lived relationality—are different in meaning, yet that cannot stand alone within the lifeworld. Lived other incorporates the lifeworld existentials of the other three themes lived body, lived space, and lived time as each lived experience intertwines with one another.

### **Summary of the Literature Review**

The review of the literature provided the preliminary context and content for the study. It outlined the relevance of past research on the current study. Over the past decade, reading scores have consistently shown an achievement gap favoring girls. As stated by Hernandez (2011), in April 2011, a longitudinal study was released showed students who are not proficient readers by the third grade are four times more likely to exit high school without a diploma. This increases to six times for students who have trouble mastering the basic skills (Hernandez, 2011). Data from various sources (e.g., NAEP, PIRLS, and PISA) have substantiated that the reading gender gap has been around for decades

(NCES, 2013c, 2015a; OECD, 2010, 2012). Although boys are now doing better academically, they have failed to close the gap in reading. Various reasons may account for this consistent gap (i.e., biological, developmental, or educational). The goal of this phenomenological study was to provide the lived experiences of elementary school teachers on the reading achievement of boys contributing to the reading gender gap.

### **Research Questions**

The overarching central question being explored is: What meaning do elementary school teachers ascribe to the reading gender gap among boys in the past, present, and future at a Central Florida school district?

The subquestions are as follows:

1. What were the *past* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer is sourced from Interview Questions 1.1, 1.2, 1.3, and 1.4.
2. What are the *present* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer is sourced from Interview Questions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, and 2.7
3. What will be the *future* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer is sourced from Interview Questions 3.1, 3.2, 3.3, and 3.4.

## **Chapter 3: Methodology**

### **Aim of Study**

The aim of the study was to explore classroom teachers' perceptions of the gender gap in reading. The study was conducted with a select group of teachers from a Central Florida school district. The problem explored by the research study was the reading gender gap that exists as a result of boys lagging behind girls in the area of reading. This study informs teachers, parents, and policymakers on the reality of the reading gender gap as defined by current literature and from the perspective of the elementary classroom teacher. This chapter describes the methods of the present study, including the study's research approach, research participants, data strategies, data analysis procedures, ethical considerations, trustworthiness, and potential biases of the study. This chapter closes with a summary of the chapter and a discussion on the delimitations and limitations of the study.

### **Qualitative Research Approach**

A qualitative approach was used to gather data from elementary school teachers on their perspectives of the reading gender gap that exists. This research study utilized a phenomenological approach. Phenomenology is the study of lived experience or the life-world that originated during Husserl's latter part of his philosophical career as existential phenomenology. According to Jung (1966) "phenomenology is the descriptive method that serves an existential intention" (p. 170). It is designed to provide a deeper understanding of the phenomenon taking into account the lived experiences related to the life-world.

Phenomenology was selected as the most appropriate research design for this

study; it is the study of lived or existential meanings with an interpretive research approach that provides an understanding of the particular phenomenon, in this case, the reading gender gap. Phenomenology is designed to capture the lived experience of a phenomenon (Glesne, 2016) and “interpret the existential meanings to a certain degree of depth and richness” (van Manen, 1990, p. 11). A phenomenological approach gathered feedback on elementary school boys and the gender gaps in reading from the perspective of elementary school teachers. This approach captured the various meanings of the life-world from elementary school teachers on the gender gap in reading.

Creswell (1998) defined qualitative research as the “process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem . . . and conducts the study in a natural setting” (p. 15). Phenomenological inquiry provides insight into human experiences and best answers what the real meaning of a lived experience is (van Manen, 1990). Phenomenology is designed to identify a phenomenon and how those involved in the situation (Lester, 1999) or the phenomenon as a lived experience perceive it (Speziale & Carpenter, 2007). Phenomenological research provides the experience from the perspective of the individual being researched (Lester, 1999).

Edmund Husserl, a German philosopher, was regarded as the “fountainhead of phenomenology in the twentieth century” (Vandenberg, 1997, p. 11). He introduced a phenomenological framework that is considered descriptive (Lopez & Willis, 2004) and he maintained that the science of consciousness and the science of nature differed. Although Husserl was not the first to utilize the term *phenomenology*, he is regarded as the father of the phenomenological movement. He disbelieved that objects were independent

in the external world; however, he stated the certainty of objects in the consciousness relies on an individual to ignore anything other than immediate experience. This certainly became the reality of what is accepted as actuality and therefore regarded as the real phenomenon (Eagleton, 1983).

### **Participants**

The participants in this study were gathered from a purposeful sample of certified elementary school teachers. The purposeful sample targeted elementary school teachers who teach Grades 3, 4, and 5. Creswell (2012) defined purposeful sampling as the process by which researchers deliberately select individuals or sites (i.e., teachers or schools) to learn or understand the central phenomenon. Palinkaset al. (2015) states that “purposeful sampling is widely used in qualitative research for the identification and selection of information-rich cases related to the phenomenon of interest” (p. 533). Participants were deliberately selected based on their information-rich experiences that could be used to provide insight into the central phenomenon, the reading gender gap.

Generally, qualitative studies have fewer participants than quantitative research (Mason, 2010). There is no exact number provided for participants in a phenomenological study; however, guidelines have been provided by various researchers. According to Creswell (1998), the sample size within a phenomenological study should range between 5 and 25 participants. Morse (as cited in Mason, 2010) stated that there should be at minimum six participants in a phenomenological study, whereas Bertauz (as cited in Mason, 2010) said that all qualitative studies should have 15 or more participants. Phenomenology allows the research to study a small group of like individuals (i.e., elementary school teachers) to grasp and understanding of the phenomenon being studied based on their

lived experiences (Glesne, 2016). Due to the size of the district, six elementary schools from one of the learning communities, employing 70 teachers of Grades 3, 4, and 5, were asked to participate in the study. It was anticipated the total participants in this qualitative study would range from 5-10 elementary teachers from the targeted grade level and targeted elementary schools.

**Target population.** This study took place at six schools in a Central Florida public school district. The sample was drawn from the 70 elementary classroom teachers (Grades 3–5) within the six schools selected. All participants were 18 years or older with a minimum of two years of teaching experience to participate in the research study. The years of teaching among this group of teacher were as follows: 6% are first-year teachers; 29% have taught for 1–5 years; 40% have taught 6–14 years; and 25% have taught for 15 or more years.

The setting for this research study was the participants' schools—A, B, C, D, E, and F. Interviews were conducted with teachers of Grades 3 through 5 within the six schools targeted for the study. All interview questions were included on the interview protocol (see Appendix C), and the participants were expected to provide their lived experience or feelings on the phenomenon being studied, the reading gender gap among elementary school boys.

### **Data Collection Tools**

The particular phenomenon on which this researcher focused was the lived experience of elementary school teachers' feelings, thoughts, and ideas about boys lagging behind girls in the area of reading. This qualitative study used a one-on-one interview as the method for data collection. The interview questions integrated a combination of closed-

ended questions to categorize the participants based on demographic information and open-ended questions to determine the experience from the perspective of the participants.

### **Procedures**

After approval was granted by Nova Southeastern University's Institutional Review Board (IRB), permission was sought from the district's Office of Accountability, Research, and Grants (ARG) and from elementary school principals. A survey was sent to the potential principals by the office of ARG to seek potential interest in the study. Based on the district's policy, the principals must approve the research study, provide contact information for eligible participants, and assist in facilitating recruitment. Once approval was granted by the office of ARG, the researcher contacted the principal of each targeted school to request permission for their school to participate in this research study. Each principal was presented with a sample participation letter describing the study.

With the principals' approval, a meeting was scheduled at the schools to recruit participants for the study. Flyers outlining the study were distributed to prospective participants, teachers of Grades 3 through 5. Once a sufficient number of teachers showed an interest (5 to 10) over a 2-week period, voluntary participation forms were sent to those meeting the study's requirements. Participants were chosen from the first 5 to 10 teachers who responded with a willingness to participate in the study.

When the signed consent forms were received from the participants, the interviews were scheduled. The participants were provided an option of a face-to-face interview or to participate in the interview using Zoom videoing conferencing. Prior to the interview, the researcher sent a schedule confirmation to the participant with the date, time,

and location for the one-on-one interview. Additionally, the confirmation provided general information on the purpose of the study, data collection tools used, potential risk and benefits of the student, and notice of the recording of the interview. The participant was reminded that participation was voluntary, and all information provided was kept confidential.

All interviews were recorded using a Sony PX 333 digital voice recorder for a thorough analysis of the data at a later time. The file was saved as an MP3 file and stored directly on the researcher's laptop. The interview style was semi-structured, which allowed some flexibility by permitting participants the freedom to express their experiences or views in their own terms (Cohen & Crabtree, 2006; Edwards & Holland, 2013). All questions derived from Sections 1 and 2 of the interview protocol and followed the same sequential order as written on the document.

**Interview protocol.** The interview protocol is commonly used in qualitative research (Creswell, 2008). The interview protocol used, with permission, to collect the data for this study was a questionnaire comprised of two sections. The first part of the questionnaire was a demographic survey to gather background information on teachers participating in the study. This section was used to gather general teaching experience and educational information on the participants. It was based on a teacher interview protocol developed by Bonnie Faddis of RMC Research Corporation, which was adapted from a 2008 USDOE survey regarding teacher perceptions of single-sex school's early implementation of public single-sex schools: Perceptions and characteristics (Riordan et al., 2008). The second and main section of the questionnaire was a self-designed interview protocol.

The interview protocol answered the central question and the subquestions related to the central question. The research question interrelates to the research problem and purpose statement. In qualitative research approach, the research question is expressed in an overarching central question with subquestions design to clarify issues related to the central question or phenomenon by chunking it (Creswell, 2007). Marshall and Rossman (2006) suggested that research questions should be categorized into four sections, exploratory, explanatory, descriptive, and emancipatory. The overarching central question being explored in this study was: What meaning do elementary school teachers ascribe to the reading gender gap among boys in the past, present, and future at a Central Florida school district?

The subquestions were as follows:

1. What were the *past* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer was sourced from Interview Questions 1.1, 1.2, 1.3, and 1.4 (see Appendix C)?

2. What are the *present* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer was sourced from Interview Questions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, and 2.7?

3. What will the *future* lived experiences of elementary school teachers dealing with the reading gender gap among boys? This answer was sourced from Interview Questions 3.1, 3.2, 3.3, and 3.4?

**Validity.** The validity of a data collection tool is measured by whether it accurately measures what it is intended to measure and thus, achieves the purpose for which it was designed (Patten, 2004; Van Gog et al., 2008, Wallen & Fraenkel, 2001). Validity

encompasses the appropriateness, meaningfulness, and usefulness of the data collected by the researcher (Wallen & Fraenkel, 2001). A 3-step process was conducted to determine the validity of the interview protocol. The first phase of the validation process involved a review by a formative committee consisting of two teachers and an assistant within the researcher's school. The researcher formally invited the three educators to participate in the formative committee to validate the interview protocol to be used during the research study. The potential committee members were emailed an invitation and asked to accept or decline participation via email (see Appendix D). Once the educators agreed to participate in the formative committee, the researcher sent the validity questionnaire with the attached interview protocol via email to be reviewed (see Appendix E). Based on feedback from the formative committee, no changes were made to the interview protocol.

The second phase of the validation process involved the organization of a summative committee consisting of three classroom teachers and a principal, all outside of the researcher's organization and considered experts in the field of education or reading. The committee was formed using the same procedures of the formative committee. The researcher formally invited the four educators to participate in the summative committee (see Appendix D). The potential committee members were emailed an invitation and asked to accept or decline participation via email by responding to the email address provided in the invitation. Once the expert agreed to participate in the summative committee, the researcher sent the validity questionnaire with the attached interview protocol to be reviewed by the member of the committee. Based on feedback from the summative committee, the following four interview questions were added to the interview protocol:

1. What student surveys have you been involved with that concern assessing the

reading gender gap at this school or another school in the last 10 years? (See Interview Question 1.4)

2. How do the lack of male teachers as role models in the classroom and the overwhelming influence of female teachers in the classrooms affect boys? (See Interview Question 2.6)

3. What interest survey on the reading gender gap do you use when selecting books to build your class library? (See Interview Question 2.7)

4. What cultural and economic impact do you think the reading gender gap among boys will have on future generations of men? (See Interview Question 3.4)

The final phase of the validation process was the pilot study. The interview protocol was piloted with group teachers. The teachers were provided the interview protocol via email using Google forms and asked to answer the interview questions. Feedback was given to determine the following three goals: (a) the directions of the interview protocol were clearly stated, (b) the interview questions were clear and concise in that they asked what was intended, and (c) the general readability was adequate. No feedback requiring further changes were supplied from the pilot study.

### **Data Analysis**

Phenomenology is an ongoing process, which requires a continual reflection of the data by the researcher (Creswell, 2003). The researcher's role in qualitative research differs from quantitative research in that the researcher's role is acknowledged and, in essence, becomes part of the study (Finlay, 2009). When analyzing data in a phenomenology study, the researcher continually interacts with the lived experiences of the partici-

pants on the phenomenon through extended exposure of the data (i.e., multiple interviews, reading and rereading the data (De Felice & Janesick, 2015). Bracketing is considered a critical methodological procedure that establishes both validity and reliability (Ahern, 1999), and it is employed to require the researcher to put aside personal beliefs and what is already known about the phenomenon prior to the phenomenological data collection and data analysis process (Carpenter, as cited in Chan, Fung, & Chien, 2013). Husserl (1970) stated bracketing is the way to gain awareness of any lived experiences. According to Creswell (1998), phenomenological data analysis goes beyond the process of phenomenological reduction as the researcher eliminates any prejudgments about the phenomenon by bracketing away experiences.

**Data analysis tools and procedures.** Express Scribe is a professional audio player used to transcribe digital recordings. It is a product of NCH, which was established in 1993 as a technology company delivering easy to use technology software for the personal computer, MAC, and mobile devices (NCH software, n.d). Express Scribe offers features such as variable speed playback, plays encrypted dictation files, and it works with programs such as Microsoft Word offering speech recognition (NCH Software, n.d.). Microsoft Word is a product of Microsoft Corporation, which was founded in 1975 and serves as a global leader in the technology industry. It utilized a word processing format for collecting and storing data files (Microsoft, 2016). Nvivo was used to analyze data in this research study. Nvivo is a product of QSR International, which is built upon more than 30 years of product development (QSR International, n.d.). It is an all-inclusive qualitative data analysis software package that was used to organize and analyze the interviews files recorded (Stanford University, 2011). The researcher used a free version

of this product offered by the organization for use in a small research study of this type.

For this research study, data analysis resembled a multistep method developed by Colaizzi (1978). The following steps are representative of Colaizzi's process of phenomenological data analysis (as cited in Speziale & Carpenter, 2007) using a digital format:

1. The digital file of the interview was opened using Express Scribe and reviewed by the researcher to acquire a general collective understanding about the whole content. Express Scribe allowed the researcher to slow down the audio speed to a manageable speed for transcription.

2. After the completion of the transcription, data reduction occurred to extract significant data that directly pertain to the phenomenon being studied from the transcript. Each transcript was read to gain an overall understanding of the content of the transcript (Rovai, Baker, Ponton, 2014). The transcript was reread as needed to "fully engage" in the content (Rovai et al., 2014, p. 23). While reading, the researcher looked for significant words, word phrases, or statements that pertain to the phenomenon to be coded noting the exact location, page numbers, and line numbers, from which the coded data were extracted. While coding data the researcher compared and contrast codes to determine patterns, similarities, or differences among the coded data (Bowen, 2005).

3. Meanings were formulated from the significant data that were extracted from the transcribed content for the research to determine the underlining meaning (Creswell, 2012).

4. Each of the formulated meanings was categorized into a cluster of themes using Nvivo software based on the likeness of responses provided by teachers. The themes varied from five to seven (Creswell, 2012).

5. The findings of the study were integrated into an exhaustive description of the phenomenon under study.

6. The findings were validated through member-checking.

7. Changes were made based on the results of member-checking.

### **Ethical Considerations, Trustworthiness, and Potential Bias**

This study presented a minimal risk to participants and precautions were taken to guarantee that the participants were aware of the purpose of the study. The participants were informed that their contribution was solicited on a voluntary basis and that the researcher used pseudonyms during the interview process and in the final applied dissertation, thereby keeping their names confidential. All participants' voice recordings were coded using a participant number and pseudonyms, which maintained the confidentiality of participants. Their school's location and the name were coded using the School A through F. All data collection occurred in a structured location and stored on the researcher's personal laptop with password protection for 5 years.

Trustworthiness is referenced by the credibility of the research study and the findings that follow it. The researcher used bracketing and member checking as strategies to increase the trustworthiness of this research study (Glesne, 2016, Lincoln & Guba, 1985, & Rehorick & Bentz, 2009). The process of bracketing ensures that the researcher suspends her own judgment and bias about the topic under research until final analysis of participants. This process was used to ensure ethical consideration, increase trustworthiness, and decrease potential research bias. Member checking is the process used to verify the results of each participant through his or her reactions to preliminary findings, interpretations, and conclusions of a study (Creswell, 2009; Polit & Beck, 2006). Member

checking increases the credibility of the data collected. According to Creswell and Plano Clark (2011), researchers conducting qualitative research should make a concerted effort to eliminate “potential bias” (p. 193). This researcher ascertains that bias is contained in this study. In a research journal, this researcher documented a reflective and explanatory piece on the knowledge and understanding gained from the data and detailed the concepts collected, as well as comment on issues to follow up on if further interviews are deemed necessary.

### **Chapter Summary**

This chapter described the methodology to be employed during this research study and discussed the reasons for selecting this type of study. It provided information on the aim of the study, the research design, and the sample. A description of the protocol, the data collection techniques and analysis procedures, ethical considerations, trustworthiness, validity, delimitations, and limitations of the study were discussed. The findings and the data analysis gathered from this study are presented in the next chapter.

### **Delimitations and Limitations**

The delimitations are the characteristics of the study, within the researcher’s control, that both limit the scope of the study and simultaneously define its boundaries (Simon, 2011). The delimitations of this phenomenological study related to the research design that focused on the lived experiences of 5 to 10 elementary school teachers in six Central Florida schools. The scope of this study had exclusionary factors affecting the potential participants of the study. Participants met four defining characteristics to participate in this study. The participant must (a) be an elementary school teacher of Grades 3 through 5, (b) be a teacher at one of the schools within the targeted population, (c) have a

minimum of two years teaching experience, and (d) have a lived experience related to the phenomenon. Findings from the teachers within the targeted population on the reading gender gap may not be typical for other elementary school teachers within the district or within the state.

Edmonds and Kennedy (2010) and Johnson and Christensen (2014) contended that research studies should aim to be valid and reliable by using the “appropriate application of the scientific method” employed in the design stage (p. 2). Considerations should be given to securing the adequate levels of validity when arriving at conclusions. In doing so, researchers should reflect on three types of validity that might have threatened the validity of the study: Threats to internal, external, and construct validity.

**Threats to internal validity.** As defined by Edmonds and Kennedy (2010), internal validity is the degree to which the outcome is based on the intervention itself and not to other elements not accounted for in the study. Johnson and Christensen (2014) noted that for qualitative studies, the researcher assumes the role of “detective” when studying the impact of the phenomena by searching for evidence to rule out competing causation for the results. For this study, the researcher underwent a process of reflexivity –self-reflection to rule out biases and “predispositions” (p. 301) and peer review – discussed the study with colleagues to challenge the researchers thought processes and conclusions on the study (Johnson & Christensen, 2014). Sutton and Austin (2015) added that reflexivity is not a simple concept of avoiding/denying one’s own biases, but instead, it calls for expanding on and articulating one’s own worldview so that readers can grasp the lens through which “questions were asked, data were gathered and analyzed, and findings were reported” (p. 226).

Sarniak (2015) surmised that qualitative researchers should be mindful of inserting leading question bias in their interactions with participants such as putting words in their mouths (i.e. summarizing participants' words in their own words) and committing confirmation bias (i.e. forming a belief about the outcome of the study and dismissing evidence that is contrary to such beliefs), and buying into the halo effect (i.e., forming a positive attribute when a participant does the same). The researcher has worked as an educator for over 10 years and relied on personal expertise in the field of education in general and reading in particular for good judgements and on qualitative journals to ensure that the conclusions were sound and solid throughout this research study.

The researcher experienced limitations with this qualitative research study. Limitations as defined by Creswell (2008) are “potential weaknesses or problems with the study identified by the researcher” (p. 207). The first limitation the researcher faced with this study was gaining interest for participation in the study. In the study’s district, the office of ARG conducted a poll first to determine if there was potential interest in the study from administrators, before allowing the researcher to proceed within the district. Once an interest was shown on behalf of the administration, the second limitation was gaining participation in the study from the targeted population.

**Threats to external validity.** Johnson and Christensen (2014) explained that for external validity, unlike that of quantitative studies, the aim of qualitative studies is not to generalize across a wide spectrum of participants but to be more concerned with “local causes of specific attitudes, actions, and events” (p. 306). For this study, the researcher considered the reading gender gap in the study’s district and the impact the results would have on the local community. Due to the nature of a qualitative study, the sample was

small; therefore, limiting the scope of the information that was derived from this study (Glesne, 2016). In conducting qualitative studies, Creswell (1998) suggested a suitable sample size of 5 to 25. This existential phenomenological study encompassed interviews from seven elementary school teachers of Grades third through five. The sample size was small; therefore, yielding the researcher no control over personal characteristics such as gender of the participants. There were six female teachers and one male teacher that agreed to participate in the study; therefore, the data obtained from the interviews presented the views of elementary boys from a mostly female perspective. The researcher, also a female educator, brought personal experience that may have been a limitation in the study. Efforts were taken to eliminate potential biases and presuppositions that may have occurred during this study by following the interview protocol script and following the semi-structured interview questions.

