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## Brian Christopher Lusk

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# SINGLE-GENDER FEMALE URBAN MIDDLE SCHOOLS: TEACHERS' PERCEPTIONS OF FACTORS FOR SUCCESSFUL IMPLEMENTATION

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by

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## Treatise

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### Dedication

This dissertation is dedicated to my three beautiful ladies. My wife, Beverly, has been patient, supportive, understanding, and has provided encouragement throughout this journey. Although there were many days in which our family time was interrupted by writing and the need to commit more attention to working through the dissertation journey, she has been steadfast in her support. Our daughters, Reiley and Reagan, have also been completely understanding throughout the entire process. They continue to make us proud in all that they accomplish. These three ladies in my life are a true blessing! To my parents, thank you for always supporting and believing in me. Whether during this educational journey or previous educational endeavors, you have provided encouragement to me to continue in the learning opportunities. Your commitment to education and commitment to providing a good life to our family served as a model for future generations.

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### Abstract

# SINGLE-GENDER FEMALE URBAN MIDDLE SCHOOLS: TEACHERS' PERCEPTIONS OF FACTORS FOR SUCCESSFUL IMPLEMENTATION

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The aim of this study was to examine teachers' perceptions of the factors for successful implementation of a single-gender female, urban middle school. The literature suggests there are benefits and drawbacks to the single-gender schooling model. Moreover, research indicates there are fewer benefits for boys than girls. While the literature illuminates there are more benefits for girls, little research outlines the specific factors for the successful implementation of the all-girls, single-gender urban middle school. Teachers involved in this qualitative case study were able to identify factors, share their experiences, identify challenges, and ways in which they addressed the challenges in implementing the all-girls, single-gender urban middle school. The study findings revealed the critical factor of staffing the school with a committed group of educators motivated to meet the instructional needs of the girls. Additionally, perceptions for factors of successful implementation of the single-gender middle school included administrative leadership and

expectations as essential components, as well as staffing, professional development, campus culture, and a pilot program. Teachers' experiences in implementing the singlegender middle school illustrated the importance of building positive relationships with the students and developing teaching strategies to meet the needs of the students. Teachers also faced challenges in implementing the all-girls school, including preparation and planning for lessons as well as consistency in procedures. Such challenges were addressed by building relationships, differentiating instruction, and creating an advisory period.

## **Table of Contents**

List of Tables	xi
List of Figures	xii
CHAPTER 1: INTRODUCTION TO THE STUDY	1
Statement of the Problem	2
Purpose of the Study	4
Research Questions	4
Overview of the Methodology	5
Definitions of Terms	
Delimitations	10
Limitations	10
Assumptions	10
Significance of the Study	11
Summary	11
CHAPTER 2: REVIEW OF LITERATURE	
Legal History	14
Background of School Choice	15
Single-Gender School Models	19
Single-Gender Schools by Level	
Conflicting Research	
Implementation of School Reform	
Summary and Implications	

CHAPTER 3: METHODOLOGY AND PROCEDURES	41
Purpose of the Study	41
Research Questions	41
Research Methods and Design	42
Grounded Theory	42
Site and Participants	44
Data Collection Protocols	45
Data Collection Process	45
Data Analysis Procedures	49
CHAPTER 4: CASE STUDY CONTEXT	54
Study Context	54
Teacher Participants	61
Summary	69
CHAPTER 5: FINDINGS	70
Research Question #1	72
Research Question #2	
Research Question #3	80
Research Question #4	83
CHAPTER 6: SUMMARY, CONCLUSIONS, AND IMPLICATIONS	87
Problem Statement	87
Purpose of the Study	
Research Questions	

Overview of Methodology	88
Summary of Findings	89
Grounded Theory Framework	95
Implications and Concluding Thoughts	99
Appendix	102
References	103
Vita	113

## List of Tables

 Table 4.1 Participant Demographic Information
 68

## **List of Figures**

Figure 6.1 Visual representation of grounded theory in terms of implementation steps for
a single-gender girls' school

### **CHAPTER 1: INTRODUCTION TO THE STUDY**

Federal legislation has shaped schooling in the United States. Over the past decade, educators have been provided more latitude in determining educational models which best meet the needs of students. Significant changes to Title IX of the Education Amendment Act of 1972 and the reauthorization of the Elementary and Secondary Education Act (ESEA) in 2001, known as No Child Left Behind (NCLB), brought about a new way for schools to operate in meeting the governmental expectation to be more "innovative" (Brown, 2013; Mead, 2003). Title IX of the Education Amendment Act of 1972 (Title IX and Sex Discrimination, 2015) prohibits discrimination from participation in educational programs and activities receiving federal funds based on gender; this includes state and local educational agencies. According to the American Civil Liberties Union (n.d.), "The widely acknowledged crisis in our public education system has led to a consensus that too many schools are failing our children, particularly in communities with high minority and low-income populations, and that the need for reform is critical" (p. 1).

NCLB is a policy that provided schools the opportunity to participate in school choice options aimed at meeting the educational needs of low-income and minority students (Mansfield, 2013). Specifically, NCLB was amended in 2006 and, as such, afforded local education agencies the use of federal funds to support same-gender education; school districts could establish school-wide models or single-gender classrooms (United States Department of Education, 2014). The federal funds were made available to expand school choice options in public schools; prior to 2006 such schools were primarily seen in the private sector (Datnow, Hubbard, & Conchas, 2001).

As a response to concerns of the quality of education in public schools in the United States, many school districts have implemented single-gender instructional models (Fabes, Martin, Hanish, Galligan, & Pahlke, 2015). While there has been much examination with regard to legality and policy of single-gender schools, research is inconclusive on the educational outcomes (Anfara & Mertens, 2008; Pahlke & Hyde, 2016). Although the popularity of these school models has been rising, there is no consensus on the optimal model, that is, whole-school single-gender or coeducation models with single-gender classes (Bigler & Signorella, 2011). Advocates of singlegender schools promote benefits of meeting students' needs, claiming boys and girls possess biological differences and would benefit from separate social contexts (Fabes, Pahlke, Borders, & Galligan, 2015). Hart (2015) found that middle school adolescents benefit from single-gender schools because these schools reduce social anxiety and serve as a way to transition to middle school. Hubbard and Datnow (2005) argued that single-gender successes have been attributed to the organizational characteristics of the school, student-teacher relationships, and amount of resources; that is, the single-gender model is not attributable to students' academic success, but rather, other factors were the reasons for success. Additionally, Eliot (2013) suggested that the claim of biological differences between boys and girls is misleading; boys and girls do not see, hear, or learn differently. Beyond the benefits and drawbacks noted above, research suggests parents choose single-gender schools based on reputation and test results, and parents view singlegender schools as advantageous for girls and co-education better for boys (Jackson & Bisset, 2008). As a result, there is an apparent contradiction regarding the actual benefits of single-gender schools that must be addressed.

#### **Statement of the Problem**

Public schools in the United States have come under much scrutiny over the last decade as educational outcomes have not met the needs of all learners. According to previous research, students are not achieving at the same level as that of their peers throughout the world (Fabes, Pahlke, Adrienne, Borders, & Galligan, 2015; Pahlke, & Hyde, 2016). In 2002, President George W. Bush signed No Child Left Behind, and provided funding to support the creation of innovative educational opportunities, close the achievement gap, and offer choice (Mead, 2003). While the No Child Left Behind Act was intended to lessen the requirements in Title IX of the Education Act Amendments of 1972, the language remained essentially the same; thus, there remained

restrictions (Salamone, 2007). No Child Left Behind was amended in 2006, which approved federal funding for innovative schools and eased previous restrictions. As a result, various educational models have been developed to improve educational outcomes for students. Specifically, single-gender schools were legally permissible and proliferated throughout the United States to meet student academic needs (Bigler & Signorella, 2011). Single-gender schools became a school choice option. The potential of single-gender schools had significant implications on schooling because it was intended to provide educational equity and school choice for students and families (Mansfield, 2013). Although controversial, single-gender education has the promise to serve as an educational opportunity to meet the needs of learners. In addition, it has the potential to meet psychological and emotional development of middle school girls (Bigler & Signorella, 2011; Hart, 2015). There has been much debate and research regarding the benefits of singlegender schooling in terms of student achievement outcomes; however, achievement data are inconclusive regarding the positive academic effects (Fabes et al., 2015 a; Hart 2015). As the number of single-gender schools and single-gender models continue to increase across the country, there is a need to further understand factors regarding the successful implementation of singlegender schools as perceived by teachers (Lofton, 2013).

Education reform, also known as school choice, has gained momentum in the United States in response to public dissatisfaction for the shortcomings of the educational system. Single-gender schools are one school choice model embraced by educational leaders to address the concern (Datnow & Hubbard, 2001; Scott, 2005). Specifically, single-gender urban middle schools serving female students are such a response that is aimed at serving girls' individual learning styles, academic, social, and emotional needs (Fabes et al., 2015a). A meta-analysis conducted by Pahlke, Hyde, and Allison (2014) found modest academic advantages in math achievement for boys and girls. This instructional model supports the varied learning styles among boys and girls (Fabes et al., 2015b). In general, single-gender girls' schools have demonstrated positive outcomes for female students, and the school choice model continues to grow throughout the United States (Hart, 2015; Hoffman, Badgett, & Parker, 2008). Lofton (2013) conducted case study research regarding staff perceptions of the factors for successful implementation of an all-girls, single-gender secondary school as a whole-school reform model. The findings indicated key factors for successful implementation include committed faculty and staff, principal leadership, board of trustee support, coordination with district-level offices, committed advisory council with strong community ties, district support, and a campus vision. While there is research in support of single-gender schooling, Lofton suggested more research is needed to examine the factors that lead to successful implementation of single-gender female schools.

#### **Purpose of the Study**

Single-gender schools serve as a competitive educational choice for parents and students, which came about through the amendments of Title IX (Mansfield, 2013). However, prior research is inconclusive regarding actual outcomes and teacher perceptions of effectiveness. Therefore, the purpose of this study was to examine planning, goal setting, strategies, and the factors contributing to successful implementation of a single-gender, all-girls, urban middle school. The specific focus was on the factors, successes, and challenges in implementing an all-girls, single-gender urban middle school. The campus to be studied was identified as successful based on its achievement in earning six of seven Distinction Designations from the Texas Education Agency in 2016-2017. Distinction Designations are awarded to schools by the Texas Education Agency for performance in the top quartile in the campus comparison group, consisting of comparable schools in terms of overall enrollment, grade levels served, student mobility rates, early college enrollment, and a range of student demographic factors (Texas Education Agency, 2017).