**Threats to construct validity.** To extent to which detailed and “higher order” (Johnson & Christensen, 2014, p. 296) constructs of the intervention such as determining that the discourse of the current study on the reading gender gap on elementary school boys accurately represents the outcome of the study and was not clouded by the researcher’s biases. For this study, the researcher was able to avoid threats to construct validity by bracketing potential biases, adhering to the semi-structured interview questions, and maintaining a research journal. Before the interview, the researcher put aside any personal opinions on the phenomenon to prevent influencing the interview process. The interview was conducted in a semi-structured manner and the researcher read the interview protocol verbatim to ensure consistency with the questions asked. Following each interview, the researcher made notes to reflect on the participants’ responses. The journal

entries allowed the researcher to eliminate any preconceived notions concerning the participants' lived experiences, allowing for richer awareness of the participants' realities while ensuring that researcher collected only information given by the participants. During the data analysis process, the researcher conducted member checking, which consisted of having the participants review the transcriptions for accuracy on how their lived experiences were conveyed during the interview process.

The final limitation faced by the researcher included the voluntary involvement of participants, their level of honesty, and their understanding of the questions asked. Data analysis was contingent upon the teachers who volunteered to be interviewed for the study. The validity of the study depends upon the honesty of the participants in answering the questions being asked by the researcher. Being educators, some of the participants were reluctant to expose their views completely on the students and the reading gender gap that exists favoring girls. Although the teachers' identities were protected, they feared their identity could be exposed through their school. Procedures were in place to maintain the confidentiality of participants and their school's identity. No identifying information was collected on the participants and pseudonyms were used to ensure that the participants' responses remain confidential. The data collected were stored on the researcher's personal computer and were password protected.

## Chapter 4: Findings

### Overview of the Findings

The purpose of this research study was to gain the lived experiences of third-, fourth-, and fifth-grade elementary school teachers on the reading gender gap that currently exist between elementary school age boys and girls. In-depth interviews were conducted with seven teachers who shared their lived experiences of teaching students within a Central Florida school district. Phenomenology was utilized to examine the teacher's voices about their lived experiences. The overarching research question was: What meaning do elementary school teachers ascribe to the reading gender gap among boys in the past, present, and future at a Central Florida school district? The data gathered were organized to address the following subquestions:

1. What were the *past* lived experiences of elementary school teachers dealing with the reading gender gap among boys?
2. What are the *present* lived experiences of elementary school teachers dealing with the reading gender gap among boys?
3. What will be the *future* lived experiences of elementary school teachers dealing with the reading gender gap among boys?

This study used Colaizzi's (1978) process of phenomenological data analysis. This method involved the following seven steps: (a) transcribe the interviews using a digital recorder, (b) extract significant statements from each transcript, (c) formulate meanings as these emerge from the significant statements, (d) organize formulated meanings into clusters of themes, (e) integrate the findings into an exhaustive description of the

topic being studied, (f) formulate the essential structure of the phenomenon, and (g) validate the descriptive findings by member checking with the participants to confirm if the analysis describes their experience (Moustakas, 1994). The intent of the phenomenological research is designed to utilize the experiences of others to provide a more in-depth understanding, or the significance of part of their lived experience as it related to the participants lived experience as a whole (van Manen, 1990).

### **Sampling**

The participants in this study were gathered from a purposeful sample of certified elementary school teachers from Grades 3, 4, and 5. Purposive sampling was used to generate the maximum variation within the sample. According to Creswell (2008), this form of “purposeful sampling strategy is when the researcher samples cases or individuals that differ on some characteristic and then find sites or individuals with a different dimension of that characteristic” (p. 214). The research sought to gather data from a diverse group of teachers across the six schools identified in the setting. An invitation to participate in the study was disseminated by the researcher through fliers that were generated with information on the study. To participate in the study, the participant must have had knowledge or data related to the gap that exists between elementary school boys and girls in reading. Seven teachers responded with interest, and all seven teachers met the criteria to participate in the study. These seven teachers made up the subjects for this phenomenological study. Each of the participants was contacted by the researcher and asked to schedule a date and time to conduct the interview. The dates and times of the interviews were confirmed via email with a copy of the informed consent electronically attached to review before the interview. In compliance with the principal’s request, the interviews were

scheduled after school to ensure instructional time was not interrupted in the teacher's classroom. One of the participants had to cancel her scheduled interview twice due to illness and consequentially set up an interview over the telephone. All other interviews were conducted face-to-face using a semi-structured format and were audio recorded to maximize the accuracy of the transcription. The participants were informed of the purpose and procedures of the study before signing the consent form and conducting the interview. The participants were verbally assured of the confidentiality of their interview and provided the consent form approved by the IRB at Nova Southeastern University to sign prior to the start of the interview. Semi-structured interview questions were used to provide a stimulus for participants to reflect on their lived experiences of the reading gender gap at the elementary level. The table presents the demographic information about the seven participants who participated in the interview process.

### **Participants' Profiles**

Adrian is a third-grade teacher who has taught for 11 years, six of which are at the current school. Prior to transferring to the current school, the teacher worked at a Title 1 school. This teacher has 17 students in the current class, six boys, and 11 girls and has a bachelor of science and is currently working toward a Master's in Educational Leadership. This teacher holds a professional teaching certification in Elementary Education (K-6) and an endorsement for teaching English as a second language (ESOL).

Bailey currently teaches fourth grade. Throughout this 16-year tenure, Bailey has taught Grades 3, 4, and 5. This is the first year at the current school with a class size of 34 students, 21 of which are boys. This total includes both the homeroom class and the regu-

lar class. This teacher has a Master's degree in Education and is currently working toward a doctorate in Educational Leadership. Bailey is ESOL-endorsed and holds a professional certificate in Elementary Education (1-6) and English or Language Arts (6-12).

Harper is a fourth grade teacher with 22 students, nine of whom are boys. This is her fourth year of teaching and the first year at the current school, which is a Title I school. Harper has a Master of Science in Elementary Education and is certified in Elementary Education (K-6).

Jordan currently teaches third grade and has seven boys and 11 girls in the classroom. This teacher holds a Bachelor of Science degree and has a professional teaching certificate in Elementary Education with an endorsement in ESOL and reading. Jordan is in the third year of teaching at her current school.

Logan is a third-grade teacher in the 19th year of teaching. Seven of those years have been at the current school. This teacher holds a Master of Science degree in Education. Logan's professional certification is in Elementary Education (K-6), and is Gifted and ESOL-endorsed. This teacher has seven boys and 10 girls in the current class.

Kem currently teaches fourth grade and has 12 boys and eight girls in the classroom. This teacher has taught for five years, three of which are at the current school. Kem has a Bachelor of Arts degree and holds a professional teaching certificate in Pre-kindergarten to third (P-3) and Elementary Education (K-6).

Stacey has taught for seven years at the same Title I school. This teacher has 21 students, 11 boys, and 10 girls. Stacey teaches fourth grade and holds a Bachelor of Science degree and has a professional teaching certificate in Elementary Education (K-6) with an endorsement in ESOL.

Table

*Participants' Demographics*

Pseudonym	Total Years of teaching	Years at current school	Highest degree	Teaching certificate	Certificate endorsement
Adrian	11	6	B.S.	Elem Ed K-6	ESOL
Bailey	16	6	M.Ed.	Elem K-6 ELA 6-12	ESOL
Harper	4	1	M.Ed.	Elem Ed K-6	N/A
Jordon	3	3	B.S.	Elem Ed K-6	ESOL Reading
Kem	5	3	B.S.	Elem Ed PK-3/3-5	N/A
Logan	19	7	M.Ed.	Elem Ed K-6	ESOL Gifted
Stacey	7	7	B.S	Elem Ed K-6	ESOL

*Note:* Harper has three years prior teaching experience at another school.

**Data Collection**

Data were collected using semi-structured interviews with closed-ended questions to obtain the demographic profile of the participants and open-ended questions to gather details related to their lived experiences. The researcher met with each teacher individually in their classroom at their work location to conduct the interview except the telephone interview, which was a result of extenuating circumstances.

Interviewing was the most appropriate method to attempt to understand the participant's lived experiences of this phenomenon in their words. On average the interviews ranged from 30 to 50 minutes. The researcher used a digital audio recorder and anecdotal

notes to collect data throughout the interview process. The interview began with the verbalization of the interview script being read to each participant. The interview followed a chronological order based on the past, present, and future experiences and it was structured in two parts. Section 1 provided the participant an opportunity to discuss the background related to the study. Eight closed-ended questions were used to develop the participant's profile for the study. Section 2 consisted of three parts: the past, the present, and the future. The sections comprised 15 open-ended questions. Although the questions were opened-ended, there were times during the interview that the researcher had to ask elaborating questions to gain a true perspective of the lived experience of the teacher.

### **Results of Thematic Analysis**

Each participant was assigned a pseudonym before listening to the digitized audio files. Once the pseudonyms were assigned to the participants, each of the audio recordings was reviewed multiple times to transcribe the data verbatim into a Word document. The transcripts were analyzed using thematic analysis (Creswell, 2007; Finlay, 2009). This required the researcher to read and reread each transcript to gain a thorough understanding of the lived experiences of each participant. The transcribed interview responses were imported into NVivo software to code the relevant sections of the transcript (Creswell, 2007). NVivo qualitative software was used to analyze the transcribed interviews to assist the researcher with the coding and identifying of emergent themes from the data that presented common attributes (Richards, 1999; Richards, 2002). This was completed by reading transcripts and highlighting excerpts that related to each of the research questions and were common among the teachers. Words and phrases that reoccurred within

the interview were identified, and codes were developed using keywords from the excerpts of the interview. Once the codes were identified, they were narrowed down to emergent themes.

The researcher linked the responses of the interview questions to that of the research questions to code the data based on the lived time or temporality of the lived experiences, which allowed the findings to be reported in a sequential manner (Annesley, 2010). Each research question was coded separately, and themes were developed as a result of the patterns exhibited from the codes.

### **Findings**

As a result of the analysis of the information presented by the participants, the codes yielded the following themes and subthemes, relevant to the lived experiences of this sample of elementary school teachers from a Central Florida school district. Three to four themes emerged from each temporality. The themes were divided based on the structure of the twofold interview process with Section 1 consisting of demographics and Section 2 consisting of the interview. Section 2 was broken into the following three parts: Section 2-Part 1 (S2-P1), the past; Section 2-Part 2 (S2-P2), the present; and Section 2-Part 3 (S2-P3), the future. The themes of S2-P1 are the awareness of the reading gender gap, the reading gender gap interventions, and the findings of reading gender gap. The themes included in S2-P2 are the causes of the reading gender gap, the academic performance related to the reading gender gap, building relationships, and reading gender gap concerns. Within the theme of building relationships emerged two subthemes: teacher-student relationship and role model. The themes of the final segment S2-P3 are reading gender gap resolution, the future of boys, and change in the approach to the RGG. The

themes were derived from terms frequently mentioned during the interview process (the full map of themes and subthemes is shown in the figure).

### Reporting Data on Research Question 1

What were the past lived experiences of elementary school teachers dealing with the reading gender gap among boys? Teachers were asked a series of three interview questions in this section to gather their perspective of the reading gender gap for their past lived experiences. The teaching experience of the sample ranged from 3 years to 19 years, which accounted for the variations in the responses. There were two prominent themes: awareness of the reading gender gap and intervention, which emerged as a result of analyzing the data from the participants' interview responses.

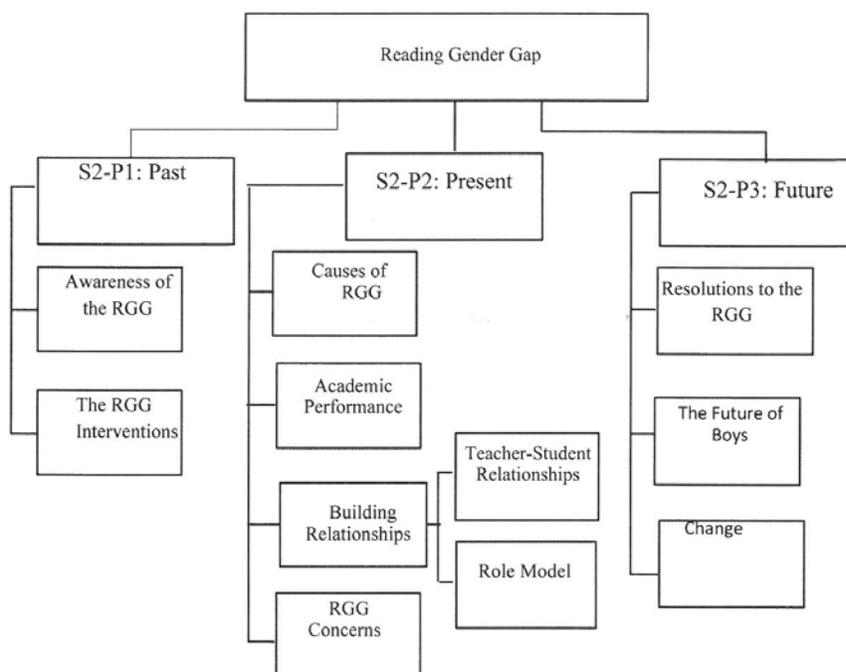


Figure. Thematic map.

### Awareness of the Reading Gender Gap

The first theme of S2-P1 is awareness of the reading gender gap. One teacher's account of the reading gender gap dated back as far as 14 years, whereas another

teacher's account was as recently as two years before being solicited as a participant in this study. Two of the teachers, Adrian and Logan, noted that the reading gender gap was more prominent while teaching at a previous school. Logan reported that it was first noticed the disparity between genders when teaching a group of Aim students. Logan opined that "I had students, boys that I taught at Aim, which were the highly-gifted students, and they scored in the lowest percentile in reading at the beginning of the year." Logan reported that at a former Title 1 school, the reading gender gap was more prominent.

Jordan indicated that she was unaware of the reading gender gap until solicited to participate in this study. This prompted her to research the topic and contact the researcher to participate in the study. Based on her lived experience, she reported:

My first year teaching I notice I had a really high population of excelling girls and most of my girls were at or above grade level and the majority of my below level students were boys. I noticed that right off the bat because I only had a couple of boys that were on grade level.

Kem first asserted, the boys and girls were equally falling behind in reading, and she had no past lived experience with the reading gender gap. However, Kem contacted the researcher the next day to amend her interview and stated that:

After the interview, I comprehend your research more thoroughly. Initially, I believed that girls and boys both have the huge initial gap and are deficient in reading due to socioeconomic, low motivation, undiagnosed learning disabilities, and lack of support. However, as I researched the topic more thoroughly and reflected on my student data, past and present, I have a deeper understanding of the reading

gender gap and agree that there is a gap that exists between genders in past and present classes.

The majority of the teachers mentioned that the awareness of the reading gender gap was noticed as a result of assessments in the classroom and local or standardized state assessments. Stacey recounted a gender gap in data related to the Accelerated Reader (AR) program, an independent reading computer-based practice platform, which her school mandated participation. Reminiscing as far as five years back, Stacey reported “in many cases; the girls seem to take more of the AR quizzes and pass more of the quizzes.”

Harper reports that in past classes, “I’ve learned that the girls seem to catch on faster and can read quicker and at a faster rate as far as fluency by the end of the school year compared to the boys.” Although the teachers were from various backgrounds from gifted to ELL, their accounts of the reading gender gap were similar in nature.

### **Intervention**

The second theme that arose within the past temporality was a direct result of the teacher’s awareness of reading gender gap. Once they were made aware of the deficiency in reading among genders, the natural educative response is an intervention, which is the second theme. The second theme of this study focuses on the interventions resulting from the reading gender gap.

Harper stated her intervention included foundational skills and higher level reading skills. Strategies gear to work on “phonics and building up their vocabulary were the two main focuses coming from a primary background to a fourth-grade classroom.” Currently, her fourth-grade class is learning about prefixes and suffixes in Language Arts. Harper spoke of the importance of teaching the students direct and systematic instruction

to allow the student, when engaged in reading, to pull from their prior knowledge to determine word meanings. “If they're reading a text and they know the meaning of the prefix or suffix they can kind of figure out what that word means.” Fluency comes from continued opportunities for practice. Harper has her students to “keep reading, so they are working on lots of fluency.”

Jordan agreed that students need the continued practice to ensure that they have the opportunities to practice what is taught during whole group or explicit instruction. Jordan utilized groups as a form of intervention and a platform for students to gain the extra support they need in a smaller group setting. Jordan specified that in the beginning, she did not realize the significance of the reading gender gap:

Of course, I intervene for my typical struggling students by pulling small groups or sending home extra resources, but even with the interventions (i.e., small groups and additional resources) the gap continued to get larger. I had my struggling students and my girls; they were struggling. They didn't meet grade level, but they progressed further than my struggling boys progressed because with the different interventions that we had- the gap kept growing.

Logan indicated that she tries to build student interest on what they like to read and she recalled that boy's interest was somewhat different from that of girls. Upon reflection, Logan responded that the gap got better when it was realized that in general all kids are different and educators must “find what their interest is and what sparks their imagination or what they want to read about.” This was common among the teachers interviewed.

Bailey also spoke of the importance of intervention based on individual student interest and expressed the use of intervention groups because “we are required to but also

just targeting the instructions based on what their needs are and using iready.” Programs like iready, which is a district initiative, are used to target the student’s need at an individual level. Bailey also uses small groups “to be able to target what they need.”

Even with the interventions the group of boys made improvements. I never really saw a huge improvement due to limited resources available for teachers to use. I wish I had more. I don't know what I wish I had I just wish I had more available to help them because it's too many kids.

Logan reported on the district’s mandated computer intervention to target increased student achievement in reading:

It’s not just this school. I know— it’s all schools and then there are pre-assessments and post-assessments. Once they get done with all that, especially with boys who tend to be more active, to kind of rope them up to a computer or to kind of force them into a form makes them apprehension toward it. And it doesn’t bring on a love of reading. It makes it more of a chore.

Based on intervention data from the participants, the teachers provided reduced group sizes for students to practice reading strategies to increase automaticity and fluency among the struggling readers. Logan stated that “there are a lot of small group instruction and explicit instruction and teaching those types of reading strategies to all the students that need them.”

Kem also uses small groups as a method for intervening to meet the needs of the student. Kem stated “we differentiate between small group and we have an extra hour so we can address the needs of individual skills.” Students who attend Kem’s school have an extra hour of schooling each day due to previous standardized assessment scores. During

this extra hour, Kem expressed, “we have many reading intervention skills in place.”

### **Reporting Data on Research Question 2**

What are the *present* lived experiences of elementary school teachers dealing with the reading gender gap among boys? The themes included in S2-P2 are the causes of the reading gender gap, the academic performance, building relationships, and reading gender gap concerns. Within the theme of building relationships, the following two sub-themes emerged: role model and teacher-student relationships. During this section of the interview, the researcher asked the teachers a series of seven interview questions related to their present lived experiences of the reading gender gap.

### **Causes of the Reading Gender Gap**

The first theme of the present temporal is the causes of the reading gender gap. When discussing the cause of the reading gender gap, the participants agreed that the reading gap exists. However, there was no consensus on the potential cause of boys lagging behind girls in reading across the schools surveyed. Adrian believed that the cause is a result of “family and the lack of father figures or male role models.” Two of the teachers discussed what some refer to as boy mentality, or simply boys being boys. Stacey reported that the cause of the reading gender gap is based on how society views the role of boys and girls. Stacey felt that:

Maybe it’s some different things, but one thing I notice as a teacher is parents have the mindset that boys are supposed to be active. They promote boys being active, whereas with girls they may or may not promote them being active. Parents are fine if they see their daughter sitting down reading. With boys sometimes I hear they need to be outside and it's perfectly fine if you

don't read and you're a boy. I don't know if that's culturally or a thing in a society where it's great for girls to be sitting down reading and it's something that it's expected of girls; whereas boys if you read-great and if he doesn't, he's just a boy.

Jordan reports a similar experience as Stacey when she added that boys are just different from girls and this is somewhat understood. Jordan spoke of a scenario when she overheard her mom explaining to her sister that girls and boys are expected to behave differently. Jordan was also concerned about her boy's behaviors:

I noticed a lot of my boys are more squirrely or more energetic, and that's typical of young boy's behavior. I think that could be a possibility why a lot of my boys like to get up and walk around. There is one boy who would just start walking around in the classroom. I'll ask him what are you doing, and he'll be like I'm just looking. What are you looking at the classroom is the same, but I think it's just typical eight-year-old boy behavior that keeps them from sitting. When we have silent reading time, I still have some chatty girls, but I have to stay on top of the boys to just sit for like 5 minutes and read and pay attention to what you're supposed to be doing. I think that the energy level that eight-year-old boys have keeps them from being able to sustain their reading time and without that reading stamina, they're not able to absorb as much information as my females are.

Bailey, on the other hand, believes the cause of the reading gender gap is based on the state and district mandates. In her opinion, the boys are required to do more than they are academically ready to do. As the need for more rigorous instruction is

placed on educators, young boys are feeling the pressure to test more, read more, and overall perform more in the classroom the same as young girls. Bailey opined that:

I think there is way too much put on these kids as far as testing and we don't get enough time to teach to mastery. I have taught fourth, fifth, and sixth grade. I see way too much testing on the skill and not enough teaching of the skills. It's just test, test, test and it's not enough time, especially in the lower grades. They don't get the foundational skills they need to be successful in the upper grades.

Kem believed the cause is teacher preparedness. Students are entering each grade level lacking essential grade-level skills, and there are classrooms with teachers unprepared to teach to the academic diversity that may exist in the classroom. Kem reported the cause of reading gender gap to be “teacher knowledge, teacher comprehension of their education, their experience with learning disabilities or unidentified learning disabilities, students not having that extra support at home, and maybe even ineffective school performance.” Additionally, Kem believed that there are times when staff motivation may play a role in boys falling behind girls academically.

### **Academic Performance**

The second theme in S2-P2 is the academic performance, which is a direct result of the reading gender gap. Of the teachers interviewed, five of the seven reported a significant academic deficiency resulting from the reading gender gap. Three of the teachers spoke of the importance of reading and its effects on the student's performance in other subject areas. Kem commented “it's greatly affected because if they can't understand on their grade level, they are not only deficient in reading, but there is a deficiency in math,

science, and social studies because the comprehension is not there.” Kem added that if students cannot read, then they cannot comprehend. Stacey indicated that “the more they read, the better they do not only in reading, but other subjects. Their vocabulary is higher, and their stamina is greater when they are reading.” Harper agreed with Kem and Stacey as she conveyed, “the academic performance is very low or below grade level in both reading and math because if you can't read it, you can't read the math problems as well, so it (reading gender gap) affects them tremendously, and sometimes it (reading) can become like an aggravation to them.” Jordon did not feel her boys are meeting their academic target:

I think my struggling boys are not progressing. I have a few boys that are very much on grade level and are where they need to be, but my struggling boys don't seem to be making much progress. We are in the 12th week of school and their reading test scores and performance on AR test are not improving. The struggling boys are staying very stagnant, even throughout, giving interventions and working together in small groups. I'm giving them just as much guidance through things as I was five weeks ago, whereas some of my other students are becoming more independent and don't need me as much as those boys do.

Bailey described the majority of her boys would be considered low achievers. Bailey's lowest 20-25 percentage is a mixture of boys and girls. Bailey indicated, “of the boys I have in my class, I teach fourth, one is 12 so he is definitely lagging behind. You can just tell with some of them there is just a huge deficit and it shows up in their grades.”

### **Building Relationships**

The third theme building relationship has two subthemes: role models and

teacher-student relationships.

**Teacher-student relationship.** Each of the teachers interviewed reported a good teacher-student relationship with the boys within their classroom. Harper provided information on the teacher-student relationship in her classroom:

I have a good relationship. They're able to see if they don't get it and they need help, they can come to me. I think the boys would say, I care a lot about their education, and I'm willing to help them. I hope they would say, I'm a motivator because I try to do that as well.

According to Logan, there is definitely a teacher-student relationship, and she tries early on to identify the student's interests by doing things like talking about sports during recess with a student who is a huge Buffalo Bills fan. Logan also opined that:

With all of the classroom expectations for students (i.e., irready, small groups, interventions, etc.), it becomes more of a chore, which is why she tries to overcompensate to make things fun. The students think I'm funny and they listen and they get the point of it and I think if you don't have that personality where you can be a little wacky sometimes you lose some of those kids. One of the elements of the teacher evaluation system is building relationships and letting students talk about themselves, but teachers are held to such tight time constraints. There's kind of that rapport that we have with each other because they know I am interested in them as people and not just as kids. If asked, I believe the boys would say, I'm funny and a different type of teacher that allows them to have a choice, yet, expects them to get their work done within the parameters that are given to them.

Jordan revealed that she learned a powerful lesson from her mother with regards to gender differences. Jordan believed that establishing a respectful teacher-student relationship is important in every classroom, which is her aim. Jordan shared her view:

The vast majority of my boys we get along very well. I try to create a very good classroom culture with all of my students. We do a lot of brain breaks, and we'll do 'Go Noodle,' and I like to do all the little dances with them. The boys love it. I have a couple of boys they do the Running Man for everything. We laugh, we play, and we joke. I have one boy who always has the nicest shoes. I told him I'm going to a birthday party, and I need to borrow your shoes, so I look cool. I have a pretty good relationship with the boys.

Jordan hoped that if asked her boys will say "we have fun while we learn and that I'm strict, but I'm fair." Jordan informed that she "tries to keep the consequences even and even tailored because some boys are squirmier than the average boy. I try to give them a little more leeway because they just can't help it." Jordan also stated that:

They have to move, and I hate to tell them just to sit constantly, so sometimes I let them take a walk around the room. I try to give them responsibility by saying - you are eight and nine years old you can handle a little extra leeway, but you still have to focus. I hope that they would say we get along and that they feel comfortable expressing their needs. I have one student that he'll just tell me that I can't sit anymore or I need a break for a few seconds. I let him stand in his spot in the room where he can do his work. It's

where he's not in the way because at the beginning of the year he told me that I just can't sit all the time. He knows when he gets squirmy; he can stand up and work there, so I try to accommodate their needs.

Bailey indicated that “I have a great relationship with the majority—I would say almost all of them. There are some that you don’t really get that bond with but I have a really good rapport with the majority of my students.” Bailey noted that she loves her students, but she is tough on them. Bailey disclosed that “some of these students are just really tough kids especially at this school. They have a really hard life and a hard background. You kind of have to break through that and get to know them.” Bailey believed her boys would say that “they really liked me. I think they would express in their words you know she’s pretty cool. I like her, she cracks jokes, she’s funny, she’s fair, she’s hard on us, and she expects a lot.”

Similar to Logan, Adrian reported that he tries to relate to their personal lives and make an effort to participate at recess with them simply by throwing a football with a student.” Adrian indicated that “I think those little efforts to relate to a student brings you much growth in the classroom.” Adrian believed the boys in his class would say “he is fun but strict and that he is a rule follower.”

**Role model.** All teachers interviewed discussed the importance of having a role model. Adrian stated that the limited number of male elementary teachers does not give boys as many role models in their educational setting.

Logan believed this has a significant effect on young boys and many times the only male teachers are PE coaches. Logan told a story of her son’s, who attends

the school where she works, inquiry about when he would have a male teacher. Logan's response was he might have a male teacher in third grade, fifth grade, or Physical Education (PE) because the school has male teachers at those levels. Logan's son questioned why there were not more male teachers and she replied, "I don't know, but when you get to college and high school there tend to be more male teachers, but in the lower grades there are not." Logan elaborated, "I think a lot of boys might not think about becoming a teacher because they are always having female teachers, not that we are bad, but they don't have a role model to look up to emulate."

Jordan, Kem, and Stacey also believe this is a major concern for young boys. Jordan revealed, "I don't feel my boys even think an option for their life is to be a teacher because they don't see it very much." Jordan affirmed Logan's statement "they might say, I can work at a school and be a PE coach, but I don't think it ever crossed their mind that they can be a classroom teacher too because they don't see it." Logan stated that:

There are a few male teachers at my school, one in third grade, one in fourth grade, one in kindergarten, two male PE coaches, the dean, and the assistant principal. The lack of male presence at our school sends a big message to them that it's not a career for boys or they may think school is just for girls and they don't apply themselves as much.

Kem feels that "boys automatically have a natural respect for males because they can relate to them. When they see that because we do have a few (two or three men) at our school, they want to be in their class." Kem shared Jordan's thoughts

“not seeing them as much doesn’t give them any motivation that men can be successful in the education arena.” However, Kem noticed that “when there are ineffective male teachers that actually lower the respect level of male students because they find they don’t want to be in those classes.”

Stacey expressed that “when you see someone doing something that looks like you, it encourages you to do it, too.” Stacey pointed out that female teachers are more of a role model for female students because males need to see other males to be encouraged by their behavior and she shared her views on the gender differences of teachers and the role it plays with students:

To see female teachers reading that encourages female students to read and there's already this gap and this thing culturally that boys are supposed to be out running around playing. By them not seeing male teachers in a role of influence and an example, it kind of continues that thought process that—that's for girls; teachers are for girls. Reading is for girls instead of closing that gap.

Harper continued the same thought pattern as Stacey. “I think that each gender probably needs to see the same gender in a positive light.” Harper believed “it’s good for boys to have male teachers because it says, I can be a teacher too, if that's what they want to be.”

Bailey said, “I definitely think they need to have a male teacher in the classroom as role models.” Bailey also believed women are seen more as the nurturers; whereas, the men are considered to be the disciplinarians. Bailey continued: “if the boys see males in the role as teachers, they would be more likely to see that they could be

successful in something other than sports as a career such as an educator or a lawyer or something like that.”

### **Reading Gender Gap Concerns**

The final theme of this S2-P2 is reading gender gap concerns, and it highlights the lived experiences of the participants as it relates to real-time concerns for the elementary boys in their classroom. Each of the participants shared a genuine concern for the boys in their class and how the underachievement in reading would impact their students. A common concern during the interviews was the inability of elementary boys to catch up with the academic demands.

Harper was concerned that “each year they’re going to get behind more. They’re going to get frustrated, and they won’t like school.” Harper also felt that the reality is “when they get a certain age they just won’t come.”

According to Bailey, “it has definitely caught up with some of them, already,” and she feared that “the farther they get in their educational career, the gap will continue to widen. Next school year it gets even harder.” Bailey taught sixth grade for almost nine years, and she is aware that the expectation to prepare them for the middle school includes a lot of reading for information. Bailey agreed with Logan that the students must learn to read nonfiction and cite textual evidence. Bailey knows that incoming middle school students should be aware of “all the things they need to be successful, not just in school, but in the future in order to achieve what they need to do to be successful in life.”

Jordan has a major concern that goes beyond the classroom and she feared for the boys and the community they are growing up in. Jordan knew that the boys

are behind, and that they need help at home to catch up, but fears that it might be too much for them to handle. Jordan continued to tell the researcher about an experience with two of her previous students and her greatest concern:

I feel bad saying it, but the community that they grew up in and not so much my boys this year, but the boys I had in previous years. I have seen that they were followers. I had two students my first year they were very wonderful boys deep down, but they would see other boys off task or say mean things as a joke and were very easily influenced. I know that both of them could go very far in life. Both had potential if they put their mind to it. Both were below level, maybe one grade level. I really felt that if they had put their mind to it, they would have caught up; with that, I worry that school isn't cool and as they get older the boys will care more about football and don't care much about getting good grades.

When they are still young, like the ones with me, it matters to them a little bit. I can just tell from both their personalities that as they got older, if they didn't have a good support system, it will be easy for them to fall into the wrong group of friends; get mixed up with the wrong crowd; and care less and less about school until it became too late for them to catch up. Once they get to high school, they have that option to drop out. And that worries me the most that they will get so far behind that they won't see themselves as able to catch up and drop out.

Stacey shared a community concern that is similar to that of Jordan. "We can promote reading in the school and in the classroom, but I would like to see them carry that outside the classroom." Stacey continued by stating "being that there is already a gap the only way to close the gap is to get ahead." Closing the gender gap means "they can't

just read in class. They may have to start reading more outside of the classroom.” Logan talked about the procedural mandates and how they potentially relate to the continuation for the reading gap instead of the intended target of intervention. Logan expressed concern as it relates to district mandated technology programs in the classroom among other interventions:

One of my students just came to me from another school, and he is significantly below grade level. What worries me is the trend toward going more technology based especially in our school. We don’t have the 1:1 technology; it’s like feast or famine. If they are in the lowest 25 percent, they get more of an opportunity than the other students do. I think it (technology) takes away that personal connection that over the past 19 years being in my 20th year I’ve tried so hard to build with the kids. Now, they have to do 45 mins of iready for example, and then they have to do these other things for intervention programs, and then there are pre-assessments and post-assessments, too. The boys tend to be more active and to kind of rope them up to a computer or to kind of force them into a form makes them apprehensive toward it, and it doesn’t bring on a love of reading.

Adrian feared that the gap can’t be made up. Adrian declared that “I keep hearing that it will come together—its age, but I don’t work with the older kids to see it every day.”

Kem stated that she too is concerned that “they’re going to continue to fall behind and never catch up. Therefore, their self-esteem is going to go down.” Kem emphasized that the gap continues to grow, ““they’re not going to be able to understand when they get to middle school and high school, or they’re not going to be

productive citizens.”

### **Reporting Data on Research Question 3**

What will be the *future* lived experiences of elementary school teachers dealing with the reading gender gap among boys? Teachers were asked a series of four interview questions in this section to gather their perspective of the reading gender gap for their past lived experiences. The future temporal, segment S2-P3, was most distinctly captured by the following three prominent themes that emerged as a result of analyzing the data from the participants’ interview responses: resolutions to the reading gender gap, the future of boys, and change in the approach to the RGG.

#### **Resolutions to the Reading Gender Gap**

Theme 1 of S2-P3, resolutions to the reading gender gap, highlights potential solutions to closing the gender gap in reading from the perspective of the classroom teacher. Two of the teachers discussed the importance of making reading fun. Harper charged that reading has to start as early as pre-kindergarten and she also endorsed the importance of building on the interest of students to make reading fun and appealing to boys “like sports (i.e., football, basketball) or something similar of interest to try to capture their attention as readers in that first couple of years.” Harper continued to discuss the issue at hand by stating that once the student gains an interest in reading based on their liking of the reading material or text-based, then it can move from there.

Stacey also spoke of the importance of making reading fun for students and providing students with incentives and letting them know the benefits of reading. Stacey asserted that:

I think something that I would like to see and I think would be helpful is getting

more, not necessarily more male teachers, but some kind of way for kids to see more males reading. A couple of years ago, my school implemented a program to promote reading schoolwide. We had something to the effect of getting caught reading, so even our coaches who are males would get caught reading. One of the coaches even took AR tests, and the kids were trying to beat his score with their AR test. This engaged boys at the school in a friendly competition for a chance to score higher on a reading test than their coach.

Logan argued the point for building student relationships and building readers based on their interest. According to Logan, teachers need to build relationships with the boys and the girls in order to find out their interests. Logan placed emphasis on the point that “when students have a choice, and it’s made on the interest I’ve concluded that they are more likely to be on task.” Logan understood the role of a teacher-student relationship in resolving the reading gender gap and she communicated that “you have to get them on your side and they will listen to you. If you don’t do that from the get-go, you’re going to lose them, if you’re too strict or too soft, you have to have that balance.” Logan affirmed with great emphasis that “after you get that then you can be real with them.” Logan frankly commented that:

You can be very honest and say look we are doing this; the point of doing this, is this, which is what I always do. Say, look, we’re going to do a biography study and when I pulled out those books and put them on the table; I called them up in groups, and they were so excited. They were picking up two and three books, and they were like can I do two or three reports. I was like let’s just get the first one done first because we have a lot of work to do. Let’s not overburden ourselves,

which just makes them want to do it more because I was telling them no. I think finding interest or finding trade books and not just always reading out of textbooks.

Jordan concluded that a resolution will come when teachers recognize that boys have more energy than girls do. Jordan continues that “and it doesn't mean that they're ADHD [Attention Deficit Hyperactivity Disorder]. It just means that little boys like to play. It's just what little boys like to do, and I think a lot of teachers forget.” Jordan argued the point of the unreasonableness of some teachers who try to compare the behavior of boys to that of girls. Jordan claimed that teachers “see the girls sitting nicely and wonder why can't the boys sit there and do that. It is a big difference, and I actually learned that from my mom trying to explain to my aunt.” Jordan divulged her personal family situation when she stated that aunt had daughters and later in life she had a son. Jordan's aunt's mindset was “just give him the same things, and he would do the same things that the girls did.” However, her aunt later discovered that her son was very active and that “you can't treat them the same.” After revealing her family history, Harper admitted that:

We as teachers have to be mindful of it as well that they're just naturally as young boys are more energetic. Forcing them to sit down or forcing them to stay in one place isn't going to resolve the situation. I learned this my first year by trying to make my kids stay in one location was not helping them focus anymore, which is why I have no issue with my little boy moving over and focusing especially if he could communicate with me that it helps him think better; I'm all for it. I believe that we have to find different ways of letting them do acceptable classroom behavior. I think so often teachers want you to sit at a table and focus on what

you're doing, but I have several boys that like to stand up. They don't wander, but they will stand at their desk, and they may sway back and forth while they are working. They just need to move, and I think we just have to give them a little bit of freedom to do that.

Kem maintained that teachers must have a growth mindset in order to start closing the reading gender gap. Having a growth mindset is not becoming complacent and always be willing to learn new strategies by talking with the students and finding out what are their interests in order to motivate them to build themselves up. "I think basically the key to education is constantly learning new strategies and consistently communicating with your students."

Adrian concurred with Kem on the importance of building those student friendly relationships. Adrian noted that taking the time to get to know the student is important for his male students because he is a male teacher and understands the gender gap problem from a boy's perspective. Adrian agreed wholeheartedly that "focusing on building relationships is the biggest factor in increasing any deficits."

Bailey's response to the question on a resolution to the reading gender gap was that "boys definitely need to have a purpose. They need to see how it benefits them and not just now but in the future. They need to see the big picture, so we need to continue to provide them with a challenging curriculum." Bailey remarked less testing is a possible resolution to the reading gender gap and continued the discourse by arguing that:

There needs to be less testing and more teaching them to understand to mastery. They need to be able to understand it before we test them on it and teachers need to prepare students for the job that they are going to be expected to fill so that

they can be successful. The students need to know how it all affects them overall. I hate to say it, but we're trying to fight the good fight as far as making sure that we do the best we can as teachers in the classroom with what we have.

### **The Future of Boys**

The second theme in S2-P3 is the future of boys with a focus on elementary boys as they transition to middle school, high school, and post school. All of the teachers interviewed seemed to believe that there was a correlation between reading and student success. Harper strongly expressed the importance of reading in everyday life.

Kem emphasized that reading readiness is a determinant of adult success. Reading is a fundamental skill that plays an important role in education, profession, and daily living.

Logan was determined that her boys are all going to be successful because "they all have a let's do this attitude." Logan candidly stated that "I sometimes think if you're honest with them and explain what it really means you will build that relationship with the kids." However, Logan cautiously stated that if they have a gap that is not narrowed or closed and that gap carries on with them in the future, they're less likely to go on to a more professional career. In addition, Logan was less optimistic about the future of the offspring of her male students when she stated that if the gender gap continues, her boys will be less likely to read to their children, which "then it becomes a cycle of I didn't do well in reading, so it's not important to me, so I'm not going to carry that on to my children. I'm not going to support that reading at home." Logan opined that situations of this nature: "parents will not pass on the love of reading." Logan continued to delve into a

lacking area in education - family-school partnerships and discussed how elementary students are asked to go home and read something they enjoy for 20-30 minutes nightly. The kids that have those families where reading is important to them do the reading and the ones that don't, they don't." According to Logan, students that are not subjected to reading at home "these are the kids that need your time before school starts to read with them to give them that time."

Unlike his counterparts, Adrian forthrightly declared that the future is positive: "I like the level of engagement that students get in the middle and high school. There are more sports activities, and I believe that it brings school closer. There's a lack of that in elementary schools and so there lies a gap." Like Logan, Adrian is hopeful that this trend with boys and reading does not become cyclical. Adrian offered a solution to avoid the cyclical prediction that boys will continue to path of the gender gap in the future when declared that: "I think that if someone steps in and make an effort to bridge the gap that there isn't a gap or as big of a gap in the next generation. I think there are big factors like socioeconomic that are a constant factor in determining the outcome of boys."

Kem revealed her classroom strategy for success with the boys she teaches: "I talk to the boys in my class about the stigma they have in society. They are the leaders of their families and their community." Like Logan, Kem endorsed that positive view and the paradigm shift of boys moving forward into society (i.e., middle school, high school) and boys lacking the knowledge that may affect their success in the future. Kem also admitted that the status quo could result in boys "not being motivated to go forward because their expectation level is already going to be low. If they never close that gap up, they are not going to feel productive." Kem continued the discourse by concluding that "basically,

they're going to fall in line with all the stereotypes.”

Stacey refuted the negative theory about the future of boys and felt that boys are going to be fine; they just need to read. Stacey was adamant that “The future of boys is promising. I think that teachers, educators, and people are seeing that there is a gap and they are making an attempt to address it.” Stacey contended that as parents and just as a community “people are hearing more about the gender gap and seeing that it’s not okay for boys not to be where they need to be as far as reading is concerned. We see the fruits of that mindset.” Stacey opined “we are seeing more boys who are reading; parents, communities, and teachers who are promoting that not just here but across the country and across the board. People are not satisfied with the gap and are attempting to close it.” Additionally, Stacey was confident that boys would be okay, they just need to read. Stacey, however, was cautious with her positive view and added that, if boys kept going in the same direction, they will experience a negative impact:

This is an elementary school classroom, if you're struggling with your academic and reading and that only intensifies as you transition into middle and high school. The older you get, the more reading there is, and now you shouldn't just be learning how to read, but you should be applying that reading.

Even with that being stated, Stacey still maintained a positive outlook on the reading gender gap. “I think if it is addressed one boy at a time, one school at a time... what’s so great about it is that there is a solution to the problem. It is promoting more reading and encouraging boys to read more.” Stacey concluded that the future of boys needs to start with boys reading or being introduced to reading at a younger age.

Bailey affirmed statements made by her colleagues: “I wish the complete opposite

happened, but I'm afraid that the boys, especially the low achievers, are going to continue to fall through the cracks." Bailey continued that she worries about the low-achievers because she hears "horror stories" about them and that as middle school students some are having to opt out of other electives to attend remediation courses. Remediation time, Bailey claimed, will in turn lead to behavior issues because the students are focused on academics all day and they miss the opportunity to have an outlet such as art or PE. Misbehavior among boys may lead to in-school suspension or fights with peers, which Bailey continued to reveal her thoughts on how suspensions and other unruly behaviors that lead to suspensions can be avoided, if only "we could meet up with them when they're at the lower level in order to be more successful before they go to middle school so they don't have to lose out on all that extra stuff that they should be participating in." Bailey is adamant that if the remediation practices of denying boys the outlet valve they need continues to promulgate gender gaps in reading into the future, she fears her students "will become statistics as far as not being able to get good jobs and not graduating." Bailey was concerned that even if they were to be able to get their General Education Degree (GED) in the future that could be considered a success. Bailey informed the researcher that she would hate to see the majority of her student drop out or go to jail because the boys in her current class have potential and she hopes that the "light will go on" so they will not fall through the cracks. Bailey's anxiety was evident when she stated that "my biggest fear is that without having a foundation in reading and understanding comprehension or all of the stuff that they're not going to be prepared for middle school, high school and beyond and that is where the problems start."

Harper thoughts of the future was cautious: "my first thought is if they don't get it

in elementary as soon as they get to middle school they're going to drown. The gap is going to get wider, and they're going to get in frustration mode and kind of go downhill from there." Although never having taught middle school, Harper too was hopeful for a paradigm shift but not within the system but with the boys themselves; it's a turning point and maybe even a reality check for some young boys because it becomes the point when they realize they are academically lost.

### **Change in the Approach to the RGG**

The final theme for S2-P3 is change in the approach to the RGG, and it highlights the implications the teachers within this study plan to implement for the upcoming year. Based on feedback from the teachers interviewed, interest seemed to be the common denominator for next school year. Harper's plans for change was to find items that are more of interest for the students for reading and to implement more peer or buddy system opportunities in which the struggling student is paired with students on a higher reading level. Harper would also like to investigate the possibility of looking into implementing more activities geared at building fluency through strategies such as popcorn reading and choral reading activities.

Stacey expressed that "each year I try to reflect and do something different that I didn't do the year before in areas like reading." Like Harper, Stacey is also appealing to the good senses of teachers to do what they can to create a learning environment built on student's interest, which is a crucial component to narrowing the reading gender gap. Stacey also informed the researcher of her impassionate plea to help boys: "I try to hear their interest more because I think that's pretty important when it comes to the gap between students, in general, having things that interest them in reading."