#### **Research Questions**

It is important to note that successful implementation of a single-gender school for this research is based on the Texas Education Agency's (2017) criteria for Distinction Designations. Distinctions are awarded to campuses achieving in the top 25 percent of their campus comparison group. This research study was guided by the following research questions:

- 1. What are teachers' perceptions of the factors contributing to successful implementation of a whole-school, all-girls, single-gender urban middle school?
- 2. What are the teachers' perceptions of their experiences in the implementation of a wholeschool, all-girls, single-gender urban middle school?
- 3. What are teachers' perceptions of the challenges in implementing a whole-school, all-girls, single-gender urban middle school?
- 4. How do teachers address implementation challenges in a whole-school, all-girls singlegender urban middle school?

#### **Overview of the Methodology**

This study was conducted following a qualitative research paradigm with a case study design. Qualitative methods are justified for this research as they provide thick description (Geertz, 1973). Further, qualitative research offers a way to understand complex individual behaviors, and it is an exploratory study (Miles & Huberman, 1994). For this qualitative case study, the researcher used an interpretivist approach in examining the teacher perceptions of the factors for successful implementation of an all-girls, single-gender urban middle school. With an interpretivist approach, the researcher seeks to understand subjective perceptions in a social situation (Roth & Mehta, 2002). According to Roth and Mehta (2002), "the interpretivist approach does not seek an objective truth so much as to unravel patterns of subjective understanding. The latter assumes that all versions of the truth are shaped by the viewers' perceptions and understanding of their world" (p. 132). According to Willis (2007), "Interpretivists argue that making meaning is a group or social process. Humans in groups and using the tools and traditions of the group (including language), construct meaning and thus are able to share their understanding with other members of the group" (p. 4). Interpretivism was used for the current study because it

gave voice to individuals and provided understanding for their perspectives as a group in a social situation (Roth & Mehta, 2002).

The single-gender female, urban middle school was selected because it met the criteria set for this research study. It was located in a Texas public school district and was transformed from a comprehensive neighborhood school to a single-gender female neighborhood academy in the Fall of 2016. The student enrollment was approximately 1,200 with nearly 80% coming from economically disadvantaged households. The student demographic was predominantly Latina and African-American; a small percentage of students came from various other student groups. The English Language Learner (ELL) population was just above 50%.

Two primary sources of data were used to gather the research: semi-structured interviews and document analysis. Semi-structured or in-depth interviews were conducted on-site and lasted approximately 45 minutes. Document analysis was conducted using artifacts generated from teacher team meetings, professional development, the campus improvement plan, and other pertinent documents. In addition to the primary data collection tools, field notes were used throughout the process, and contact summary sheets were maintained during each interview. Participants were purposefully selected from among the core content teaching areas and have remained at the campus from the school year in which the campus opened as a single-gender school. This was done through random selection and was aimed at understanding the experiences and understandings from participant perspectives.

Individual face-to-face interviews were held with seven teachers serving students in the single-gender urban female middle school. The homogenous nature in terms of educational background and teaching experience of the participants supported interviewing a sample size of seven, and their perspectives provided deep understanding. A protocol of 10 questions was used

to guide the interviews. However, as appropriate, probing questions served to gain a deeper understanding of participants' experiences. Furthermore, participants had opportunities to add additional information for the interviewer to gain a deeper understanding to support thick description (Geertz, 1973).

The interview questions were aimed at understanding the factors for successful implementation of the single-gender female, urban middle school. The semi-structured interviews afforded opportunities for the participants to have more control over the interview structure and process, as well as including more participant voice (Hays & Singh, 2012). Through the seven interviews, saturation of information was achieved so the experiences of campus staff members in the single-gender urban female school could be fully understood, and themes appropriately developed. According to Hays and Singh (2012),

Once the interview begins, the interviewee has more say in the structure and process. Even with those that do include a protocol, every interview question does not have to be asked, the sequence and pace of interview questions can change, and additional interview questions can be included to create a unique interview catered to fully describing the interviewee's experience. (p. 239)

Each interview was recorded using an audio device. The interview responses were placed into themes and coded. A Contact Summary Sheet was completed for each interview as well. Furthermore, participant checks were conducted at the conclusion of each interview to ensure understanding and accuracy of responses.

As noted by Hays and Singh (2012), reflexivity is an important component of the research process. It is used by the researcher to help the audience understand the research process. Reflexivity is a benchmark for creating trustworthiness and credibility of the research. In doing

so, the researcher exhibits positive regard and empathy. Further, they listen without judgment (Hays & Singh, 2012). Journaling was used as part of the research, so the researcher was able to share his understanding and perceptions of the interview responses. Field notes were used by the researcher at the conclusion of each interview and during site visits. This allowed for reflection of the interview and the interview responses.

Subjectivity allows the researcher to get closer to the interview data and understand the phenomenon more closely through the shared lived experiences of the participant (Hays & Singh, 2012). As part of the research process, data were triangulated by reviewing the interviews through coding and themes, reflexive journaling, and participant checks. A colleague assisted to ensure the voice of the participant was captured in the transcription rather than that of the interviewer (Hays & Singh, 2012).