Jordan informed the researcher that her change is a direct result of her being more knowledgeable of the existence of the reading gender gap. As a result, she is more likely to “pay more attention to pinpointing why they’re not successful in reading.” Jordan plans to differentiate more to determine the need of the student by asking questions like “do they need to move more? Is it too many people around them and causing them to get off task”? Overall, Jordan's goals to implement change is to be more mindful of what each of her struggling boys needs.” Jordan's intent is not to allow her boys to fall let her boys fall through the cracks just because they are labeled as “typical struggling readers.”

Kem agreed with Bailey that the best way going forward to closing the gap is to instill self-value as self-worth, so the students are self-motivated to receive the interventions. Kem gave the undertaking that “I’m going to definitely push that next year that they find that self-motivation and take ownership.” Kem further implied that teachers plan with the end in mind, but they have to teach the students to also plan with the end in mind.

Bailey was somewhat on the same page as Kem; if she had an option, her change would be the curriculum because she feels there is “too much placed on the kids and the teachers.”

Adrian and Logan like some of the other participants consider that a focus on student’s interest is essential to making an impact on the reading gender gap. Adrian believes that making an impact on his library can make a minor step toward change in the right direction: “I like to put books in my library about soccer and books that interest boys, in particular, to bridge that gap.”

Logan was also in agreement that building on interest is an essential element for

teachers to build relationships with the students. Based on past experiences, Logan opined that when students have a choice and teachers “build on the student interest by finding books they like and not was just always reading out of textbooks, they are more likely to be on task.” Logan indicated that “you kind of have to get them on your side and they listen to you. If you don't do that, at the get-go, you're going to lose them, you have to have that balance, and then you can be real with them.” Next year, Logan plans to pay more attention to the gender gap and try to pay more attention in pinpointing why her boys are not successful in reading.

### **Chapter Summary**

Chapter 4 presented the findings of the phenomenological interviews conducted to gain an understanding of the essence of the lived experiences of elementary school teachers on the reading gender gap from their past and present classes. These findings included an analysis of semi-structured interviews with seven participants. Excerpts from the interviews were provided to share the participant’s perspectives in their own words. The findings were structured using the past, present, and future temporality, which resulted in an analysis of the eight overarching themes and two subthemes that provided a comprehensive response to the central research questions that guided the study. The next and final chapter presents a discussion of the research findings and their relationship to previous research. It summarizes the findings further, draws conclusions based on the data, and includes implications for the future.

## **Chapter 5: Discussion**

### **Overview of Discussion**

The preceding chapters constituted an inquiry into the lived experiences of the reading gender gap (RGG) between boys and girls from the perspective of the elementary school teacher. The aim of this phenomenological study was to gain the lived experiences of third-, fourth-, and fifth-grade elementary school teachers' lived experiences derived from a temporality of their past, present, and future lifeworld existentials. This chapter includes discussion and interpretation of the findings in the context of the existing literature on the RGG and how it related to the lifeworld of the teachers interviewed. These findings are interpreted in the order in which they were presented in the previous chapter. In addition, implications of the findings, the relevance of the study, and the recommendations for future research and limitations will also be presented.

### **Meanings and Understandings**

Readings from the literature suggested that boys are less engaged in literacy learning than girls (Lam et al., 2012; Senn, 2012; Vantieghem et al., 2014) and it confirms that the RGG is a global issue (Bozack, 2011; Conlin, 2003; Gambell & Hunter, 2000; Legewie & DiPrete, 2012). The underlying problem presented in this study was that elementary school age boys were falling behind in reading when compared to girls. National and international data (i.e. PIRLS, PISA, NAEP) consistently have indicated that there is a notable difference in reading achievement between genders (Cappon, 2011; Haupt & Clark, 2003; Loveless, 2015). Conlin (2003) stated that from the start of school, the average boy is developmentally two years behind the average girl in reading. Additionally, boys comprise 70% of the special education classes and are five times more likely to be

diagnosed as being hyperactive (Conlin, 2003).

Data (i.e. the Nation's report card and the National Literacy Trust) depict the gender gap in reading only widens as boys and girls progress through school (Clark & Burke, 2012, Gill, 2005; Parsons, 2004; Robinson & Lubienski, 2011). The Manhattan Institute study reported graduation statistics showing only 65% of boys in the high school class of 2003 earned diplomas, compared to 72% of girls (Greene & Winters, 2006). Data from NCES (2014), revealed in the United States during the 2010-2011 school year, 77% of boys graduated from high school compared to 84% of girls and during the 2011-2012 school year, 78% of boys graduated from high school compared to 85% of girls, a seven percentage point difference between the two consecutive years. The results were consistent for all 50 states, the District of Columbia, and the U.S. Territories of Puerto Rico and the U.S. Virgin Islands. In the state of Florida, the average difference in graduation rate favoring girls was 8.5% for the two consecutive school years. Nonetheless, some researchers believe that the RGG does not constitute a crisis because the gap is not significant (Corbett, Hill, & St Rose, 2008; Curcio, 2015; Mead, 2006). The PISA 2009 data revealed that the reading gender gap cuts across all racial and ethnic groups (OECD, 2010). Some of the participants in this study felt that elementary school boys have time to make up the deficiencies throughout the course of the educational journey with the appropriate interventions.

The PIRLS (2016) defined reading literacy as “the ability to understand and use those written language forms required by society and/or valued by the individual. Readers can construct meaning from texts in a variety of forms” (Mullis et al., 2012, p. 2). If one relied on this definition, readers use their reading skills not only to learn but to access

their community, including schools, and day-to-day activities. Participants in this research study reported that the reading gender gap goes beyond the classroom and it is a societal issue due to a culture in which the mentality of *boys will be boys* is acceptable. In this chapter, the researcher interpreted the lived experiences of elementary school teachers on the RGG to the research questions guiding this study and the relevant empirical literature.

### **Summary of the Findings**

This study began with the overarching research question: What meaning do elementary school teachers ascribe to the RGG among boys in the past, present, and future at a Central Florida school district? The analysis of this central research question consisted of three subquestions that were utilized to guide the research. This section outlines the findings of this study by providing an interpretation of the data as presented by the three research questions in context with the existing literature related to the study.

The lifeworld existentials served as a secondary lens to the meaning and understanding of the lived experiences of the teachers interviewed (van Manen, 1997). The analysis of the lifeworld of the seven participants captured the lived experiences of the participants with the RGG from their perspective. The results of this study support the findings of the literature review presented in Chapter 2. Based on the results of the literature review, there was not a definite cause to the RGG. Reading from literature suggested that the RGG was a result of a variety of factors such as biological, developmental, and educational factors that affect student achievement in school (Gong et al., 2011; Lenroot & Giedd, 2010; Logan & Johnston, 2010; McIntosh et al., 2012). Other factors such as

the socioeconomic status and geographical location were also considered to have a potential effect on the educational performance and participation among specific groups of both boys and girls (Betrand & Pan, 2011; DiPrete & Jennings, 2012; Legewie & DiPrete, 2012). Other literature reviewed provided evidence that associated the cause of the reading gap to gender factors such as the societal mindset that boys will be boys, more commonly referenced as the boy code (Kimmel, 2010; Wolter et al., 2015) or the gender of the educator, which directly correlated to the lack of male teachers in elementary schools (Cornwell et al., 2013; Legewie & DiPrete, 2012).

### **Interpretation of Findings for Research Question 1**

What were the past lived experiences of elementary school teachers dealing with the RGG among boys? This research question yielded two themes: awareness of the RGG and interventions. Of the seven participants interviewed, five were aware of the RGG and two required research to determine the exact meaning of the terminology used for solicitation. The third-grade teacher, Participant Jordan stated that she was unaware of the RGG until she was approached to participate in the study, which triggered her curiosity to research the topic to gain a greater understanding of what was meant by the term reading gender gap. Although Participant Jordan was aware that her boys were falling behind her girls in reading, she was not aware of why or had no inclination of the RGG due to the lack of awareness of the term RGG. Wiens (2005) revealed that “two decades ago, schools were raising awareness of educational practices in this country biased against girls. Today it seems that girls are winning the race and the gender gap” (p. 11).

Former President Obama and then Secretary of Education Duncan implemented the educational initiative Florida’s Race to the Top (RTTT) Grant as part of the 2009

American Recovery and Reinvestment Stimulus Act. This grant replaced the NCLB act in many states that opted to implement provisions of the grant to receive RTTT federal funding (Rose, 2014) and it aimed to reform low-performing schools to get students college and career ready. RTTT identified four goals for student achievement, three of which directly relate to Florida's literacy issues. However, none of the goals focused on the *RGG* that was represented in Florida's annual assessment data:

- Cut the achievement gap in half on the National Assessment of Educational Progress (NAEP) by 2015.
- Increase the percentage of students scoring at or above proficient on NAEP by 2015 to or above the performance level of the highest-performing states.
- Reduce the percentage of students scoring non-proficient on statewide assessments in half by 2017 (FLDOE, 2013, pg. 9).

The progress notes of the RTTT grant document the increase in the PIRLS average scale score for fourth graders in 2011, which is higher than the U.S. average of 556 and the PIRLS average of 500. The fourth graders in Florida who were assessed on the reading PIRLS scored the second highest behind Hong Kong among the 53 participating education systems assessed (FLDOE, 2013). Yet, the girls still outperformed the boys in the state by 15 points. The average scale score for girls was 576; whereas the average scale score for boys was 561 (Mullis et al., 2012).

Over the past 25 years, a concern for girls brought awareness to gender bias that favored boys; this caused research, programs, and interventions aimed for girls to succeed (King & Winthrop, 2015; Weins, 2005). Twenty years later, the roles are reversed, and

boys are in need of interventions. During interviews, the participants in this study indicated a common intervention was small groups, which is a district recommendation for elementary school. Teachers are expected to have small rotational groups, which includes mandatory minimum minutes (i.e. 45 minutes) requirements for intervention programs such as iready. Participant Bailey spoke about the requirement for intervention groups; however, she states that the instruction has to be based on the need of the student. Participants Harper, Stacey, Adrian, and Logan stated that in addition to the needs of the students, it is important to target the student's interest. Dewey (1913) stated that to gain an individual interest, the educator must first gain the student's attention.

### **Interpretation of Findings for Research Question 2**

What are the present lived experiences of elementary school teachers dealing with the RGG among boys? Four themes arose from Research Question 2: causes of the RGG, the students' academic performance, building relationships with boys, and RGG concerns. Various theories ranging from biological characteristics to the feminization of the educational culture were proposed as potential causes of the RGG (Bertrand & Pan, 2011; Cornwell et al., 2013; DiPrete & Jennings, 2012; Kimmel, 2010; Lenroot & Giedd, 2010; Logan & Johnston, 2010; McIntosh et al., 2012); yet, there is no concrete evidence to substantiate a definite cause (Driessen & Langen, 2013). The findings of this study align with the literature and suggests that there is no consensus on the underlining cause of the RGG. In the elementary classroom, the vast majority of the teachers are female (Ingersoll, Merrill, & Stuckey, 2014). Adrian, a third-grade male teacher/participant believed that the cause is associated with the lack of male role models or father figures in the life

of the student, which extends to the school environment. All of the participants interviewed believed that the lack of male teachers in the elementary setting was of concern. Most of the teachers could only recall two or three male classroom teachers at their school. Participant Stacey, however, believed that the cause is more widespread because as a society it is acceptable for girls to read and boys not to read. This belief aligns with the results of a study conducted across the United States, the United Kingdom, and Canada that revealed that parent of children born in the new millennium spent an estimated 500 hours more of literacy activities with their daughters over sons during the time leading up to their primary years of life (Baker & Milligan, 2013). Boys are expected to exhibit boyish behavior such as being active by playing sports or engaging in similar activities. In various cultures, boys' reading for pleasure could be frowned upon or considered uncool by peers because stereotypical behaviors suggests that reading is for girls (Artola, Sastre, Gratacós, & Barraca, 2013; Wolter et al., 2015). Boys associate reading books with their mother rather than their father because that is primarily who they tend to see reading in school and at home (Cleveland, 2011). It is said that girls are more likely to imitate the same gendered models (i.e., girls will imitate their mother or older sister), and boys will imitate their fathers or older brothers (Baron, Schmader, Cvencek, & Meltzoff, 2014; Bussey & Bandura, 1984; McLeod, 2011). Clark and Burke (2012) conducted a study with 200 participants of which feedback from boy participants of a study indicated that reading was uncool and stressful.

The teacher-student relationship is of importance to each of the participants interviewed. The lived relational that each of the teachers spoke of was positive and the need to build positive student relationship was a high priority. In Wolter's et al. (2015) the

gender stereotype study, conducted on the impact teachers have on the traditional gender role attitudes of boys' reading related to motivation and skill concluded that a teacher's gender role attitude could have a long term effect on boys reading development in as early as preschool. The findings of this gender stereotype study suggested that boys with teachers who demonstrated reading as gendered or endorsed gender stereotypes (reading is for girls) encouraged boys who were less motivated to read, which had a direct effect on skill development. The relationship that teachers build with students is one of importance (Marzano, 2003; Prior, 2014). The teacher evaluation tool used by the district of the participants interviewed rates teachers on the element of building student relationships. Design Question 8 of the Marzano instructional framework asks: *What will I do to establish and maintain effective relationships with students?* Teachers are to plan lessons with each of the 10 design questions in mind. They are expected to understand student interest and backgrounds, use verbal and nonverbal cues to indicate affection for students, and to display objectivity and control (Marzano Center, 2013). Although each of these elements may not be rated in every observation, it is critical that teachers are utilizing instructional strategies within each of the various elements to increase student achievement. Marzano (2003) declared that students' desire to know that their teacher cares about them. If students feel rejected or not liked, they are more likely to disconnect from the teacher and the classroom. This could potentially affect the student's achievement where a student might be less likely to ask questions when he or she does not understand the content. According to Tomlinson & Kalbeisch (1998) students are less probable to learn or perform to their maximum potential academically when they feel unaccepted, intimi-

dated or unsafe. Marzano and Marzano (2003) agreed that the teacher-student relationship should not be left to chance because these relationships are the foundation for student achievement. One of the best ways to build relationships is for the teacher to determine a common ground by identifying the student's interest. Building teacher-student relationships allow the teachers to get to know the student, which in turn, increases the ability to teach them in the classroom. Sizer (1999) admitted that "we cannot teach students well if we do not know them well" (p. 9). The teachers interviewed shared a similar concern for the students in their previous and current classes.

Reading is a foundational life skill (Cooper et al., 2014; Duke & Block, 2012; Wolter et al., 2015) that all students need to acquire. Finley (2011) and Ricks (2013) assert that boys who fail in reading are more likely to be retained or drop out of school. The findings of this study suggested that the RGG has an effect on the academic performance of students in the classroom. Participant Harper opined that the academic performance related to the RGG in her classroom is below grade level in both reading and math because when students have complications in reading, it affects their progress in other content. Local, national, and international data provide evidence of the academic performance of students around the globe (Mullis et al., 2012; OECD, 2010, NCES, 2015b). The relationship between reading ability and academic performance goes beyond an individual issue; it is a societal issue that requires action (Cimmiyotti, 2013; Leu et al., 2015).

National and international data show that girls have consistently outperformed boys in reading for decades (Loveless, 2015; Mullis et al., 2012, NCES, 2015b; OECD, 2010; 2012). Loveless (2015) suggested that the reading gap shown in elementary can be made up when the students become adults, which is considered to fade by at least age 25.

However, research shows that more women than men are enrolling and completing higher education in both high income and low income countries (Becker, Hubbard, & Murphy, 2010). NCES's (n.d.) Fast Facts identified that for the 2012-2013 academic school year across all racial and ethnic groups, there were more undergraduate degrees and certificates conferred for females than males. According to Conlin (2003), by the year 2020, the college gap ratio of men to women bachelor degrees will be 100:156.

The findings in this study are consistent with that data reflecting girls outperforming boys. Participants Bailey, Logan, Stacey, Jordan, and Kem expressed that their greatest concern for the young boys in previous and current class is that the gap in reading will widen to a point they may not be able to catch up. The ultimate result being the student has to take remediation classes or worse the student drops out of school because he is so far behind. Kindergarten through eighth-grade national longitudinal data suggest that the gap does not narrow (Robinson & Lubienski, 2011).

### **Interpretation of Findings for Research Question 3**

What will be the *future* lived experiences of elementary school teachers dealing with the RGG among boys? The final research question in this study addresses the following three themes: resolutions to the RGG, the future of boys, and change in the approach to the RGG. The United States is not in isolation with the existing reading gap between girls' and boys' literacy proficiency. Data from the PISA and PIRLS provide international evidence of the global phenomenon of the RGG. In response to this trend, countries like Canada, Australia, Ireland, Germany, and Great Britain have initiated efforts with national, publicly-funded programs to target the phenomenon of boys' underperformance to girls in reading. However, the United States has not joined in on this trend to

create programs specifically targeted to the gender-based reading achievement gap (Brozo et al., 2014; Estyn, 2008; Finley, 2011).

During the interviews, the participants agreed that building on the student's interest could be a potential solution to the current RGG. Participant Logan, maintained that the teachers have to get the students involved by conducting interest surveys (i.e., book tasting) because the students do not always know their interest. When teaching a gifted program for all boys, Participant Logan found that the boys were reluctant readers and they did not want to engage with any sort of readers especially fiction. They were more likely to read if it was from a magazine like *Sports Illustrated* or something of a nonfiction nature. Estyn (2008) makes the claim that boys tend to do better when they are provided nonfiction reading material with graphic and pictorial representation. Based on a study conducted by Artola et al. (2013), in addition to nonfiction (i.e., instructional manuals, animals, experiments, records or sports), boys seem to find interest in comic books, adventures with fantasy tales on villains and evil characters, and sports magazines because they relate to their interest outside the school. In contrast to girls, boys are less engaged in fiction (i.e., fairy tales, romance, school text) and boys comprehend less when reading fiction because of the lack of interest in the content. Participant Kem reverberated that teachers should interact with the students to determine what interest them and will motivate them to build themselves up. Loveless (2015) confirms students' interest as a potential solution to the RGG and improving boys' reading scores. Teachers have a repertoire of tools for teaching and learning, and emphasis should be placed on implementing best practices to gain boys' motivation to read (Guthrie, 2008). In trying to resolve the RGG and building positive relationship with boys, teachers should seek to unearth what

will motivate their boys to read.

Participant Bailey understands that the district has state mandates, but she believed teachers need to teach to mastery and like Participant Logan, she feels the time constraints do not allow students ample time to master strategies and content. The realignment of the curriculum was implemented to compete in a global economy; however, it has negatively impacted boys' interest and motivation (Estyn, 2008). The Marzano Center (2013) stated that the lesson has to be fun to appeal to the interest of the student for them to learn the content. Priorities must be set to address the literacy needs of boys.

Estyn (2008) recommends that in an effort to close the RGG in schools and local districts should:

- devise a coherent whole-school policy for raising boys' attainment;
- focus on improving boys' literacy;
- find ways to meet pupils' individual learning needs through tracking their progress and targeting support where it is most needed;
- give high priority to literacy programs that improve boys' literacy skills;
- ensure schools set targets for raising boys' attainment; and
- provide schools with performance data on the relative attainment of boys and girls compared with national and benchmarked norms (p. 10).

Collum (2012) asserted that boys who have a reading problem during elementary school are affected in secondary education, which potentially affects their ability to obtain and maintain a job that can support them. As young boys grow and develop into men, there is a societal expectation that these men will provide for their family as they assume the role of head of household; however, not being armed with the proper skill-set can stymie their

potential as productive citizens in society. A longitudinal study, conducted by the National Endowment of Arts (2007) indicated that proficient readers, individuals whose reading and comprehension is above average, are 2.5 times more likely to earn \$850 or more a week in comparison to those who only have average reading and comprehension skills.

Students who fail to complete high school have an average income of \$20,241, which is more than \$10,000 less than the average high school graduate and approximately \$15,000 less than a person with a bachelor's degree (Breslow, 2012). This affects their future in a drastic way and could potentially have lasting effects. Participant Adrian offered a resolution for a paradigm shift in the future of boys and that is to infuse mentoring and positive male role models. McKee (2014) concurred that reading male role models are important for closing the RGG and breaking the stereotypes associated with the term the boy code. In schools where the male teaching staff is limited, Participant Adrian recommended bringing males into the school as reading role models to promote masculinity in reading.

Each of the participants identified that changes should be made on their students' behalf in an effort to close the RGG in their classrooms. In providing their lived experiences from the past, present, and for the future, the participants in this study were able to provide implications for their classroom, the district, and even the state level.

### **Implications of Findings**

The findings of this study can serve as a resource for the classroom teacher, school administrators, local districts or district level administrators, and educational poli-

cymakers. Providing relevant professional development that teachers can utilize to enhance their practice could be a challenge but is achievable with teachers dedicated to the RGG cause (Feiman-Nemser, 2012). This study could be used as a guide to educators at various leadership levels for professional growth and to guide decisions related to student achievement.

**Classroom teacher.** The academic expectations for students in the 21st century are greater than ever as teachers are expected to provide increased rigor built throughout their lessons. There is not a one-size-fit-all resolution to the RGG. During interviews with the participants it was emphasized by the majority of the participants that it is important to build relationships with the students and also build on their interests. According to Tomlinson (2015), students are very diverse and these diversities come in variations such as interest, family culture and circumstances, and levels of maturity. These variables often affect a student's learning capability and it affects each student differently. Consequently, teachers must provide instruction based on the students need. Differentiated instruction is based on best practices of the profession in which teachers utilized strategies that are purposefully implemented based on the need of the student in an effort to maximize an individual student's learning capacity (Heacox, 2002; Tomlinson, 2015). When teachers build on a student's interest, it is said to *hook the learner*, which could potentially increase the students' motivation to learn. Teachers must look for opportunities or cracks that enable them to move beyond the district mandates to engage the students in academics (Tomlinson & Edison, 2003). When differentiating instruction to build upon a student's interest, teachers must link the instructional material, based on the content, to topics that intrigue the student (Tomlinson, 2001). Professional development is critical to

the success of teaching and learning. This study provides the classroom teacher relevant information collected from their colleagues on the RGG that could be utilized to guide their instructional practice.

**School administrator.** The results of this study can be used to create a beneficial training program to provide awareness of the RGG. Boys are expected to be educated in the same or similar fashion as girls. Based on the data collected during the interviewing process with the participants, the boys and girls in their class processes information differently. In most cases, the teachers reported that they had constraints placed on them by the mandates from the school district. Therefore, the increased awareness of the RGG at the local school administrator level would provide the support classroom teachers need to be a voice in advocating for the flexibility needed to provide differentiated instruction with built in rigor to meet the individualized need of the students. The classroom teachers should garner the support of the administrator to ensure that their quest to build academic capacity in the students is not hindered by compliance with district or state mandates.

Each of the participants interviewed shared the importance of building relationships with students in the classroom. In addition, the participants shared a concern that boys were only interacting with male teachers as coaches in the elementary setting. It was even suggested that the boys may not see teaching as a potential career path since it is not the norm in their educational setting. This has direct implications for reading and the gender gap because elementary school boys are not connecting the PE coaches as readers or teachers of academics. One participant, Stacy, spoke of a collaborative effort at her school to increase reading on campus whereby all teachers, including the PE coaches were part of this schoolwide project. Based on Stacey's recollection, the implications

among young boys in the school was positive. The boys in the school wanted to join the reading challenge because they could connect with the PE coach as someone who looked like them. Ehrenworth, Minor, Federman, Jennings, Messer, and McCloud (2015), contended that reading is enhanced when core academic teachers collaborate with coaches: “It is about working to build bonds so teachers can see all of a student, and a school can see all of its teachers” (p. 20). Ehrenworth et al. (2015) further specified that greatness requires a system of all, which means that teachers cannot decrease the RGG without the support of the school administration and/or the district. Increasing student achievement and overcoming the gap requires a systematic approach that is disseminated with a plan and a purpose and it is differentiated based on the academic need of the student.

**Local district.** A critical component of the leadership’s vision as part of the research site’s district’s 5-point strategic plan is to provide a clear focus on the student’s achievement by decreasing or eliminating the academic achievement gap between subgroups. Based on data pulled from the district, there is an apparent achievement gap in reading between boys and girls within this district and Florida. However, the subgroups targeted do not include gender. Therefore, a practical implication would be for the district level administrators to, first, add gender as a targeted subgroup geared to diminishing the gap that currently exists. Second, increase awareness within the district on the RGG and provide training to increase competence in this area. Third, as per the literature review, one of the factors associated with the cause of the RGG is the lack of male teachers within the elementary educational environment. This is an element that could be within the control of the local school administration. The potential implication would be to recruit, hire, and retain qualified male teachers for the elementary grade levels to allow the

students within this environment an opportunity to connect academically with someone who looks more like them.

**Educational policymakers.** The provisions set by the NCLB act are geared to decrease the achievement gap between genders with an emphasis that was placed on single sex schools. Yet, there remains an achievement gap in reading between genders. This study can be used by policymakers as a resource to start a conversation on the RGG, its current status, and what future effects it could have on the global society. Reading is a fundamental skill that students learn in early elementary school teaching. As the student grows and progresses throughout school, it is expected that their reading ability level is also progressing, to ensure that they are at or above grade level in reading. Policymakers must rely on information from those in the classroom, such as the elementary teachers in this study who provided their lived experiences on the RGG. The Center on Education Policy confirmed that girls are outperforming boys in all 50 states (Chudowsky & Chudowsky, 2010) and this data can then be used to fund programs targeting the achievement gap that exists between genders in reading.

### **Theoretical Relevance**

**Dewey's theory of experience.** The first principle of experience is continuity, and it states that experience affects humans. The principle of interaction extends the principle of continuity and explains how experience is created based on past and present familiarities. In this study, the experience boys had with reading was important in their motivation to read. The participants had a concern that culturally it is acceptable for girls to read and boys to play sports. In some cases, this is encouraged and boys experience a culture that affects how they react to reading. They are not motivated because reading is perceived as

unmasculine by those they interact with. Dewey (1997) suggested that educators should take into account a student's past experience when designing instruction or subject matter to fulfill the student's potential. Classroom teachers should grasp the importance of Dewey's premise that all genuine education is derived from experience. In order to create a positive experience, teachers must ensure that boys are motivated to read. The participants in this study, discussed the importance of building on student interest and they have attempted to build positive teacher-student relationships with the students to promote desirable experiences, which will in turn influence a positive future experience. The ultimate goal is that "every experience lives on in future experiences" (Dewey, 1997, p. 27).

**Bruner's learning theory.** Similar to Dewey (1997), theory of experience, Bruner's (1966) learning theory suggest that learning is built upon past learning experiences. He referenced past experiences as intrinsic motives for learning. In this case, the motive is not dependent upon the reward connected to the activity. Bruner (1966) wrote "in the process of teaching a skill the parent or teacher passes on much more. The teacher imparts attitudes toward a subject and, indeed, attitudes toward learning itself" (p. 123). According to Baron et al. (2014), children imitate their same-gendered parent. Parents are considered the first teachers of their children (Cordry, & Wilson, 2004) and the attitudes they instill towards gendered activities could potentially affect how boys view the activity (i.e., reading) (McLeod, 2011). Participant Stacey reported that females reading encourages females because students typically emulate those that resemble them. Participants Logan and Adrian discussed how the love of reading has to pass from parents to children. During the interview, participants Logan and Adrian elaborated on the trends that have seen in past and present classes where students from a family that reading is not practiced

in the home required interventions or additional support at school in the area of reading. Both participants Logan and Adrian feared that when parents do not consider the importance of boys reading, it is reciprocated to the student, in essence, creating a cycle of boys who are less motivated than girls to read. Bruner (1938) believed teachers should seek to motivate students by providing materials and activities that peak the student interest to achieve growth. All seven participants understood that interest was a major component in the effort to close the reading gender gap. Participant Adrian indicated that he tried to build his library based on student interest. Participants Jordan and Logan recalled that boy's interest was somewhat different from that of girls; whereas, Participants Stacey and Harper spoke of bringing fun into reading either by books of interest (i.e., sports) or appealing to their sense of competitiveness by engaging them in friendly competition. Each of the seven participants recognized that interest is an important motivator in gaining and maintaining the attention of elementary school age boys.

**Vygotsky's zone of proximal development.** Vygotsky (1978) defines the ZPD as "the distance between the actual development level... and the level of potential development... under adult guidance or in collaboration with more capable peers" (p. 86). The ZPD is the process of maturation a child goes through, and learning should correspond with the developmental level of the child. The zone of proximal development is a result of the developmental process lagging behind that of the learning process. Participant Bailey described that boys are being required to do more than she feels they are academically ready to complete. Participant Bailey contributed the reading gender gap to the mandates from the district and state requiring elementary school teachers to provide more rigorous instruction that some students are not ready to receive. Participant Jordan discussed the

difference she noticed with the maturity level of the boys in her classroom, she categorized them as energetic, squirrely, and often needed redirection to remain on task for five minutes. However, she also considered it as typical boyish behavior. Although the girls and boys within the study are of the same actual age (i.e., chronological age of a child), some are not of the same mental development age (i.e., the age group a child can perform a series of the task with increasing level of difficulty) (Vygotsky, 1978). Participant Jordan observed that she was providing the extra support and interventions to more of the boys in her class, while Participant Bailey detected that the majority of her students considered low achievers were boys. Participant Harper perceived that her girls seemed to catch on to content faster and were more fluent in reading than her boys. Throughout the study, the participants reported lived experiences of ZPD in which the developmental process of boys reading lagging behind that of the learning process of their female peers.

**Moss and Brookhart, the theory of action to build capacity.** Theory of action is designed to build capacity and use research-based strategies to increase effective teaching. An emphasis is placed on the foundational elements of teaching and learning such as educational content knowledge, classroom management, and understanding of the social and economic background of students (Core Education, 2011). Participant Kem believed that a cause of the reading gender gap could be contributed to teacher competency or knowledge of educating the diverse students that may exist in their classroom. Motivation is a critical component in building capacity in students with an intended outcome to close the gaps in student learning. Participants in this study believed that building student relationships are a potential opener to closing the reading gender gap that currently exists by

surveying student interest to motivate the student to read. Within the study's setting, intervention programs (iready) were put in place as district mandates to use research-based strategies for teaching and learning. These programs are designed to build capacity in both the student and the teacher by providing the student with an individualized academic plan and providing the teacher with student data to use for instructional decisions.

### **Significance of the Study**

The finding of this study supported claims of girls outperforming boys in reading and has brought a focus on the reading achievement disparities between the genders (Brozo, 2010). The significance of the RGG resulted in a lawsuit being filed in 2006 in Milton, Massachusetts, alleging a civil rights violation against a suburban school for discriminating against the boys in the school because they were underperforming in comparison to the girls within the school (Jan, 2006). Throughout the years the percentage of boys scoring as proficient in reading is not meeting the percentage of girls scoring proficient. The Florida Standards Assessment (FSA) provides an analysis of student reading proficiency in districts throughout the state was first administered in spring 2015 replacing the FCAT 2.0. This assessment measured the academic achievement of students in Florida's public school to determine their mastery in the subject areas such as English Language Arts (FLDOE, 2016). Based on the 2015-2016 accountability report from the FLDOE, 56% of the girls at the district level scored satisfactorily at or above on the ELA FSA; whereas only 47% of the boys scored satisfactory or above. This was consistent at the state level with 57% of the girls scored satisfactory or better and 47% of the boys scored satisfactory or better. Students at these levels demonstrated a skill that indicate they are at a satisfactory level, above satisfactory level, or mastery level of success with

the ELA Florida Standards (FLDOE, n.d.a).

According to data from the NCES, the 2015 Nation's Report Card remains unchanged for fourth-grade students in the area of reading for all subgroups including gender. Additionally, the report revealed that eighth grade students' overall reading results dropped for all subgroups, including gender (NCES, 2015b). Based on this data, the problem of boys lagging behind girls in the area of reading remains an issue. This is not a new issue; the Nation's report card revealed that since the implementation of the national assessment in 1992, fourth- and eighth-grade girls have scored higher on the assessment than fourth- and-eighth grade boys. The PISA assesses approximately 500,000 15-year-olds in science, reading, and math every three years in an effort to evaluate the educational systems around the world (OECD, 2010). The focus of the triennial survey rotates the subject area of emphasis. Reading was the focus during the 2009 survey, and the results around the globe aligned with those found in the Nation's Report Card—that girls were outperforming boys across the world in reading. During the 2015 PISA, the focus was on science, yet reading results were aggregated to provide data on the subgroups such as gender. The OECD Family Database (2016) reported on the PISA results:

Across all OECD countries, girls performed significantly better than boys in reading in 2015. The size of the gender difference varies between countries – in Finland, Slovenia, Latvia, Iceland, Korea, for example, the female mean score in reading was over 40 points higher than the male mean score, while in Japan, Ireland, and Chile the difference was less than 15 points. But in most OECD countries the gender difference was at least 20 points, with the OECD average gender difference 27 points (p. 2).

Data from the elementary, middle, and high school level show consistent results that indicate a RGG exists (NCES, 2015b; OECD Family Database, 2016). This information is relevant to the significance of this study. Although there is evidence that the RGG exists at the primary and secondary level, there is very little awareness of the RGG in the research site's district. During the interview portion of the study, there were some participants who were not aware of the meaning of the RGG. This study provided the awareness to encourage participants to be open-minded to the idea that boys and girls could potentially learn differently and could potentially require differentiated strategies.

### **Recommendations for Future Research**

Research is necessary to guide educators to gain a deeper understanding of the impact of the RGG. The significance of the findings found in this phenomenological study aligned with previous research outcomes. The data confirm that the RGG is a global issue (Bozack, 2011; Legewie & DiPrete, 2012) and increased awareness is essential to diminishing the gap. The RGG can have a lasting effect on education at the local, state, national, and global level. The data are available at each of these levels, but they would need to be utilized to make instructional decisions to increase reading achievement among boys.

This study could potentially extend to address concerns expressed by the participants during the interview process. Based on responses from the participants interest is a major component in increasing reading among boys. Boys are less motivated to read because they may find the genre of reading material selected by the teacher not captivating and unable to hold their attention. Therefore, the future research could survey student interest (i.e. collaborating with the media specialist within the school or public library) to

track the genre of books checked out by elementary school boys. The data will provide feedback on the gendered reading habits of elementary boys and provide data for instructional planning.

Another aspect addressed by the participants interviewed was the lack of reading male role models at the elementary level. There are more female teachers at the elementary level of schooling (National Education Association, 2012). Consequentially, boys are accustomed to seeing women in the role of readers and has led to the assumption that reading is for girls. Based on lived experiences of the participants in this study, elementary boys respond positively to reading male role models. Unfortunately, due to a lack of presence of male teachers at the elementary level, future research is needed to determine the effect reading male role models could potentially have on academic achievement of elementary school boys. During the interview process, one of the participants suggested that teacher preparation could be a possible cause of the RGG. Therefore, research could potentially extend to the effectiveness of teacher preparation programs in educating teachers on gender differences in education. This study was limited because it only provided the lived experience of targeted elementary school teachers. Future research could incorporate administrators' perspectives of the RGG to increase awareness of the leadership level.

## **Conclusion**

The purpose of this phenomenological study was to explore the perceptions of elementary school teachers on the RGG. An analysis of responses from the participants affirm that a RGG exists in this Central Florida school district. Although the causes of this gap vary based on the student; it is agreed that the lack of reading male role models in the

presence of boys contributes to the stereotype that reading is feminine. Teachers in this study recognize that reading comprehension is a life skill and the gap has to be closed during elementary school. If not, society runs the risk of the RGG widening to a point in which boys may lose interest in catching up. Based on the findings, academic and social implications were discussed with recommendations for current practice. It is recommended that boys are provided opportunities to read more to increase stamina and fluency when reading. Additionally, it is recommended that teachers differentiate instruction based on the student's needs and interest and that teachers continue to build relationships with students in an effort to educate the whole child. Awareness of the RGG is a collaborative effort and essential to increasing the reading achievement of elementary school boys and transforming them from boys to men.

## References

- Ackerman, D. J., & Barnett, W. S. (2005). *Prepared for kindergarten: What does “readiness” mean?* (Policy report). New Brunswick, NJ: Rutgers University, National Institute for Early Education.
- Ahern, K. J. (1999). Ten tips for reflexive bracketing. *Qualitative Health Research*, 9, 407–411. doi:10.1177/104973239900900309
- Alloway, N., & Dalley-Trim, L. (2006). *Success for boys: Boys and literacy module*. Canberra, Australia: Curriculum Corporation. Retrieved from <http://researchonline.jcu.edu.au/9601/>
- Andersen, E. B. (1973). A goodness of fit test for the Rasch model. *Psychometrika*, 38(1), 123–140. doi:10.1007/BF02291180
- Annesley, T. M. (2010). Show your cards: The results section and the poker game. *Clinical chemistry*, 56(7), 1066–1070. Retrieved from <https://pdfs.semanticscholar.org/bba0/ded6cbdee5d44840fa2ec235d8ff0eef004f.pdf>
- Artola, T., Sastre, S., Gratacós, G., & Barraca, J. (2013). *Differences in boys and girls attitudes toward reading*. Retrieved from <http://www.easse.org/docs/content/241/gloria-gratacos.pdf>
- Auerbach, S. (2007). Visioning parent engagement in urban schools. *Journal of School Leadership*, 17(6), 699–734. Retrieved from EBSCOhost database
- Autor, D., & Wasserman, M. (2013). *Wayward sons: The emerging gender gap in labor markets and education*. Washington, DC: Third Way. Retrieved from <http://economics.mit.edu/files/8754>
- Aydeniz, M., & Southerland, S. A. (2012). A national survey of middle and high school

science teachers' responses to standardized testing: Is science being devalued in schools? *Journal of Science Teacher Education*, 23, 233–257. doi:10.1007/s10972-012-9266-3

Aydin, A., Erdağa, C., & Tas, N. (2011). A comparative evaluation of PISA 2003–2006 results in reading literacy skills: An example of top-five OECD countries and Turkey. *Educational Sciences: Theory and Practice*, 11, 665–673. Retrieved from ERIC database. (EJ927371)

Baker, M., & Milligan, K. (2013). *Boy-girl differences in parental time investments: Evidence from three countries (No. w18893)*. Canada: National Bureau of Economic Research. Retrieved from <http://faculty.arts.ubc.ca/kmilligan/research/papers/gender.may2014.pdf>

Baron, A. S., Schmader, T., Cvencek, D., Meltzoff, A. N (2014). The gendered self-concept. In I. P. Leman & H. R. Tenenbaum, Eds., *Gender and development* (pp. 109–134). East Sussex, England: Psychology Press.

Baron-Cohen, S. (2003). *The essential difference: Men, women and the extreme male brain*. London, England: Penguin.

Barrett, D., & Green, K. (2009). Pedagogical content knowledge as a foundation for an interdisciplinary graduate program. *Science Educator*, 18(1), 17–28. Retrieved from ERIC database. (EJ851876)

Becker, G. S., Hubbard, W. H., & Murphy, K. M. (2010). Explaining the worldwide boom in higher education of women. *Journal of Human Capital*, 4(3), 203–241. Retrieved from <http://econresearch.uchicago.edu/sites/econresearch.uchicago.edu/files/MFI-2010-009.pdf>

- Benner, G. J., Kutash, K., Nelson, J. R., & Fisher, M. B. (2013). Closing the achievement gap of youth with emotional and behavioral disorders through multi-tiered systems of support. *Education & Treatment of Children, 36*(3), 15–29. doi:10.1353/etc.2013.0018
- Bertrand, M., & Pan, J. (2011). The trouble with boys: Social influences and the gender gap in disruptive behavior. *American Economic Journal: Applied Economics, 5*(1), 32–64. doi:10.1257/app.5.1.32
- Bigler, R. S., & Signorella, M. L. (2011). Single-sex education: New perspectives and evidence on a continuing controversy. *Sex Roles, 65*, 659–669. doi:10.1007/s11199-011-0046-x
- Bowen, G. (2005). Preparing a qualitative research-based dissertation: Lessons learned. *The Qualitative Report, 10*(2), 208–222. Retrieved from <http://www.nova.edu/ssss/QR/QR10-2/bowen.pdf>
- Bozack, A. (2011). Reading between the lines: Motives, beliefs, and achievement in adolescent boys. *The High School Journal, 94*(2), 58–76. doi:10.1353/hsj.2011.0001
- Bramen, J. E., Hranilovich, J. A., Dahl, R. E., Forbes, E. E., Chen, J., Toga, A. W., . . . Sowell, E. R. (2011). Puberty influences medial temporal lobe and cortical gray matter maturation differently in boys than girls matched for sexual maturity. *Cerebral Cortex, 21*, 636–646. doi:10.1093/cercor/bhq137
- Braunger, J., & Lewis, J. (1998). *Building a knowledge base in reading* (2nd ed.). Portland, OR: Northwest Regional Educational Laboratory.
- Breslow, J. L. (2012). *By the numbers: Dropping out of high school*. Retrieved from

<http://www.pbs.org/wgbh/frontline/article/by-the-numbers-dropping-out-of-high-school/>

Brophy, J. E., & Good, T. L. (1973). Feminization of American elementary schools. *The Phi Delta Kappan*, 54(8), 564–566. Retrieved from <http://www.jstor.org/stable/20373588>

Brozo, W.G. (2010). *To be a boy, to be a reader*. Newark, DE: International Reading Association.

Brozo, W. G., Sulkunen, S., Shiel, G., Garbe, C., Pandian, A., & Valtin, R. (2014). Reading, gender, and engagement. *Journal of Adolescent & Adult Literacy*, 57(7), 584–593. doi:10.1002/jaal.291

Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.

Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.

Burman, D. D., Bitan, T., & Booth, J. T. (2008). Sex differences in neural processing of language among children. *Neuropsychologia*, 46, 1349–1362. doi:10.1016/j.neuropsychologia.2007.12.021

Bussey, K., & Bandura, A. (1984). Influence of gender constancy and social power on sex-linked modeling. *Journal of Personality and Social Psychology*, 47(6), 1292–1302. doi:10.1037/0022-3514.47.6.1292

Cappon, P. (2011). *Exploring the “boy crisis” in education*. Ottawa, ONT: Canadian Council on Learning. Retrieved from ERIC database. (ED518173)

Carl, J. (2012). Gender vs. sex: What is the difference? *Montessori Life*, 24(1), 26–31. Retrieved from ERIC database. (EJ975093)

- Chan, Z. C., Fung, Y. L., & Chien, W. T. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process. *The Qualitative Report*, 18(30), 1–9. Retrieved from <http://nsuworks.nova.edu/tqr/vol18/iss30/1>
- Chenoweth, G. (2012). The cultural bind on the American male. *Journal of College Admission*, 214, 12–17. Retrieved from ERIC database. (EJ992664)
- Chiu, M. M., & McBride-Chang, C. (2006). Gender, context, and literacy: A comparison of students in 43 countries. *Scientific Studies of Literacy*, 10, 331–362.  
doi:10.1207/s1532799xssr1004\_1
- Chudowsky, N., & Chudowsky, V. (2010). *Are there differences in achievement between boys and girls?* Washington, DC: Center on Education Policy. Retrieved from [www.cepdc.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=304&documentFormatId=4643](http://www.cepdc.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=304&documentFormatId=4643)
- Cimmiyotti, C. B. (2013). *Impact of reading ability on academic performance at the primary level*. Retrieved from <http://scholar.dominican.edu/cgi/viewcontent.cgi?article=1126&context=masters-theses>
- Clark, C., & Burke, D. (2012). *Boys' Reading Commission 2012: A review of existing research conducted to underpin the commission*. London, England: National Literacy Trust. Retrieved from [http://www.literacytrust.org.uk/assets/0001/4047/BRC-\\_Research\\_overview\\_-\\_Final.pdf](http://www.literacytrust.org.uk/assets/0001/4047/BRC-_Research_overview_-_Final.pdf)
- Cleveland, K. (2011). *Teaching boys who struggle in school: Strategies that turn underachievers into successful learners*. Alexandria, VA: ASCD Press.