As a researcher, it is important to capture the perceptions, feelings, and descriptions of the subjects being interviewed. Researchers bring bias to the research and should seek to maintain positionality (Hays & Singh, 2012). Therefore, the researcher maintained positionality, so the views of the staff members were understood through the interviews. In addition, a colleague reviewed the transcripts to ensure coding that was reflective of the voices interviewed. In addition, the researcher bracketed his feelings to accomplish participant voice (Hays & Singh, 2012). Finally, multiple sources of data were collected and triangulated to verify results.

#### **Definitions of Terms**

Achievement gap: The significant difference in student achievement when comparing one student group to another using the same test instrument (Crawford-Ferre & Wiest, 2013).

*Comprehensive school reform (CSR)*: A school improvement approach to provide parents and students with instructional models aimed at providing improved, and distinctly different learning experiences (Rowan & Miller, 2007).

8

*Distinction Designation*: Distinctions are awarded to campuses achieving in the top 25 percent of their school comparison group (TEA, 2017)

*Implementation*: The use of components established in a comprehensive school reform model (CSR). Aspects of CSR implementation include management techniques, reorganization, parent involvement, teacher collaboration, and decision making (Desimone, 2002).

*No Child Left Behind Act*: The No Child Left Behind Act of 2001 is an education reform law aimed at closing the achievement gap in reading, math, and science. It has over 800 requirements and was amended in 2006 to provide more educational opportunities for single-sex schooling (McCreary, 2011).

*Single-sex/single-gender public education*: Schools which provide education to one group of students in the public education setting. Such schools must provide for voluntary participation and provide a comparable co-educational opportunity and demonstrate a need for single-sex schooling (Brown, 2013).

*School Choice*: School options for parents aimed at creating competition and providing various instructional models of schooling in an educational market (Jabbar, 2015).

*Stereotype:* "Refers to beliefs that we have about the way people behave as a result of their membership in a group" (James, 2007, p. 5).

*Successful Schools*: Campuses receiving Distinction Designations based on the criteria established by the Texas Education Agency (Texas Education Agency [TEA], 2017). Beginning in 2013, TEA awarded Distinction Designations to campuses based on specific categories related to student achievement if the campus performance ranked in the top 25 percent in the cohort of schools.

*Title IX of the Education Amendment Act*: A United States federal law prohibiting sex discrimination in education for institutions receiving federal funding (United States Department of Justice [USDOJ], 2015).

#### **Delimitations**

The research was intended to understand the factors perceived by teachers for successful implementation of a single-gender female, urban middle school in Texas. Only teachers employed at the campus for at least a year and a half were interviewed. Consequently, the voices of students and parents were not examined. Further, this study focused only on a whole-school model of a single-gender middle school and should not be expected to provide explanation for other models, such as female single-gender magnet schools, private schools, or parochial schools.

#### Limitations

It is undetermined whether the results of this study will have generalizable or limited applicability to other settings such as co-educational models or other models outside of the single-gender school setting. Therefore, this case study is aimed to uncover findings which are specifically applicable to single-gender school settings (Hays & Singh, 2012). The limited scale of this research focused on one campus and included a small group of teacher participants. Additionally, the campus was a comprehensive neighborhood school serving middle school students from the immediate community in contrast to many other single-gender models of its type in which the students are admitted through an application process specific to magnet schools, schools of choice, or innovate internal charter schools. Also, participants interviewed may have had difficulty recalling the related factors under study due to the time that had passed since the single-gender school opened. As such, while there may be limited generalizability to gender-specific schools, there may be findings that are similarly discovered in regular, non-gender-specific successful schools.

#### Assumptions

Several assumptions were made by the researcher. It was assumed that Girls' Middle School [pseudonym used for the school site] was successful. This assumption is based on the Texas Education Agency's accountability system (TEA, 2017) indicators of success. To be considered successful, the campus had to achieve Distinction Designations per the Texas Education Agency in the 2016- 2017 school year. Another assumption was that teachers were implementing uniquely-designed practices that aligned to single-gender girls' middle schools, resulting in significantly high yields of student performance outcomes. Furthermore, it was assumed that teachers were able to recall experiences and practices perceived to contribute to the school's overall academic successes.

#### Significance of the Study

An education reform, also known as school choice, has gained momentum in the United States in response to public dissatisfaction for the shortcomings of the educational system. Singlegender schools are one school choice model embraced by educational leaders to address the concern (Datnow, Hubbard, & Woody, 2001; Scott, 2005). While there is research in support of single-gender schooling, this study will contribute to the research by providing policymakers with findings which may be applicable to similar settings to shape policy. Additionally, this research will illustrate practices for educators with a similar student group and setting for successful implementation of these schools. It is expected that the findings of this study will also inform practice regarding transferability and institutionalization of gender-specific implementation strategies that lead to higher levels of student performance as perceived by teachers in this case study.

#### Summary

This chapter has outlined a qualitative study to understand the teachers' perceived factors for successful implementation of single-gender female urban middle school. This study replicated aspects of Lofton's (2013) study to examine teacher perceptions of factors contributing to successful implementation of a single-gender female, urban middle school. The research questions and an interview protocol were developed specifically for this study. This chapter included an introduction to the study, statement of the problem, purpose of the study, research questions, methodology, definition of terms, delimitations, limitations, assumptions, and significance of the study. Next, a review of the existing research regarding single-gender schools is presented. It

includes research on why parents make school choices, the benefits and drawbacks of singlegender schools, and the relevant research surrounding single-gender schools by level.