- Coburn, C. E., Pearson, P. D., & Woulfin, S. (2011). Reading policy in the era of accountability. *Handbook of Reading Research, 4*, 561–593. New York, NY: Routledge.
- Cohen, D., & Crabtree, B. (2006). *Qualitative research guidelines project*. Retrieved from <http://www.qualres.org/index.html>
- Cohen, D. S., & Levit, N. (2013). Still unconstitutional: Our nation's experiment with state-sponsored sex segregation in education. *Seton Hall Law Review, 44*(2), Article 1. Retrieved from <http://scholarship.shu.edu/cgi/viewcontent.cgi?article=1497&context=shlr>
- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. Valle & M. King (Eds.), *Existential phenomenological alternatives for psychology* (pp. 48–71). New York, NY: Oxford University Press.
- Coley, R. J. (2001). *Differences in the gender gap: Comparisons across racial/ethnic groups in education and work*. Princeton, NJ: Educational Testing Service. Retrieved from <https://www.ets.org/Media/Research/pdf/PICGENDER.pdf>
- College Board. (2015). *Education pays: Lifetime earnings by education level*. Retrieved from <http://trends.collegeboard.org/education-pays/figures-tables/lifetime-earnings-education-level>
- Collum, S. P. (2012). *The impact of teacher attitudes and perceptions of direct instruction on student achievement in reading*. Unpublished doctoral dissertation. Liberty University, Lynchburg, VA.
- Conlin, M. (2003, May 26). The new gender gap: From kindergarten to grad school, boys are becoming the second sex. *Business Week Online*. Retrieved from

<http://www.bloomberg.com/bw/stories/2003-05-25/the-new-gender-gap>

- Connor, C. M., Morrison, F. J., Fishman, B., Giuliani, S., Luck, M., Underwood, P. S., & Schatschneider, C. (2011). Testing the impact of child characteristics x instruction interactions on third graders' reading comprehension by differentiating literacy instruction. *Reading Research Quarterly, 46*, 189–221. doi:10.1598/RRQ.46.3.1
- Connor, S. (2013, December 03). The hardwired difference between male and female brains could explain why men are “better at map reading” and why women are “better at remembering conversations.” *The Independent*. Retrieved from <http://www.independent.co.uk/life-style/the-hardwired-difference-between-male-and-female-brains-could-explain-why-men-are-better-at-map-reading-8978248.html>
- Cooper, B. R., Moore, J. E., Powers, C. J., Cleveland, M., & Greenberg, M. T. (2014). Patterns of early reading and social skills associated with academic success in elementary school. *Early Education and Development, 25*, 1248–1264. doi:10.1080/10409289.2014.932236
- Corbett, C., Hill, C., & St. Rose, A. (2008). *Where the girls are: The facts about gender equity in education*. Washington, DC: American Association of University Women Educational Foundation. Retrieved from ERIC database. (ED501319)
- Cordry, S., & Wilson, J. D. (2004). Parents as first teacher. *Education, 125*(1), 56-63. Retrieved from [http://go.galegroup.com.ezproxylocal.library.nova.edu/ps/i.do?id=GALE%7CA124940263&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=00131172&p=AONE&sw=w&authCount=1&u=novasea\\_ourl&selfRedirect=true#](http://go.galegroup.com.ezproxylocal.library.nova.edu/ps/i.do?id=GALE%7CA124940263&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=00131172&p=AONE&sw=w&authCount=1&u=novasea_ourl&selfRedirect=true#)

- Core Education. (2011). *Theories of action for teacher effectiveness*. Retrieved from <http://www.coreeducationllc.com/blog2/theories-of-action-for-teacher-effectiveness/>
- Cornwell, C., Mustard, D. B., & Van Parys, J. (2013). Noncognitive skills and the gender disparities in test scores and teacher assessments: Evidence from primary school. *Journal of Human Resources*, 48, 236–264. doi:10.3368/jhr.48.1.236
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publication.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publication.
- Creswell, J. W. (2007). *Qualitative inquiry and research method: Choosing among five approaches* (2nd ed.) Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education.
- Creswell, J. W. (2009). *Designing a qualitative study: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Curcio, A. C. (2015). *Proposed FSA cut scores show achievement gap. Tallahassee Democrat*. Retrieved from <http://www.tallahassee.com/story/news/local/>

2015/09/16/proposed-fsa-cut-scores-show-achievement-gap/32536713/

Curriculum and Associates. (n.d.). iready: Overview. Retrieved from <https://www.curriculumassociates.com/products/iready/diagnostic-instruction.aspx>

Datnow, A., Hubbard, L., & Woody, E. (2001). *Is single gender schooling viable in the public sector? Lessons from California's pilot program*. Toronto, Canada: University of Toronto, Ontario Institute for Studies.

De Felice, D., & Janesick, V. J. (2015). Understanding the marriage of technology and phenomenological research: From design to analysis. *The Qualitative Report* 20(10), 1576-1593. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss10/3/>

Dehaene, S., Pegado, F., Braga, L. W., Ventura, P., Filho, G. N., Jobert, A., ... Cohen, L. (2010). How learning to read changes the cortical networks for vision and language. *Science*, 330, 1359–1364. doi:10.1126/science.119414

Denton, C. (2009). *Classroom reading instruction that supports struggling readers: Key components for effective teaching*. Houston, TX: University of Texas Health Science Center, Children's Learning Institute. Retrieved from <http://sites.ssis-suzhou.net/wordsworth/files/2015/05/Classroom-Reading-Instruction-That-Supports-Struggling-Readers.pdf>

Dewey, J. (1913). *Interest and effort in education*. Carbondale, IL: University Press.

Dewey, J. (1997). *Experience and education*. New York, NY: Macmillan. (Original work published 1938)

DiPrete, T. A., & Jennings, J. L. (2012). Social and behavioral skills and the gender gap in early educational achievement. *Social Science Research*, 41, 1–15.

<http://dx.doi.org/10.1016/j.ssresearch.2011.09.001>

- Dorman, C. (n.d.). Multi-tiered system of supports (MTSS) in Florida: An overview. Retrieved from [http://flpbs.fmhi.usf.edu/pdfs/RTIB%20Guide%20101811\\_final.pdf](http://flpbs.fmhi.usf.edu/pdfs/RTIB%20Guide%20101811_final.pdf)
- Driessen, G. (2007). The feminization of primary education: Effects of teachers' sex on pupil achievement, attitudes and behaviour. *International Review of Education*, 53, 183–203. doi:10.1007/s11159-007-9039-y
- Driessen, G., & Van Langen, A. (2013). Gender differences in primary and secondary education: Are girls really outperforming boys? *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale De L'Education*, 59(1), 67–86. Retrieved from <http://www.jstor.org/stable/42636128>
- Duke, N. K., & Block, M. K. (2012). Improving reading in the primary grades. *The Future of Children*, 22(2), 55–72. doi:10.1353/foc.2012.0017
- Dulaney, S. K., Hallam, P. R., & Wall, G. (2013). Superintendent perceptions of multi-tiered systems of support (MTSS): Obstacles and opportunities for school system reform. *AASA Journal of Scholarship and Practice*, 10(2), 30–45. Retrieved from [http://aasa.org/uploadedFiles/Publications/Journals/AASA\\_Journal\\_of\\_Scholarship\\_and\\_Practice/JSP\\_Summer2013.FINAL.pdf#page=30](http://aasa.org/uploadedFiles/Publications/Journals/AASA_Journal_of_Scholarship_and_Practice/JSP_Summer2013.FINAL.pdf#page=30)
- Eagleton, T. (1983). *Literary theory: An introduction*. Oxford, England: Blackwell.
- Edmonds, W. A., & Kennedy, T. D. (2010). *A reference guide to basic research designs: A visual system for research designs in education and the social & behavioral sciences*. Boston, MA: Pearson.
- Edwards, R., & Holland, J. (2013). *What is interviewing?* New York, NY: Bloomsbury.
- Ehrenworth, M., Minor, C., Federman, M., Jennings, J., Messer, K., & McCloud, C.

- (2015). Those who can coach can teach. *Journal of Adolescent & Adult Literacy*, 59(1), 15-20. doi: 10.1002/jaal.430
- Eliot, L. (2009). *Pink brain, blue brain: How small differences grow into troublesome gaps—and what we can do about it*. New York, NY: Houghton Mifflin Harcourt.
- Entwisle, D. R., Alexander, K. L., & Olson, L. S. (2007). Early schooling: The handicap of being poor and male. *Sociology of Education*, 80, 114–138. doi:10.1177/003804070708000202
- Eriksson, M., Marschik, P. B., Tulviste, T., Almgren, M., Pérez Pereira, M., Wehberg, S., . . . Gallego, C. (2012). Differences between girls and boys in emerging language skills: Evidence from 10 language communities. *British Journal of Developmental Psychology*, 30, 326–343. doi:10.1111/j.2044-835X.2011.02042.x
- Erlauer, L. (2003). *The brain-compatible classroom: Using what we know about learning to improve teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Estyn. (2008). *Closing the gap between boys' and girls' attainment in schools*. Retrieved from <https://www.estyn.gov.wales/thematic-reports/closing-gap-between-boys-and-girls-attainment-schools-march-2008>
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1–22. doi:10.1023/A:1009048817385
- Farris, P. J., Werderich, D. E., Nelson, P. A., & Fuhler, C. J. (2009). Male call: Fifth-grade boys' reading preferences. *The Reading Teacher*, 63, 180–188. doi:10.1598/RT.63.3.1

- Feiman-Nemser, S. (2012). *Teachers as Learners*. Cambridge, MA: Harvard Education Press. ERIC database (ED530156)
- Finlay, L. (2009). Exploring lived experiences: Principles and practices of phenomenological research. *International Journal of Therapy and Rehabilitation*, 16(9), 474–481. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=aph&AN=44205925&site=ehost-live>
- Finley, H. (2011). *Closing the achievement gap between boys and girls*. (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database. (No. 3478100)
- Florida Department of Education. (n.d.a). *School, district, and state public accountability report*. Retrieved from [http://doeweb-prd.doe.state.fl.us/eds/nclbpar/year1516/nclb1516.cfm?dist\\_schl=48\\_881](http://doeweb-prd.doe.state.fl.us/eds/nclbpar/year1516/nclb1516.cfm?dist_schl=48_881)
- Florida Department of Education. (n.d.b). *FCAT 2.0 Student Performance: Demographic Report*. Retrieved from <http://app1.fldoe.org/FCATDemographics/Default.aspx>
- Florida Department of Education. (2013). *A second year progress report on Florida's Race to the Top January 2013*. Retrieved from [http://www.fldoe.org/core/fileparse.php/7605/urlt/0073264-fla\\_rttt\\_final\\_1\\_31.pdf](http://www.fldoe.org/core/fileparse.php/7605/urlt/0073264-fla_rttt_final_1_31.pdf)
- Florida Department of Education. (2014). *Understanding FCAT 2.0 reports: Spring 2014*. Retrieved from <http://www.fldoe.org/core/fileparse.php/3/urlt/2014ufr.pdf>
- Florida Department of Education. (2015). *K-12 assessment*. Retrieved from <http://www.fldoe.org/accountability/assessments/k-12-student-assessment>
- Florida Department of Education. (2016). *FSA 2014–2015 technical report: Volume 3*. Retrieved from [http://fsassessments.org/wp-content/uploads/2016/04/V3\\_FSA-Technical-Report-Year-2014-2015\\_4.6.16.pdf](http://fsassessments.org/wp-content/uploads/2016/04/V3_FSA-Technical-Report-Year-2014-2015_4.6.16.pdf)

- Francis, B., & Skelton, C. (2005). *Reassessing gender and achievement: Questioning contemporary key debates*. Abingdon, England: Routledge.
- Fullan, M. (2007). Change theory as a force for school improvement. In J. M. Burger, C. F. Webber, & P. Klinck (Eds.), *Intelligent leadership: Constructs for thinking education leaders* (pp. 27–39). Dordrecht, The Netherlands: Springer.
- Galindo, C., & Sheldon, S. B. (2012). School and home connections and children's kindergarten achievement gains: The mediating role of family involvement. *Early Childhood Research Quarterly, 27*, 90–103. doi:10.1016/j.ecresq.2011.05.004
- Gambell, T., & Hunter, D. (2000). Surveying gender differences in Canadian school literacy. *Journal of Curriculum Studies, 32*, 689–719. doi:10.1080/00220270050116941
- Gelzheiser, L. M., Scanlon, D., Vellutino, F., Hallgren-Flynn, L., & Schatschneider, C., (2011). Effects of the interactive strategies approach—extended: A responsive and comprehensive intervention for intermediate-grade struggling readers. *The Elementary School Journal, 112*(2), 280–306. doi:10.1086/661525
- Gill, Z. (2005). Boys: Getting it right: The “new” disadvantaged or “disadvantage” redefined? *The Australian Educational Researcher, 32*(2), 105–124. doi:10.1007/BF03216822
- Glesne, C. (2016). *Becoming qualitative researchers* (5th ed.). New York, NY: Pearson.
- Goldberg, J. L. (2003). How does an axon grow? *Genes & Development, 17*, 941–958. doi:10.1101/gad.1062303
- Gong, G., He, Y., & Evans, A. C. (2011). Brain connectivity: Gender makes a difference. *The Neuroscientist, 17*, 575–591. doi:10.1177/1073858410386492

- Graham, E. (2004). *Single sex schools*. Retrieved from <http://singlesexschools.org/>
- Graue, M. E., & DiPerna, J. C. (2000). Redshirting and early retention: Who gets the “gift of time” and what are its outcomes? *American Educational Research Journal*, 37, 509–534. doi:10.3102/00028312037002509
- Greene, J., & Winters, M. (2006). *Leaving boys behind: Public high school graduation rates*. New York, NY: Manhattan Institute.
- Griffin, P., Burns, M. S., & Snow, C. E. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academies Press.
- Guild, P.B. (2009). *Diversity, learning style and culture*. Retrieved from [www.newhorizons.org/strategies/styles/guild](http://www.newhorizons.org/strategies/styles/guild)
- Gurian, M. (2003). *What could he be thinking? How a man's mind really works*. New York, NY: Macmillan.
- Gurian, M. (2009). *The purpose of boys: Helping our sons find meaning, significance, and direction in their lives*. San Francisco, CA: Jossey-Bass.
- Gurian, M. (2011). *Boys and girls learn differently! A guide for teachers and parents*. San Francisco, CA: Jossey-Bass.
- Guthrie, J. (2008). *Engaging adolescents in reading*. Thousand Oaks, CA: Corwin Press.
- Halpern, D. F. (2000). *Sex differences in cognitive abilities*. Mahwah, NJ: Erlbaum.
- Haupt, A., & Clark, K. (2003). Where the boys are . . . *Teacher Librarian*, 30(3), 19–24.
- Hayes, W. (2008). *No child left behind: Past, present, and future*. Boston, MA: McGraw-Hill.
- Heacox, D. (2002). *Differentiating instruction in the classroom: How to reach and teach all learners, Grades 3–12*. Minneapolis, MN: Free Spirit.

- Hedges, L. V., & Nowell, A. (1995). Sex differences in mental test scores, variability, and numbers of high-scoring individuals. *Science*, *269*, 41–45. doi:10.1126/science.7604277
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. New York, NY: The Annie E. Casey Foundation.
- Hidi, S., & Reninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist*, *41*(2), 111–127. doi:10.1207/s15326985ep4102\_4
- Hodgetts, K. (2010). Boys' underachievement and the management of teacher accountability. *Discourse: Studies in the Cultural Politics of Education*, *31*(1), 29–43. doi:10.1080/01596300903465401
- Hoffert, S. L., & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and the Family*, *63*, 295–308. doi:10.1111/j.1741-3737.2001.00295.x
- Huang, Y. M., Liang, T. H., & Chiu, C. H. (2013). Gender differences in the reading of e-books: Investigating children's attitudes, reading behaviors and outcomes. *Educational Technology & Society*, *16*(4), 97–110. Retrieved from <http://www.jstor.org/stable/jeductechsoci.16.4.97>
- Huber, J. N. (2008). Reproductive biology, technology, and gender inequality: An autobiographical essay. *Annual Review of Sociology*, *34*, 1–13. doi:10.1146/annurev.soc.34.040507.134654
- Husain, M., & Millimet, D. L. (2009). The mythical “boy crisis?” *Economics of Education Review*, *28*, 38–48. doi:10.1016/j.econedurev.2007.11.002

- Husserl, E. (1970). *Logical investigations* (J. N. Findlay, Trans.). New York, NY: Humanities Press.
- Ingalhalikar, M., Smith, A., Parker, D., Satterthwaite, T. D., Elliott, M. A., Ruparel, K., . . . Verma, R. (2014). Sex differences in the structural connectome of the human brain. *Proceedings of the National Academy of Sciences*, *111*, 823–828.  
doi:10.1073/pnas.1316909110
- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). Seven trends: The transformation of the teaching force. CPRE Report.# RR-80. *Consortium for Policy Research in Education*. Retrieved from ERIC database. (ED566879)
- Ingersoll, R. M., & Merrill, L. (2010). Who's teaching our children? *Educational Leadership*, *67*(8), 14–20. Retrieved from <http://www.ascd.org/publications/educational-leadership/may10/vol67/num08/Who's-Teaching-Our-Children%C2%A2.aspx>
- Jacob, B. A. (2002). Where the boys aren't: Non-cognitive skills, returns to school and the gender gap in higher education. *Economics of Education review*, *21*(6), 589–598. doi:10.1016/S0272-7757(01)00051-6
- James, A. N. (2007). *Teaching the male brain: How boys think, feel, and learn in school*. Thousand Oaks, CA: Corwin Press.
- James, A. N. (2009). *Teaching the female brain: How girls learn science and math*. Thousand Oaks, CA: Corwin Press.
- Jan, T. (2006, January 26). Schoolboy's bias suit: Argues system is favoring girls. *Boston Globe*. Retrieved from [http://archive.boston.com/news/local/articles/2006/01/26/schoolboys\\_bias\\_suit/](http://archive.boston.com/news/local/articles/2006/01/26/schoolboys_bias_suit/)

- Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Jeynes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education, 47*, 706–742.  
doi:10.1177/0042085912445643
- Johnson, R. B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Johnson, S. & Weber, B. (2011). Toward a genderful pedagogy and the teaching of masculinity. *The Journal of Men's Studies, 19*(2), 138–158. doi:10.3149/jms.1902.138
- Johnson, S. P. (2008). The status of male teachers in public education today. *Center for Evaluation & Education Policy Education Policy Brief, 6*(4), 1–11. Retrieved from [http://ceep.indiana.edu/projects/PDF/PB\\_V6N4\\_Winter\\_2008\\_EPB.pdf](http://ceep.indiana.edu/projects/PDF/PB_V6N4_Winter_2008_EPB.pdf)
- Johnston, H. (2012). *The spiral curriculum. Research into practice*. Retrieved from <http://eric.ed.gov/?id=ED538282>
- Jung, H. (1966). Jen: An existential and phenomenological problem of inter-subjectivity. *Philosophy East and West, 16*(3/4), 169–188. doi:10.2307/1397539
- Kaufman, A. K., & Blewett, E. (2012). When good enough is no longer good enough: How the high stakes nature of the No Child Left Behind Act supplanted the Rowley definition of a free appropriate public education. *Journal of Law & Education, 41*, 5–23. Retrieved from [http://works.bepress.com/evan\\_blewett/1/](http://works.bepress.com/evan_blewett/1/)
- Kaufmann, C. (2007). How boys and girls learn differently. *Reader's Digest*. Retrieved from <http://www.rd.com/advice/parenting/how-boys-and-girls-learn>

-differently/

- Keddie, A., & Mills, M. (2009). Disrupting masculinised spaces: Teachers working for gender justice. *Research Papers in Education*, 24(1), 29–43. doi 10.1080/02671520801945834
- Keenan, K., & Shaw, D. (1997). Developmental and social influences on young girls' early problem behavior. *Psychological Bulletin*, 121(1), 95–113. doi:10.1037/0033-2909.121.1.95
- Kenney, L. (2011). Elementary education, there's an app for that: Communication technology in the elementary school classroom. *The Elon Journal of Undergraduate Research in Communications*, 2(1), 67–75. Retrieved from <http://www.elon.edu/docs/e-web/academics/communications/research/vol2nol/07kenney.pdf>
- Kenney-Benson, G. A., Pomerantz, E. M., Ryan, A. M., & Patrick, H. (2006). Sex differences in math performance: The role of children's approach to schoolwork. *Developmental Psychology*, 42, 11–26. doi:10.1037/0012-1649.42.1.11
- Kimmel, M. (2010). *Boys and school: A background paper in the "boy crisis."* Stockholm, Sweden: Fritze. Retrieved from [http://menengage.org/wp-content/uploads/2014/06/Boys\\_and\\_School\\_A\\_Background\\_Paper\\_on\\_the\\_Boys\\_Crisis.pdf](http://menengage.org/wp-content/uploads/2014/06/Boys_and_School_A_Background_Paper_on_the_Boys_Crisis.pdf)
- King, E., & Winthrop, R. (2015). *Today's challenges for girls' education*. Washington, DC: Brookings Institution. Retrieved from <https://www.brookings.edu/wp-content/uploads/2016/07/Todays-Challenges-Girls-Educationv6.pdf>
- Knickmeyer, R., Baron-Cohen, S., Raggatt, P., Taylor, K., & Hackett, G. (2006). Fetal

testosterone and empathy. *Hormones and Behavior*, 49, 282–292. doi:10.1016/j.yhbeh.2005.08.010

Kristoff, N. (2010, March 27). The boys have fallen behind. *The New York Times*, p. WK12. Retrieved from <http://www.nytimes.com/2010/03/28/opinion/28kristoff.html>

Kuhlmann, F. (1912). A revision of the Binet-Simon system for measuring the intelligence of children. *Journal of Psycho-Asthenics* 1(1). Faribault, Minnesota: Press of Minnesota School for Feeble-minded and Colony for Epileptics.

La Paro, K. M., & Pianta, R. C. (2000). Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research*, 70, 443–484. doi:10.3102/00346543070004443

Lam, S. F., Jimerson, S., Kikas, E., Cefai, C., Veiga, F. H., Nelson, B., . . . Zollneritsch, J. (2012). Do girls and boys perceive themselves as equally engaged in school? The results of an international study from 12 countries. *Journal of School Psychology*, 50, 77–94. doi:10.1016/j.jsp.2011.07.004

Learning Forward. (2011). *Evidence of effectiveness*. Retrieved from <http://learningforward.org/docs/pdf/evidenceofeffectiveness.pdf>

Lee, J., & Reeves, T. (2012). Revisiting the impact of NCLB high-stakes school accountability, capacity, and resources: State NAEP 1990–2009 reading and math achievement gaps and trends. *Educational Evaluation and Policy Analysis*, 34, 209–231. doi:10.3102/0162373711431604

Legewie, J., & DiPrete, T. A. (2012). School context and the gender gap in educational achievement. *American Sociological Review*, 77, 463–485. doi:10.1177/

0003122412440802

- Leinhardt, G., Seewald, A. M., & Engel, M. (1979). Learning what's taught: Sex differences in instruction. *Journal of Educational Psychology, 71*, 432–439.  
doi.org/10.1037/0022-0663.71.4.432
- Lenroot, R. K., & Giedd, J. N. (2010). Sex differences in the adolescent brain. *Brain and Cognition, 72*(1), 4655. doi:10.1016/j.bandc.2009.10.008
- Leonard, V. W. (1989). A Heideggerian phenomenologic perspective on the concept of the person. *Advances in Nursing Science, 11*(4), 40–55. Retrieved from  
<http://www.jstor.org/stable/2136956>
- Lester, S. (1999). *An introduction to phenomenological research*. Retrieved from  
[http://www.psyking.net/HTMLobj-3825/Introduction\\_to\\_Phenomenologica\\_Research-Lester.pdf](http://www.psyking.net/HTMLobj-3825/Introduction_to_Phenomenologica_Research-Lester.pdf)
- Leu, D. J., Forzani, E., Rhoads, C., Maykel, C., Kennedy, C., & Timbrell, N. (2015). The new literacies of online research and comprehension: Rethinking the reading achievement gap. *Reading Research Quarterly, 50*(1), 37–59. doi:10.1002/rrq.85
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Lipson, M.Y., & Wixson, K.K. (2012). To what interventions are students responding? *The Reading Teacher, 66*(2), 111–115. doi:10.1002/TRTR.01110
- Logan, S., & Johnston, R. (2010). Investigating gender differences in reading. *Educational Review, 62*, 175–187. doi:10.1080/00131911003637006
- Lopez, K. A., & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative Health Research, 14*, 726–735. doi:10.1177/1049732304263638

- Loveless, T. (2015). *The 2015 Brown Center report on American education: How well are American students learning? With sections on the gender gap in reading, effects of the common core, and student engagement*. Washington, DC: Brookings Institute. Retrieved from [http://www.brookings.edu/~media/research/files/reports/2015/03/bcr/2015-brown-center-report\\_final.pdf](http://www.brookings.edu/~media/research/files/reports/2015/03/bcr/2015-brown-center-report_final.pdf)
- Lunenburg, F. C., & Irby, B. J. (2006). *The principalship: Vision to action*. Boston, MA: Wadsworth Cengage Learning.
- Lutchmaya, S., & Baron-Cohen, S. (2002). Human sex differences in social and non-social looking preferences at 12 months of age. *Infant Behaviour and Development*, 25, 319–325. doi:10.1016/S0163-6383(02)00095-4
- Lynn, R., & Mikk, J. (2009). Sex differences in reading achievement. *Trames: A Journal of the Humanities and Social Sciences*, 13, 3–13. doi:10.3176/tr.2009.1.01
- Maccoby, E. E. (1966). *The development of sex differences*. Stanford, CA: Stanford University Press.
- Maccoby, E. E., & Jacklin, C. N. (Eds.). (1974). *The psychology of sex differences*. Stanford, CA: Stanford University Press.
- Mahdavi, J. N. & Tensfeldt, L. (2013). Untangling reading comprehension strategy instruction: Assisting Struggling readers in the primary grades, preventing school failure: *Alternative Education for Children and Youth*, 57(2), 77–92, doi:10.1080/1045988X.2012.668576
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Martino, W. J. (2008). Male teachers as role models: Addressing issues of masculinity,

pedagogy and the re-masculinization of schooling. *Curriculum Inquiry*, 38, 189–223. doi:10.1111/j.1467-873X.2007.00405.x

Martino, W., & Kehler, M. (2006). Male teachers and the “boy problem”: An issue of recuperative masculinity politics. *McGill Journal of Education*, 41(2), 113–131. Retrieved from <http://mje.mcgill.ca/article/viewArticle/559>

Marzano Center. (2013). *Design Question 8: What will I do to establish and maintain effective relationships with students?* Retrieved from <http://www.marzano-center.com/blog/article/design-question-8-what-will-i-do-to-establish-and-maintain-effective-relati/>

Marzano, R. J. (2003). *What works in schools*. Alexandria, VA: ASCD.

Marzano, R. J., & Marzano, J. S. (2003). *The key to classroom management*. Retrieved from [https://www.researchgate.net/publication/283749466\\_The\\_Key\\_to\\_Classroom\\_Management](https://www.researchgate.net/publication/283749466_The_Key_to_Classroom_Management)

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research*, 11(3). Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1428/3027>

Matthews, J. S., Kizzie, K. T., Rowley, S. J., & Cortina, K. (2010). African Americans and boys: Understanding the literacy gap, tracing academic trajectories, and evaluating the role of learning-related skills. *Journal of Educational Psychology*, 102, 757–771. doi:10.1037/a0019616

Maynard, M. (2002). Studying age, “race” and gender: Translating a research proposal into a project. *International Journal of Social Research Methodology*, 5(1), 31–40. doi:10.1080/13645570110098055

- McIntosh, K., Reinke, W. M., Kelm, J. L., & Sadler, C. A. (2012). Gender differences in reading skill and problem behavior in elementary school. *Journal of Positive Behavior Interventions, 15*, 51–60. doi:10.1177/1098300712459080
- McKee, K. (2014). *Four reading motivators for teenage boys*. Retrieved from <http://www.nea.org/tools/61415.htm>
- McLeod, S. A. (2011). *Bandura-social learning theory*. Retrieved from <http://www.simp-lypsychology.org/bandura.html>
- Mead, S. (2006). *The evidence suggests otherwise: The truth about boys and girls*. Washington, DC: Education Sector. Retrieved from [http://people.uncw.edu/caropresoe/edn203/203\\_Fall\\_07/ESO\\_BoysAndGirls.pdf](http://people.uncw.edu/caropresoe/edn203/203_Fall_07/ESO_BoysAndGirls.pdf)
- Mehanna, W. N. (2004). e-Pedagogy: The pedagogies of e-learning. *Research in Learning Technology, 12*(3). Retrieved from ERIC database. (EJ821507)
- Microsoft. (2016). *News center*. Retrieved from <https://news.microsoft.com/>
- Miedzian, M. (2002). *Boys will be boys: Breaking the link between masculinity and violence*. Herndon, VA: Lantern Books.
- Moje, E. B., Overby, M., Tysvaer, N., & Morris, K. (2008). The complex world of adolescent literacy. *Harvard Educational Review, 78*(1), 107–154. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19756223>
- Moore, G., & Slate, J. R. (2011). A multi-year analysis of Asian gender differences on advanced placement exams. *International Journal of Educational Leadership Preparation, 6*(4). Retrieved from <http://www.ncpeapublications.org/index.php/volume-6-number-4-october-december-2011-sp-1319740523/>

- Mortimore, P. (Ed.). (1999). *Understanding pedagogy: And its impact on learning*. Thousand Oaks, CA: Sage.
- Moss, C. M., & Brookhart, S. M. (2012). *Learning targets: Helping students aim for understanding in today's lesson*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 international results in reading*. Chestnut Hill, MA: Boston College, TIMSS & PIRLS International Study Center. Retrieved from <http://timssandpirls.bc.edu/pirls2011/international-results-pirls.html>
- Mulvey, R. E. (2009). Avant-garde metalating agents: Structural basis of alkali-metal-mediated metalation. *Accounts of Chemical Research*, 42, 743–755. doi:10.1021/ar800254y
- Munhall, P. L. (1994). *Revisioning phenomenology: Nursing and health science research*. Crockett, TX: Clarkwood Corp.
- National Center for Education Statistics. (n.d.). *Fast facts: degrees conferred by race and sex*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=72>
- National Center for Education Statistics. (2005). *NAEP and No Child Left Behind*. Retrieved from <http://nces.ed.gov/nationsreportcard/nclb.asp>
- National Center for Education Statistics. (2012). *Trends in academic progress 2012*. Retrieved from <http://nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf>

- National Center for Education Statistics. (2013a). *Are the nation's twelfth-graders making progress in mathematics and reading?* Retrieved from [http://www.nationsreportcard.gov/reading\\_math\\_g12\\_2013/#/](http://www.nationsreportcard.gov/reading_math_g12_2013/#/)
- National Center for Education Statistics. (2013b). *NAEP reading 2013 state snapshot reports (NCES 2014-464)*. Retrieved from <http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2014464>
- National Center for Education Statistics. (2013c). *NAEP 2012: Trends in academic progress, reading 1971–2012, mathematics 1973–2012 (NCES 2013-456)*. Retrieved from <https://nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf>
- National Center for Education Statistics. (2014). *Public High School Four-Year On Time Graduation Rates and Event Dropout Rates: School Years 2010–11 and 2011–12*. Retrieved from <https://nces.ed.gov/pubs2014/2014391.pdf>
- National Center for Education Statistics. (2015a). *National Assessment of Educational Progress (NAEP): Achievement gaps*. Retrieved from <http://nces.ed.gov/nationsreportcard/studies/gaps>
- National Center for Education Statistics. (2015b). *The nation's report card: 2015 mathematics and reading assessments (NCES 2015-136)*. Retrieved from <http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2015136>
- National Education Association. (2012). *Rankings and estimates: Rankings of the states 2012 and estimates of school statistics 2013*. Retrieved from <http://www.nea.org/home/54597.htm>
- National Endowment for the Arts. (2007). *To read or not to read: A question of national*

- consequence*. Retrieved from <http://www.arts.gov/research/ToRead.pdf>
- National Literacy Trust. (2012). *Boys' Reading Commission*. Retrieved from [https://www.literacytrust.org.uk/assets/0001/4056/Boys\\_Commission\\_Report.pdf](https://www.literacytrust.org.uk/assets/0001/4056/Boys_Commission_Report.pdf)
- NCH Software. (n.d.) *Express scribe transcription software*. Retrieved from <http://www.nch.com.au/scribe/index.html>
- Nevills, P. (2011). *Build the brain for reading, Grades 4–12*. Thousand Oaks, CA: Corwin Press.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110. (2002). Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>
- O'Connor, R. (2013). The male brain vs. the female brain. Retrieved from <http://tvblogs.nationalgeographic.com/2013/05/20/the-male-brain-vs-the-female-brain/>
- Odi, A. (1982). The process of theory construction. *Journal of Research and Development in Education*, 15(2), 53–58. Retrieved from ERIC database. (EJ258800)
- O'Keefe, J., & Nadel, L. (1978). *The hippocampus as a cognitive map*. Oxford, England: Oxford University Press. Retrieved from <http://www.cognitivemap.net/HCMpdf/HCMComplete.pdf>
- Ontario Ministry of Education. (2004). *Me read? No way! A practical guide to improving boys' literacy skills*. Retrieved from <http://edu.gov.on.ca/eng/document/brochure/meread/meread.pdf>
- Orekoya, O. S., Chan, E. S., & Chik, M. P. Y. (2014). Humor and reading motivation in children: Does the tickling work? *International Journal of Education*, 6, 61–72. doi:10.5296/ije.v6i1.4724
- Organisation for Economic Co-operation and Development. (2010). *PISA 2009 results:*

*What students know and can do: Student performance in reading, mathematics, and science* (Vol. I). <http://dx.doi.org/10.1787/9789264091450-en>

Organisation for Economic Co-operation and Development. (2012). *PISA 2012 results in focus: What 15-year-olds know and what they can do with what they know*. Retrieved from <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>

Organisation for Economic Co-operation and Development Family Database. (2016). *CO3.4: Literacy scores by gender at age 15*. Retrieved from [oecd.org/els/family/database.htm](http://oecd.org/els/family/database.htm)

Orr, A. J. (2011). Gendered capital: Childhood socialization and the “boy crisis” in education. *Sex Roles, 65*, 271–284. doi:10.1007/s11199-011-0016-3

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533–544. doi:10.1007/s10488-013-0528-y

Parsons, L. (2004). Challenging the gender divide: Improving literacy for all. *Teacher Librarian, 32*(2), 8–11.

Patten, M. L. (2004). *Understanding research methods: An overview of the essentials* (4th ed.). Glendale, CA: Pyrczak.

Pence, K. L., & Justice, L. M. (2008). *Language development from theory to practice*. Upper Saddle River, NJ: Pearson.

- Piechura-Couture, K., Heins, E., & Tichenor, M. (2013). The boy factor: Can single-gender classes reduce the over-representation of boys in special education? *Journal of Instructional Psychology, 38*, 255–263. Retrieved from <http://www.freepatentsonline.com/article/Journal-Instructional-Psychology/289619990.html>
- Pikulski, J. J. (2012). *Preventing reading problems: Factors common to successful early intervention programs*. Retrieved from <http://www.eduplace.com/intervention/readintervention/articles/pikulski.html>
- Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (1995). Chapter 8: Understanding curriculum as phenomenological text. *Counterpoints, 17*, p. 404–449. Retrieved from <http://www.jstor.org/stable/42974924>
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health, 29*(5), 489–497. doi:10.1002/nur.20147
- Pollack, W. S. (1998). *Real boys: Rescuing our sons from the myths of boyhood*. New York, NY: Random House.
- Porter, E. (2015, March 10). Gender gap in education cuts both ways. *The New York Times*, p. B1. Retrieved from [http://www.nytimes.com/2015/03/11/business/gender-gap-in-education-cuts-both-ways.html?\\_r=0](http://www.nytimes.com/2015/03/11/business/gender-gap-in-education-cuts-both-ways.html?_r=0)
- Prior, J. (2014). Focus on elementary: Love, engagement, support, and consistency: A recipe for classroom management. *Childhood Education, 90*(1), 68–70. doi:10.1080/00094056.2014.872518
- QSR International. (n.d.) Nvivo products. Retrieved from [www.qsrinternational.com/](http://www.qsrinternational.com/)
- Ravitch, D. (2010). *The death and life of the great American school system: How testing*

- and choice are undermining education*. New York, NY: Basic Books.
- Rehorick, D. A., & Bentz, V. M. (2009). *Transformative phenomenology: Changing ourselves, lifeworlds, and professional practice*. Lanham, MD: Lexington Books.
- Richards, L. (1999). Data alive! The thinking behind NVivo. *Qualitative Health Research*, 9(3), 412–428. doi:10.1177/104973239900900310
- Richards, T. (2002). An intellectual history of NUD\* IST and NVivo. *International Journal of Social Research Methodology*, 5(3), 199–214. doi:10.1080/13645570210146267
- Ricks, D. (2013). *Educating boys for success: Are today's classrooms biased against boys?* Retrieved from <http://www.nea.org/home/44609.htm>.
- Ricoeur, P. (1994). *Oneself as another*. Chicago, IL: University of Chicago Press.
- Riordan, C., Faddis, B., Beam, M., Seager, A., Tanney, A., DiBiase, R., et al. (2008). Early implementation of public single-sex schools: Perceptions and characteristics. *U.S. Department of Education*. Retrieved from ERIC database. (ED504174)
- Robinson, I. (2017). *The abcs of apa: An incoming student inspirational guide*. Raleigh, NC: Lulu Publishing.
- Robinson, J. P., & Lubienski, S. T. (2011). The development of gender achievement gaps in mathematics and reading during elementary and middle school examining direct cognitive assessments and teacher ratings. *American Educational Research Journal*, 48, 268–302. doi:10.3102/0002831210372249
- Rose, M. (2014). *Why school?: Reclaiming education for all of us*. New York, NY: The New Press.

- Rose, S., & Schimke, K. (2012). *Third grade literacy policies: Identification, intervention, retention*. Denver, CO: Education Commission of the States.
- Rothbart, M. (2011). *Becoming who we are: Temperament and personality in development*. New York, NY: Guilford Press.
- Rovai, A. P., Baker, J. D., & Ponton, M. K. (2014). *Social science research design and statistics: A practitioner's guide to research methods and IBM SPSS*. Chesapeake, VA: Watertree Press LLC.
- Rowan, L., Knobel, M., Bigum, C., & Lankshear, C. (2002). *Boys, literacies and schooling*. Buckingham, England: Open University Press.
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The role of direct/explicit teaching. *Reading & Writing Quarterly*, 25(2–3), 125–138. doi:10.1080/10573560802683523
- Sadowski, M. (2010). Putting the “boy crisis” in context. *The Education Digest*, 76(3), 10–13. Retrieved from ERIC database. (EJ903528)
- Salisbury, J., & Riddell, S. (Eds.). (2000). *Gender, policy and educational change: Shifting agendas in the UK and Europe*. London, England: Routledge.
- Sanders, D., & McCutcheon, G. (1986). The development of practical theories of teaching. *Journal of Curriculum and Supervision*, 2(1), 50–67. Retrieved from [http://ascd.asia/ASCD/pdf/journals/jcs/jcs\\_1986fall\\_sanders.pdf](http://ascd.asia/ASCD/pdf/journals/jcs/jcs_1986fall_sanders.pdf)
- Santiago-Delefosse, M., & del Río Carral, M. (2015). The life-world and its multiple realities: Alfred Schütz’s contribution to the understanding of the experience of illness. *Psychology*, 6(10), 1265. <http://dx.doi.org/10.4236/psych.2015.610124>
- Sarniak, R. (2015). *Nine types of research bias and how to avoid them*. Retrieved from

- <https://www.quirks.com/articles/9-types-of-research-bias-and-how-to-avoid-them>
- Sax, L. (2001). Reclaiming kindergarten: Making kindergarten less harmful to boys. *Psychology of Men & Masculinity*, 2(1), 3–12. doi:10.1037//1524-9220.2.1.3
- Sax, L. (2005). *Why gender matters*. New York, NY: Doubleday.
- Sax, L. (2006). Six degrees of separation: What teachers need to know about the emerging science of sex differences. *Educational Horizons*, 84, 190–200. Retrieved from ERIC Database. (EJ750623)
- Sax, L. (2007). *Boys adrift: The five factors driving the growing epidemic of unmotivated boys and underachieving young men*. New York, NY: Perseus.
- Schrag, C. O. (1963). The structure of moral experience: A phenomenological and existential analysis. *Ethics*, 73(4), 255–265. Retrieved from <http://www.jstor.org/stable/2379295>
- Senn, N. (2012). Effective approaches to motivate and engage reluctant boys in literacy. *The Reading Teacher*, 66, 211–220. doi:10.1002/TRTR.01107
- Simon, M. K. (2011). *Dissertation and scholarly research: Recipes for success*. Seattle, WA: Dissertation Success, LLC.
- Sizer, T. R. (1999). No two are quite alike. *Educational Leadership*, 57(1), 6–11. ERIC database. (EJ592910)
- Skelton, C., & Francis, B. (2011). Successful boys and literacy: Are “literate boys” challenging or repackaging hegemonic masculinity? *Curriculum Inquiry*, 41, 456–479. doi:10.1111/j.1467-873X.2011.00559.x
- Smith, E. (2014). *Next Generation Sunshine State Standards—The arts, 2014*. Retrieved

from [https://www.flrules.org/gateway/readRefFile .asp?refId=3100&filename=1.%20Proposed%20NGSSS%20for%20Arts.pdf](https://www.flrules.org/gateway/readRefFile.asp?refId=3100&filename=1.%20Proposed%20NGSSS%20for%20Arts.pdf)

Sommers, C. H. (2000). *The war against boys: How misguided feminism is harming our young men*. New York, NY: Simon & Schuster.

Sommers, C. H. (2013, February 2). The great divide: The boys at the back. *New York Times*, p. SR1. Retrieved from <http://opinionator.blogs.nytimes.com/2013/02/02/the-boys-at-the-back/>

Sousa, D. A. (2003). *How the gifted brain learns*. Thousand Oaks, CA: Corwin Press.