#### **CHAPTER 2: REVIEW OF LITERATURE**

The purpose of this chapter is to present a review of the literature related to single-gender school research. Section one is an overview of the background and legal history of single-gender education. Section two offers an examination of the background of school choice and the reasons parents select schools. Section three provides an overview of the types of single-gender schools as well as the benefits and drawbacks of these schools. Section four contains research on each level of schooling regarding single-gender schooling, and section five offers arguments from critics and proponents.

The signing of the No Child Left Behind Act of 2002 by President George W. Bush afforded public school educators the opportunity to develop "innovative" school choice models aimed at improving public education for low-income and minority students. In 2006, the amendment to Title IX of the Education Amendment Act of 1972 opened the door for such school choice models to be implemented—more specifically, single-gender schools. Over the years, single-gender schools have been developed and implemented for boys and girls respectively across various grade levels such as elementary school, middle school, and high school. In addition, these school choice models have been implemented as a whole-school, single-gender model, and some have been implemented inside of a co-educational setting. Generally, single-gender girls' school models have been more successful in relation to student academic achievement, classroom discourse, and the development of self-concept for minority and low-income students. Further, single-gender girls' middle schools have been helpful as girls often have considerable difficulty during their adolescent years. However, the research is less favorable and is conflicting for boys as some suggest these schools further perpetuate gender stereotypes. Overall, research indicates there are benefits and drawbacks to both boys and girls single-gender school models. Critics and advocates argue against and for these models; however, there still remains much to be learned about the benefits of single-gender schooling. Specifically, there is an opportunity to understand

the factors teachers perceive for effective implementation of single-gender, girls' urban middle schools.

#### Legal History

Title IX of the Education Amendments Act was passed in 1972, prohibiting discrimination from federal programs based upon gender (Eckes & McCall, 2014; Salamone, 2007). Title IX was established with the intent to ensure equal academic opportunities for female students in educational programs receiving federal funds (Eckes & McCall, 2014). A consequence of Title IX was the limitation of single-gender schools because of the mandate to not discriminate, and to provide for equal access (Bigler & Signorella, 2011). Federal regulations only permitted the separation of boys and girls for physical education, due to the physical contact, as well as classes in elementary and secondary schools dealing with human sexuality. In 2001, federal legislation was amended affecting Title IX as well as transforming the Elementary and Secondary Education Act of 1965 into the No Child Left Behind Act (USDOE, 2014). This landmark change in legislation provided support for the development of "innovative" schools and expanded options for educational leaders to improve failing schools (Brown, 2013; Mansfield, 2013). The signing of NCLB served to close the achievement gap, provide flexibility, and offer choice to parents through innovative schooling (Mead, 2003). As a result, parent choice became a greater reality in 2004 when the Office of Civil Rights issued a proposal supporting single-gender schools with few restrictions (Salamone, 2007). Two years later, in 2006, additional federal funding became available for the creation of these "innovative" schools (Pahlke et al., 2014). According to Weiss (2007), "Education Secretary Margaret Spellings described the revised Title IX regulations as a part of a greater effort to expand and diversify options in the public sector" (p. 1). The expected outcomes were accelerated implementation of single-gender public schools.

Single-gender schools serve as a means to create better educational opportunities to meet the needs of low-income and minority students (Goodkind, 2013). Single-gender schools proliferated as a result of the legislation and access to federal funding. In 2006, Congress eased the restrictions on single-gender schooling, which allowed boys and girls to be educated separately, but there were specific provisions outlined (Fabes et al., 2015a). The following are a list of the provisions from the United States Department of Education (USDOE, 2014):

- 1. Identify an important objective by offering single-sex classes;
- 2. Demonstrate that the single-sex class is substantially related to achieving the objective;
- 3. Ensure enrollment is voluntary through an opt-in or opt-out process;
- 4. Offer a substantially equal coed class in the same subject;
- 5. Conduct evaluations at least every two years to ensure compliance with Title IX;
- 6. Avoid relying on gender stereotypes;
- Provide equitable access to single-sex classes to students with disabilities and English language learners;
- Avoid discriminating against faculty members based on gender when assigning classrooms (2014, p. 1).

School leaders were significantly impacted with the imposed requirement to make attendance voluntary, ensure a mixed-sex education option is available, review the necessity of the school every two years, and see that the school meets a governmental objective that can only be accomplished in such an educational setting (Fabes et al., 2015a).

#### **Background of School Choice**

Public schools have come under much scrutiny for failing to meet the academic needs of students and often cited as the reason for societal shortcomings (Datnow et al., 2001; Fabes et al., 2015b). Congress made changes to Title IX and the NCLB Act in order to provide parents with school choice options (Mansfield, 2013). The intent of the provisions in Title IX and NCLB were aimed at offering more "innovative" schooling opportunities for parents and families. This legislation was enacted in response to an achievement gap that existed between middle-class suburban students compared to their peer urban counterparts in low-income schools (Datnow et al., 2001; Fabes et al., 2015b).

al., 2005). In short, improving the education of low-income and minority students was a priority (Mansfield, 2013). Specifically, an achievement gap between middle-class White students and African-American students in economically disadvantaged communities reflects the racial disparity (Ridenour & Hassell Hughes, 2016). Public educators have come to recognize the importance of offering a broader range of school choice for the greater good of students and parents. Gone are the days of parents simply taking their child to the local neighborhood school without exploring other schooling options first (Rex & Chadwell, 2009). School choice has gained momentum nationally and continues to do so since NCLB was enacted in 2002 (Betts, 2005). The purpose of NCLB was to focus on improving education for low-income, minority students and provide school choice options for parents (Goodkind et al., 2013). Furthermore, school choice is intended to create equity in access to quality education programming for students and families in racially segregated neighborhoods (Levin, 2011). Students are often relegated to their neighborhood school or a private school, but when multiple options are available, competition drives quality, resulting in higher caliber schools and absolute parent choice (Betts, 2005). School choice provides better options for students in economically and racially segregated neighborhoods (Levin, 2012).

#### **Implications for Parents Selection of Schools**

School choice programs serve to create educational options in a competitive market, so parents can select a school which best meets the needs of their child (Betts, 2005). Parents take advantage of school choice for different reasons. As previous research suggests, "Education is a complex good with many dimensions, and as parents evaluate schools they have to strike a balance between the different attributes of education that schools represent" (Schneider & Buckley, 2002, p. 141). Therefore, choice and competition are seen as a tool to improve the educational market and schooling practices (Lubienski, 2003).

Understanding the reasons parents select schools is important so that school leaders can create a school system that balances both race and class while meeting student academic needs (Schneider & Buckley, 2002). When faced with the benefit of school choice options, parents choose schools based on their social network, student achievement, and standard enrollment patterns (Bell, 2009). Jackson and Bisset (2005) found that middle-class parents chose schools based on school reputation and school exam results. Also, parents make choices based on race (Schneider & Buckley, 2002). Goldring and Hausman (2010) found that when parents seek schools outside of their attendance zone, they often choose based on overall proximity and convenience. Parents use academic quality and performance as factors when selecting a school (Hanushek, Kain, Rivkin, & Branch, 2007).

Irrespective of race and class, parents choose schools based on academic quality; their differences in selecting schools is based on their view of the world (Kleitz, Weiher, Tedin, & Matland, 2000). Other factors have been found with respect to parents' schooling choices. Bell (2009) found that social capital was an important factor when parents were considering schooling options based on choice sets; that is, middle-class parents had greater access to information about non-failing, selective, and tuition-based school options. Conversely, parents in poor or working-class families had limited access to such information.

Parents of different economic backgrounds also make school selections but have significantly different choice sets (Bell, 2009). Bell found that poor, working-class parents of rising sixth and ninth-grade students conducted a greater number of school searches when compared to middle-class parents. However, the school choices working-class parents made tended to be failing and nonselective. Middle-class parents, on the other hand, chose non-failing, selective schools. It is also reported that parents have bounded rationality; that is, they are confronted with many schooling options, but are not able to consider all of them. As such, they are expected to "take shortcuts" and make the best selection based on their expectation from the options (Bell, 2009). Rather than considering all of the choices in the set, parents tend to filter the

choice of school options based on their expectations and select from the given group. In addition, school leaders' marketing and advertising strategies often segment market options, further inhibiting parent and student access (Jabbar, 2015).

Single-sex schools are becoming more prevalent as a school choice option in the publicschool market. Before the passage of NCLB, they were primarily available in the private sector. Single-gender schools are a choice option and are intended to serve as a benefit to improve student academic achievement (Jackson & Bisset, 2005). Single-gender public schools serve as a choice option for parents; they are not compulsory and forced upon parents (Datnow et al., 2005).

Prior to the enactment of NCLB in 2001, California engaged in the implementation of 12 single-gender pilot schools in 1997 (Datnow et al., 2005). Ultimately, the goal of the academies was to increase the diversity of California public school offerings. Proponents of the model claimed the distraction of the other gender was eliminated with students in single-gender schools. However, other distractions were said to have emerged from their female peers' desire to compete for popularity (Fabes et al., 2015b), and female students' distractions of boys were eliminated, but were replaced by peer competition. Datnow et al. (2005) studied the California pilot schools to determine if the model improved the education for low-income and minority students. They suggested that the extra funding provided to the single-sex initiative resulted in extra resources beyond what other schools received and when such funding was not reinstated, the schools deteriorated. Additionally, they asserted the positive relationships developed between students and teachers was attributable to caring teachers; it was not attributable to the separation of boys and girls. The single-gender academies were shut down after three years due to this model reinforcing stereotypes.

Politicians, parents, and educators seek to increase school choice options in the publicschool sector by replicating the success of single-gender schools from the private-school sector (Datnow et al., 2005). For instance, Pahlke et al. (2014) found parents, students, and teachers to affiliate and therefore endorse single-gender schools in four areas of significance: gender differences in learning, gender differences in interest, girls' in-group preference, and gender discrimination. As the nuances of single-gender school models become more defined and information becomes more readily available to parents, so does the responsibility to consider the real differences within such models.