Spelke, E. S. (2005). Sex differences in intrinsic aptitude for mathematics and science? A critical review. *American Psychologist*, 60, 950–958. <http://psycnet.apa.org/doi/10.1037/0003-066X.60.9.950>

Speziale, H. J. S., & Carpenter, D. R. (2007). *Qualitative research in nursing: Advancing the humanistic imperative* (4th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Stabiner, K. (2004, March 14). Can separate ever be equal? For girls, answer isn't simple. *Los Angeles Times*. Retrieved from <http://www.singlesexschools.org/stabiner.htm>

Stanford University. (2011). Using NVivo for qualitative data analysis. Retrieved from [http://web.stanford.edu/group/ssds/cgi-in/drupal/files/Guides/UsingNVivo9\\_0.pdf](http://web.stanford.edu/group/ssds/cgi-in/drupal/files/Guides/UsingNVivo9_0.pdf)

Stoet, G., & Geary, D. C. (2013). Sex differences in mathematics and reading achievement are inversely related: Within- and across-nation assessment of 10 years of PISA data. *PLoS ONE*, 8(3), e57988. doi:10.1371/journal.pone.0057988

- Strain, M. R. (2013). Single-sex classes and student outcomes: Evidence from North Carolina. *Economics of Education Review*, 36, 73–87. doi:10.1016/j.econedurev.2013.06.002
- Sui-Chu, E. H., & Willms, J. D. (1996). Effects of parental involvement on eighth-grade achievement. *Sociology of Education*, 69, 126–141. doi:10.2307/2112802
- Sutton, J., & Austin, Z. (2015, May-Jun). Qualitative research: Data collection, analysis, and management. *Canadian Journal of Hospital and Pharmacy*, 68(3), 226-231.
- Tian, L., Wang, J., Yan, C., & He, Y. (2011). Hemisphere-and gender-related differences in small-world brain networks: A resting-state functional MRI study. *Neuroimage*, 54(1), 191–202. doi:10.1016/j.neuroimage.2010.07.066
- Timar, T. B., & Maxwell-Jolly, J. (2012). *Narrowing the achievement gap: Perspectives and strategies for challenging times*. Cambridge, MA: Harvard Education Press.
- Tomlinson, C. A. (2001). *Differentiate Instruction in Mixed-Ability Classrooms*. (2nd ed). Upper Saddle River, NJ: Merrill Prentice Hall.
- Tomlinson, C. A. (2015). Teaching for excellence in academically diverse classrooms. *Society*, 52(3), 203-209. doi:10.1007/s12115-015-9888-0
- Tomlinson, C. A., & Eidson, C. (2003). *Differentiation in practice: A resource guide for differentiating curriculum*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Tomlinson, C. A., & Kalbfleisch, M. (1998). Teach me, teach my brain: A call for differentiated classrooms. *Educational Leadership*, 56(3), 52-55. Retrieved from [http://swcontent.spokaneschools.org/cms/lib/WA01000970/Centricity/ModuleInstance/12758/PDDITeach\\_Me\\_Teach\\_My\\_Brain.pdf](http://swcontent.spokaneschools.org/cms/lib/WA01000970/Centricity/ModuleInstance/12758/PDDITeach_Me_Teach_My_Brain.pdf)

- Tyack, D., & Hansot, E. (1990). *Learning together: A history of coeducation in American public schools*. New York, NY: Russell Sage Foundation.
- Tyre, P. (2008). *The trouble with boys: A surprising report card on our sons, their problems at school, and what parents and educators must do*. New York, NY: Random House.
- Tyre, P. (2013). *It's time to worry: Boys are rapidly falling behind girls in school*. Take Part. Retrieved from <http://www.takepart.com/article/2013/02/14/boys-fall-behindgirls-school>
- U.S. Department of Education. (2009). *Early reading first*. Retrieved from <http://www2.ed.gov/programs/earlyreading/legislation.html>
- U.S. Department of Education. (2014). *Improving basic programs operated by local educational agencies (Title I, Part A)*. Retrieved from <http://www2.ed.gov/programs/titleiparta/index.html>
- U.S. Department of Justice. (2015). *Overview of Title IX of the education amendments of 1972*. Retrieved from <http://www.justice.gov/crt/about/cor/coord/titleix.php>
- University of Washington Center for Educational Leadership. (2014). *Creating a theory of action for improving teaching and learning*. Retrieved from <http://info.k-12leadership.org/hs-fs/hub/381270/file-2166618739-pdf/documents/webinar-presentation-pdfs/creating-a-theory-of-action.pdf>
- Urguhart, A. H., & Weir, C. J. (2014). *Reading in a second language: Process, product and practice*. New York, NY: Routledge.
- Van Gog, T., Paas, F., Savenye, W., Robinson, R., Niemczyk, M., Atkinson, R., ...

- Duley, A. R. (2008). Data collection and analysis. *Handbook of Research on Educational Communications and Technology 3e*, 763–806.
- van Manen, M. (1990). *Researching lived experience human science for an action sensitive pedagogy*. Albany, New York: SUNY Press.
- van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). London, Ontario: Althouse Press.
- van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press
- Vandenberg, D. (Ed.). (1997). *Phenomenology and education discourse*. Johannesburg, South Africa: Heinemann.
- Vantieghem, W., Vermeersch, H., & Van Houtte, M. (2014). Why “gender” disappeared from the gender gap:(Re-) introducing gender identity theory to educational gender gap research. *Social Psychology of Education, 17*(3), 357–438. doi:10.1007/s11218-014-9248-8
- Vinovskis, M. (2008). *From a nation at risk to No Child Left Behind: National education goals and the creation of federal education policy*. New York, NY: Teachers College Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wallen, N. E., & Fraenkel, J.R. (2001). *Educational research: A guide to the process* (2nd ed.). Mahwah, NJ: Erlbaum.
- Wanzek, J., Wexler, J., Vaughn, S., & Ciullo, S. (2010). Reading interventions for strug-

- gling readers in the upper elementary grades: A synthesis of 20 years of research. *Reading and writing*, 23(8), 889–912. doi:10.1007/s11145-009-9179-5
- Watson, A., & Kehler, M. (2012). Beyond the “boy problem”: Raising questions, growing concerns and literacy reconsidered. *New England Reading Association Journal*, 48(1), 43-55, 113–115. Retrieved from <http://search.proquest.com/openview/6b7a0d8c62f6fc768115c170282372bf/1?pq-origsite=gscholar>
- Whitmire, R. (2010). *Why boys fail: Saving our sons from an educational system that's leaving them behind*. New York, NY: American Management Association.
- Whitmire, R., & Bailey, S. M. (2010). Gender gap: Are boys being shortchanged in K-12 schooling? *Education Next*, 10(2), 52–62. Retrieved from ERIC database. (EJ910553)
- Wiens, K. (2005). The new gender gap: What went wrong? *The Journal of Education*, 186(3), 11–27. Retrieved from <http://www.jstor.org/stable/42742613>
- Willer, B., & Bredekamp, S. (1990). Public policy report. Redefining readiness: An essential requisite for educational reform. *Young Children*, 45(5), 22–24. Retrieved from ERIC database. (EJ415400)
- Witelson, S. F., Glezer, I. I., & Kigar, D. L. (1995). Women have greater density of neurons in posterior temporal cortex. *Journal of Neuroscience*, 15, 3418–3428. Retrieved from <http://www.jneurosci.org.ezproxylocal.library.nova.edu/content/jneuro/15/5/3418.full.pdf>
- Wolter, I., Braun, E., & Hannover, B. (2015). Reading is for girls!? The negative impact of preschool teachers' traditional gender role attitudes on boys' reading related motivation and skills. *Frontiers in Psychology*, 6, 1267. <http://doi.org/10.3389/>

fpsyg.2015.01267

Wood, T. D. (2012). Teacher perceptions of gender-based differences among elementary school teachers. *International Electronic Journal of Elementary Education*, 4, 317–345. Retrieved from ERIC database. (EJ1070480)

Zill, N., & West, J. (2000). *Entering kindergarten* (NCES 201-035). Washington DC: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2001/2001035.pdf>

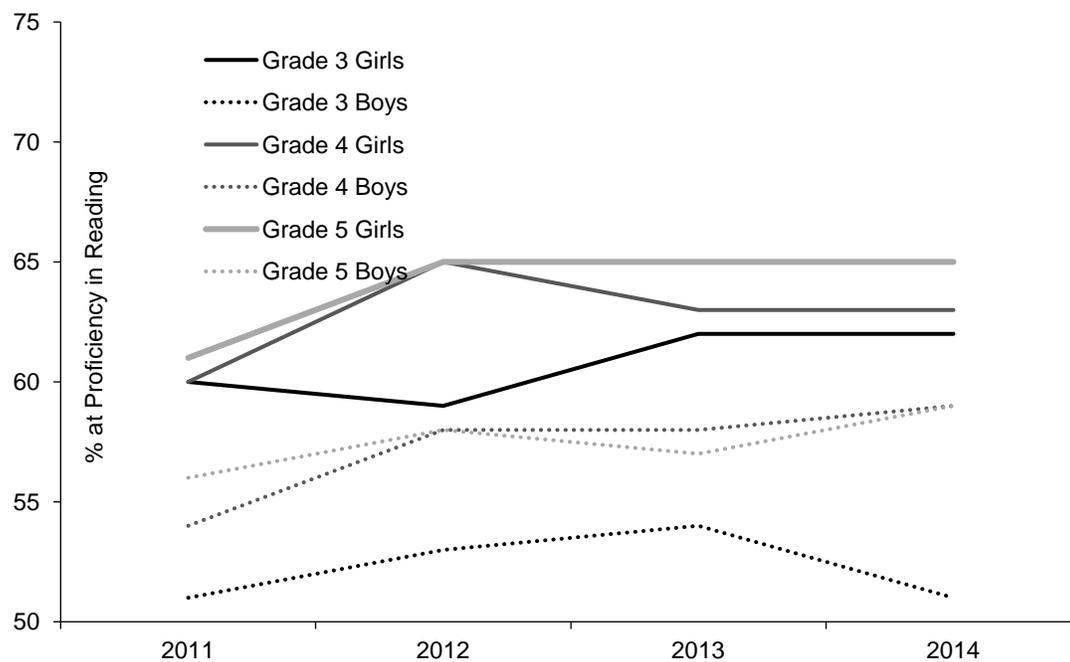
Appendix A  
FCAT: Reading Scores by Gender

*Percentage of Students Scoring Proficient on the FCAT 2.0 in Reading, by Gender, for District and State Students in Grades 3–5, 2011–2014*

Year	Grade 3			Grade 4			Grade 5		
	Girls	Boys	Diff.	Girls	Boys	Diff.	Girls	Boys	Diff.
District									
2011	60	51	-8	60	54	-6	61	56	-5
2012	59	53	-6	65	58	-7	65	58	-7
2013	62	54	-8	63	58	-5	65	57	-8
2014	62	51	-11	63	59	-4	65	59	-6
State									
2011	61	53	-8	62	56	-6	61	56	-5
2012	60	53	-7	65	59	-6	64	57	-7
2013	61	53	-8	63	57	-6	64	57	-7
2014	62	52	-10	64	58	-6	64	58	-6

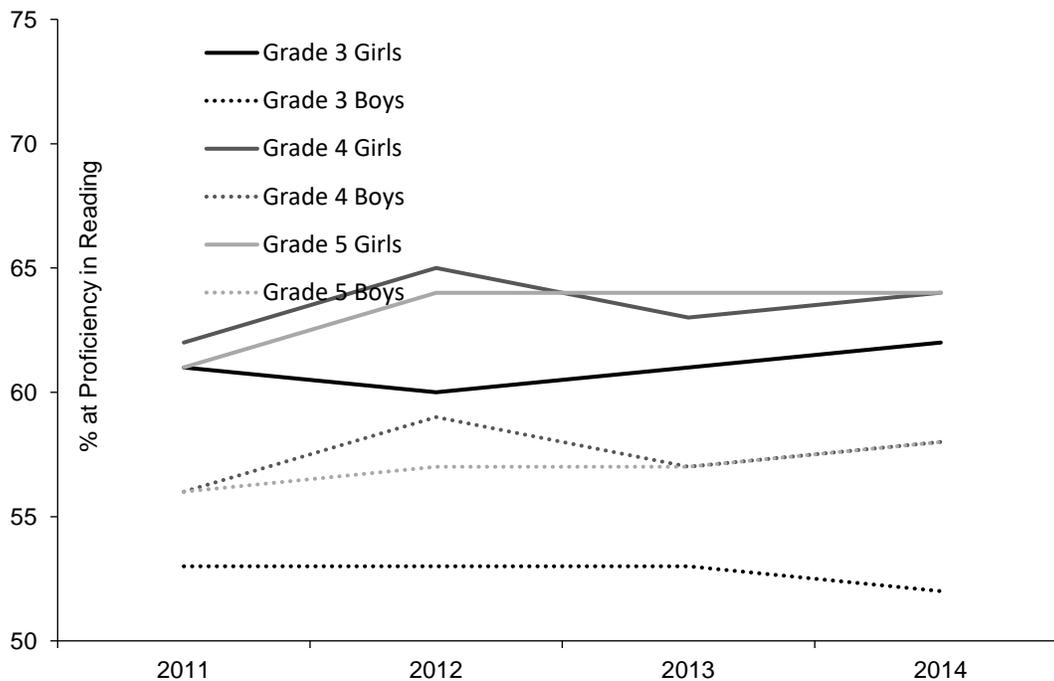
*Note.* FCAT 2.0: reading assessment data by gender for the researcher's district and the state of Florida. Adapted from Florida Department of Education (FLDOE) the latter part of the assessment year. Retrieved from <http://app1.fldoe.org/FCATDemographics/Default.aspx>

*Percentage of Students Scoring Proficient on the FCAT 2.0 in Reading, by Gender, for Students at the District Level in Grades 3–5, 2011–2014*



*Note:* Line graph showing the percentage of students Grades 3–5 in the study district achieving proficiency in reading on the FCAT 2.0, by gender and year. Girls are solid lines; boys are dotted lines. The graph clearly shows the gender gap in the district. Adapted from Florida Department of Education (FLDOE) the latter part of the assessment year. Retrieved from <http://app1.fldoe.org/FCATDemographics/Default.aspx>

*Percentage of Students Scoring Proficient on the FCAT 2.0 in Reading, by Gender, for Students at the State Level in Grades 3–5, 2011–2014*



*Note.* Line graph showing the percentage of students Grades 3–5 in the state of Florida achieving proficiency in reading on the FCAT 2.0, by gender and year. Girls are solid lines; boys are dotted lines. The graph clearly shows the gender gap in the state. Adapted from Florida Department of Education (FLDOE) the latter part of the assessment year. Retrieved from <http://app1.fldoe.org/FCATDemographics/Default.aspx>

Appendix B  
Reading Scores by Gender

*Grade 4 Average Scale Scores in Reading by Gender for 2009, 2011, & 2013*

Year	Girls	Boys	Difference
2013			
U.S. public schools	224	217	-7
Florida	231	224	-7
2011			
U.S. public schools	223	217	-6
Florida	228	221	-7
2009			
U.S. public schools	223	216	-7
Florida	229	223	-6

*Note.* Adapted from *The nation's report card: 2015 mathematics and reading assessments*, by the National Center for Education Statistics, 2015, Retrieved from [http://www.nationsreportcard.gov/reading\\_math\\_2015/#? grade=4](http://www.nationsreportcard.gov/reading_math_2015/#? grade=4)

Appendix C  
Interview Protocol

## Interview Script

### Introduction

Thank you for agreeing to participate in this research study. I am Teleshia Mincey- Jones, a doctoral student at Nova Southeastern University engaged in research for the purpose of satisfying a requirement for a Doctor of Education degree.

You were selected as a possible participant in this study because you work as an elementary school teacher in the Central Florida school district. Your participation is voluntary, and you must be age 18 or older to participate. A total of five to 10 elementary school teachers will be invited to participate in this study. You will be provided a voluntary consent form to sign for participation in this study. The voluntary consent form will provide an overview of the study.

The title of my applied dissertation is *Teachers' Perspectives: The Reading Gender Gap Among Elementary School Boys*. The central question to be answered is: What meaning do elementary school teachers ascribe to the reading gender gap among boys in the past, present, and future at a Central Florida school district?

The purpose of this study is to explore the gender gap that exists among boys explicitly in the area of reading from the perspectives of elementary school teachers' lived experiences derived from a temporality of their past, present, and future lifeworld existentials.

### Directions

You will be participating in a minimum of two 1-hour interviews over a two-week period, but you may be asked for additional follow-up interviews if necessary. You will be asked a series of questions relating to your past and present experiences with the boys' reading gender gap as well as your feelings about the future in respect to the topic. All the interviews will be digitally recorded, and notes will be taken. You will be given a pseudonym to protect your privacy. The interview protocol is sectioned into two parts. The first section will inquire about your demographic information. The second section consists of the interview questions.

### Section I: Demographic Information

Teacher \_\_\_\_\_ School \_\_\_\_\_

#### Student Characteristics

1. What is the total number of boys and girls in your class?
  - a. Number of boys \_\_\_\_\_
  - b. Number of girls \_\_\_\_\_
  - c. Total \_\_\_\_\_
2. What grade(s) are the students you currently teach?
 

___K	___1	___2
___3	___4	___5
3. Sex
 

\_\_\_ Female    \_\_\_ Male
4. Ethnicity
 

\_\_\_ White    \_\_\_ Black or African American    \_\_\_ Hispanic or Latino descent origin

\_\_\_ Asian    \_\_\_ Native Hawaiian or Other Pacific Islander

\_\_\_ American Indian or Alaskan Native
5. Tenure
  - a. How many years have you worked as a full-time teacher in public and/or charter school? \_\_\_\_\_
  - b. What are the total number of years you have worked as a teacher at this school \_\_\_\_\_
6. What is the highest degree you have obtained as of today?
 

\_\_\_ Bachelors (B.A., B.S., B.E., etc.)

\_\_\_ Master's degree (M.A., M.A.T., M.B.A., M.Ed., M.S., etc.)

\_\_\_ Education specialist or certification, at least, one year beyond master's level

\_\_\_ Doctorate or first professional degree (Ph.D., Ed.D.)
7. Which of the following describes the teaching certificate(s) or endorsement(s) you currently hold in the state of Florida?
 

\_\_\_ Temporary certificate    \_\_\_ Professional certificate

\_\_\_ Reading Endorsement    \_\_\_ Gifted Endorsement    \_\_\_ ESOL endorsement
8. What subject(s) are you fully certified to teach? Mark (X) for all that apply.
 

\_\_\_ Elementary grades (K-6)    \_\_\_ English or language arts

\_\_\_ Special education    \_\_\_ English language learners

\_\_\_ Other (Please specify \_\_\_\_\_)

## Section II: Interview Protocol

Teacher \_\_\_\_\_

School \_\_\_\_\_

### The Past

1. What were the *past* lived experiences of elementary school teachers dealing with the reading gender gap among boys?
  - 1.1 Tell me when in the *past* did you notice that boys were falling behind girls in reading? How and when did it start?
  - 1.2 What action did you take *back then* to alleviate this situation?
  - 1.3 Did you notice if the reading gender gap got worse or better for boys due to your action back in the *old days*?
  - 1.4 What student surveys have you been involved with that concerns assessing the reading gender gap at this school or another school in the last 10 years?

### The Present

2. What are the *present* lived experiences of elementary school teachers dealing with the reading gender gap among boys?
  - 2.1 What would you attribute to the *current* reading gender gap among boys?
  - 2.2 How does the reading gender gap affect the academic performance of boys in your class *today*?
  - 2.3 What type of relationship do you have with boys in your classroom?
  - 2.4 What would the boys in your classroom say about you?
  - 2.5 What worries you the most about boys' underachievement in reading?
  - 2.6 What interest surveys on the reading gender gap do you use when selecting books to build your class library?

2.7 How does the lack of male teachers as role models in the classroom and the overwhelming influence of female teachers in the classrooms affect boys?

### **The Future**

3. What are the *future* lived experiences of elementary school teachers dealing with the reading gender gap among boys?

3.1 How can elementary school teachers resolve the reading gender gap among boys *going forward*?

3.2 What do you think about the *future* of your boys as they graduate from elementary school and move on to high school?

3.3 What would you change *next school year* that will allow boys to be as successful as girls in reading?

3.4 What cultural and economic impact do you think the reading gender gap among boys will have on future generations of men?

Appendix D

Formative and Summative Committee Invitation to Participate

### **Formative Committee Invitation**

Dear Educator,

I am in the dissertation phase of doctoral work in Educational Leadership at Nova Southeastern University's Fischler College of Education, and I seek your assistance with one aspect of this study.

The title of my applied dissertation is *Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School Boys*

To gather the data for this qualitative study, I will use an interview protocol that measures: reading gender gap among boys. I designed several questions to be included in the interview protocol that will be administered to elementary school teachers. As a result, a formative and a summative committee must validate it. A formative committee is an internal committee that helps validates the criteria for the study and the protocol being used. I would be obliged if you will be part of my formative committee.

The time commitment for this formative committee will be to read the 11 questions and provide your scientific and scholarly criticism via email on the form provided after reviewing the questions on the protocol. No face-to-face meetings are required.

If you are willing and able to serve on this formal committee, please contact me as quickly as possible so I can send you the materials. I can be reached at [Teleshia@nova.edu](mailto:Teleshia@nova.edu) for your response as well as any questions or concerns.

Thank you for considering this request.

Best Regards,

Teleshia Mincey-Jones

### **Summative Committee Invitation**

Dear Educator,

I am in the dissertation phase of doctoral work in Educational Leadership at Nova Southeastern University's Fischler College of Education, and I seek your assistance with one aspect of this study.

The title of my applied dissertation is *Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School Boys*

To gather the data for this qualitative study, I will use an interview protocol that measures: reading gender gap among boys. I designed several questions to be included in the interview protocol that will be administered to elementary school teachers. A formative committee is an internal committee that has already reviewed the protocol, and I now need the services of the summative committee that consists of experts external to my institution to conclude the validation process. I would be obliged if you will be part of my summative committee.

The time commitment for this summative committee will be to read the 11 questions and provide your scientific and scholarly criticism via email on the form provided after reviewing the questions on the protocol. No face-to-face meetings are required.

If you are willing and able to serve on this formal committee, please contact me as quickly as possible so I can send you the materials. I can be reached at [Teleshia@nova.edu](mailto:Teleshia@nova.edu) for your response as well as any questions or concerns.

Thank you for considering this request.

Best Regards,

Teleshia Mincey-Jones

Appendix E  
Validity Questionnaire

### Validity Questionnaire

**Dissertation Topic:** *Teachers' Perspectives: Exploring the Reading Gender Gap Among Elementary School Boys*

Thank you for volunteering your time to assist with the development of 3 of the researcher-designed domain with three to five questions in each domain to be added to this questionnaire. Your input is very important with respect to the questionnaire itself and the development of my overall dissertation. Your willingness to participate is greatly appreciated.

The full survey is attached for your perusal. All interview questions were self- designed. Please rate the researcher-designed questions based on the following information:

1. Do the researcher-designed questions address *specific and appropriate issues* as they relate to obtaining information regarding reading gender gap among boys?
  - a.  Yes
  - b.  No (please explain) \_\_\_\_\_
  
2. Do the researcher-designed questions contain *language* that is free from being overly biased or inflammatory that is appropriate for a K-8 educational setting and can be easily understood (free of ambiguity and misrepresentation) by teachers' in an elementary school?
  - a.  Yes
  - b.  No (please explain) \_\_\_\_\_
  
3. Did you find any of the researcher-designed questions *negative, insensitive, offensive, or otherwise intrusive*?
  - a.  No
  - b.  Yes (please identify which question and why)  
\_\_\_\_\_
  
4. Are there any other survey items(s) you would like to see included that are not currently included on the questionnaire?
  - a.  No
  - b.  Yes (please state the question and why)  
\_\_\_\_\_

Additional Comments/Suggestions: \_\_\_\_\_

Thank you for your time and patience in assist with this survey development.

Teleshia Mincey-Jones, Nova Southeastern University Dissertation Student at the Fischer College of Education