#### **Single-Gender School Models**

Proponents of single-gender schools believe that separating students by gender, whether it be at the classroom level or school level, will have a positive impact on student achievement and academic interest; but such instructional arrangements often vary from school to school (Hoffman, Badgett, & Parker, 2008). There are two basic models of single-sex or single-gender instruction: students are separated by classroom in co-education settings or they are separated by school in whole-school implementation (Hoffman et al., 2008; Pahlke et al., 2014). Pahlke and Hyde (2016) stated:

The debate over single-sex schooling at the K-12 level is raging among educators, policymakers, and civil rights advocates. In the United States, approximately 1,600 public schools offer single-sex classes or operate as single-sex schools. These classes and schools cross all developmental levels, with approximately the same numbers of elementary, middle, and high schools represented. (p. 61)

In addition to these two models, campuses have implemented the single-gender model in various structures as a choice option. Some co-educational campuses implement single-gender classes only in specific content areas such as math and science. In some instances, schools experiment with single-gender classes by piloting the structure with a team of teachers serving the same group of students (Hart, 2015). There are thousands of classrooms across the United States implementing the single-gender classroom approach within traditional, co-education schools (Pahlke et al., 2014). Subsequent to the allocation of additional federal funds in 2006 for innovative schooling options, the number of single-gender schools spiked from 228 in 2006 to over 500 in 2012. Specifically, 390 of the 500 schools remained co-educational, and 100 were

whole school models (Mansfield, 2013). To date, there are approximately 1,600 single-gender schools operating throughout the United States.

When single-gender classrooms are housed inside of a co-educational school, students enroll in these classes voluntarily while other students may be enrolled in the standard classroom of mixed gender students (Hart, 2016). Given the adolescent challenges faced by girls as they enter middle school, there is a benefit of the single-gender option as it lends support for girls as they deal with social anxieties, self-concept, and student satisfaction in school (Hart, 2015). Separating boys and girls at the campus level exists at all school levels: the elementary, middle, or high school (Spielhagen, 2011).

Whole-school models exist in which only boys attend one school and only girls attend another school, separated by gender; these schools are less frequently implemented than the singlegender classrooms in a co-educational school (Riordan et al., 2008). In developing whole-school models, principals implement them due to the need to improve student academic achievement and to increase parent satisfaction by offering choice (Fabes et al., 2015a).

#### **Benefits of Single-Gender Schools**

Public schools in the United States have come under criticism due to the concern for educational quality, effectiveness, and the low academic performance of minority and low-income students in urban schools. Consequently, educators have turned to separating boys and girls to teach students differently in the single-gender classrooms (Fabes et al., 2015b) and to improve the educational experience of low-income and minority students (Datnow et al., 2005). A prominent whole school reform initiative is to separate students by gender. There are many reasons proponents support grouping students according to gender (Hoffman et al., 2015). For example, the National Association for Single Sex Public Education (NASSPE) asserts that boys and girls are more likely to explore subjects of interest in single-gender schools. Academic accountability has caused some school leaders to consider student achievement as a reason to implement single-

gender schooling; separating boys and girls is believed to make an educational difference (Pahlke & Hyde, 2016). Providing single-gender learning to low-income and minority students is seen by parents as having similar choices usually only made available in private schools (Hughes, 2006). Some parents choose single-gender schools for the academic benefits; single-gender schools are seen by some as an option to improve student achievement (Jackson & Bisset, 2005). Others have implemented single-gender schools due to the perceived difference in student learning styles (Fabes et al., 2015a). According to Weiss (2007), the American Institute for Research (AIR) for the United States Department of Education found single-gender schooling to have "some definitive advantages" when compared to co-educational learning (p. 2). Among the qualitative and quantitative literature studies comparing single-gender and co-education schooling, the research ascertains that single-gender schooling outperforms co-education schooling in 22 areas. Specifically, academic achievement was stronger, and single-gender schools were seen as promoting higher education and career aspirations.

While some of the research on the implementation of single-gender schools has been conducted in private schools due to the limited options prior to NCLB, Walker (2004) identified the most significant benefits to impact both boys and girls respectively. Girls demonstrated more interest in math and science and were more academically motivated as evidenced by their willingness to do homework and study. They learned how to become more competitive, spent more time on-task in the classroom, and were more willing to take on leadership opportunities. For boys, their reading and writing skills were further developed, they were more likely to be on the college preparatory track and were less likely to drop out of school (Walker, 2004). Common attributes associated with single-gender schooling for boys and girls were the reduction of distractions from the opposite sex, both single-gender schools were more open to discussing sensitive topics (Walker, 2004).

A systemic literature review of 40 quantitative studies meeting comparison criteria was conducted on the strongest research available in 2008 by the United States Department of Education. These 40 studies were among the highest quality research available at the time. Additionally, survey data were collected as well as observation data from 19 single-gender schools in operation at the time (Riordan et al., 2008). The literature review suggests findings that most single-gender schools can be helpful for improving student academic achievement and provide greater academic aspirations for students (Riordan et al., 2008).

Survey and observation data were collected to gather descriptive data regarding school demographics, professional characteristics of teachers and principals, and staff perceptions of the school characteristics from 19 schools in the United States (Riordan et al., 2008). Findings indicated decreased student distractions, improved student achievement, and the opportunity to support boys' and girls' unique learning styles were benefits principals and teachers perceived as noted in surveys and site visits. Among the eight elementary schools visited, the academic and behavioral interactions among teachers and students were more positive. Principals and teachers found the greatest benefits of the school model were increased student achievement and a reduction in distractions. While teacher survey data indicated that single-gender schooling was more beneficial for girls than boys, it promoted a greater sensitivity to maturation and sex differences in learning. In high schools, teachers felt there were less serious problems with student behavior. Observers noted the student interactions of peers in the single-gender model were more positive than that of the co-education setting (Riordan et al., 2008).

Beyond the academic benefits seen in single-gender schooling, the social benefits for female students can be helpful, particularly in the middle school environment. The single-gender environment provides a more secure, safe place for middle school girls to learn, and there is more support for girls with social anxieties (Hart, 2016). These instructional environments remove distractions for students, allowing them to focus on learning (Anfara & Mertens, 2008). According to Hoffman et al. (2015), single-gender instruction in a large, urban high school promoted a more

positive classroom culture reflected in improved behavior and academic risk-taking by girls. Girls in single-gender schools perceive math and science as accessible to them and not as a "masculine" (Anfara & Mertens, 2008).

In addition to the benefits seen by students, teachers also find the single-gender learning model to be a benefit for students. Spielhagen (2011) examined the experiences of urban middle school teachers and found adolescent developmental changes as well as the time of the school year to be a factor for these teachers' experiences. As the year progressed, teachers' experiences of student behaviors became less positive. Thus, their perceptions of the single-gender benefits decreased. Additionally, teachers spoke of the critical importance of professional development and administrative support. Although teacher motivation diminished as the year progressed, the teachers maintained the choice option should continue. Datnow et al. (2005) also found that the successes of single-gender schools serving low-income, minority students were due to student-teacher relationships, school organizational characteristics, and ample school resources.

More recently, Hoffman et al. (2015) found benefits associated with students and teachers; girls in single-gender classes exhibited greater risk-taking among their female peers in contrast to girls in co-educational settings. Classroom culture was more positive with girls engaging in teamwork and demonstrating an enthusiasm for academics. Beyond the benefits observed for girls in single-gender classes, teachers' self-efficacy improved relative to the tenure of their time spent at the campus. As such, teachers felt their teaching improved, as did their enjoyment of the work and overall self-efficacy (Hoffman et al., 2015).

In a middle school study conducted by Hart (2016) over a three-year period, qualitative data from sixth-grade students provided insight into multiple benefits of the single-gender site. Girls felt the learning environment was more supportive than traditional co-education settings; they perceived academic achievement to be improved and social anxieties were lessened due to the female-only school. Teasing and distractions were not present, and this was directly attributable to the absence of boys. Girls expressed the benefit of improved academic performance,

as did their teachers (Hart, 2016). According to the NASSPE (2011), there are significant benefits to this instructional model: the brains of boys and girls are programmed genetically different— their learning styles are distinct due to innate, biological differences. As a result, single-gender schools offer a unique learning opportunity for students. In a study conducted by Pahlke et al. (2014), parents, teachers, and students were interviewed regarding their views of the need to attend single-gender settings based on the rationales of gender differences in interest, learning, and gender discrimination. They found strong support for single-gender schools as compared to co-educational settings, noting that "boys' and girls' brains, interests, and peer relationships, respectively, differ in fundamental ways" (p. 268). While research supports the benefits of single-gender schools, there is evidence refuting such benefits.

#### **Drawbacks of Single-Gender Schools**

There is a clear divide among those who believe in the benefits of single-gender schools and those who feel the drawbacks outweigh the benefits (Pahlke & Hyde, 2016). While there is a substantial amount of research surrounding the benefits of single-gender schools, much research suggests it does not have any more positive effect than co-education (Mansfield, 2013). Singlegender schools are challenging for principals as they can be difficult to operate logistically due to shrinking budgets and maintaining co-educational single-gender classes can put a strain on student scheduling (Fabes et al., 2015a). Single-gender schools exacerbate gender stereotypes which already exist among boys and girls; in essence "single-gender schools replace one problem with another" (Fabes et al., 2015b, p. 433). For instance, one study found that African-American students had less of a connection with their peers in a single-gender school; however, this may have been due to the limited number of African-American peers in the school (Patterson & Pahlke, 2011). Similarly, Goodkind et al. (2013) reviewed the research of single-gender schools and asserted that these schools perpetuated gender stereotypes, replaced one distraction with another. They also noted that single-gender schools do not offer the same educational quality as that of similar private schools.

Educators in California experimented with the implementation of single-gender schools and found that students were free from distractions from the opposite gender. However, the distraction from the opposite gender was replaced with other distractions such as boisterous peers and the need to gain popularity. The students also reported difficulty with peer gossiping and friendships (Fabes et al., 2015b). The single-gender schools experiment lasted only a few years until they were closed because they were found to reinforce gender stereotypes. According to Datnow et al. (2005), California's single-gender success in the late 1990s was not related to the model; rather, it was correlated with additional funding which provided services and resources not available in other schools, such as computers. Pete Wilson, California's governor at the time, provided the additional funding for the 12 schools in single-gender schools project. Several years later. the funding dwindled, and as a result, services and resources were not available. Subsequently, the 12 schools began to decline. Datnow et al. (2005) added that the outcomes experienced by the students in the school were related to the care teachers provided to students; therefore, the successes were not attributable to the single-gender model.

Herr and Arms (2004) asserted that leaders should move past measuring the performance of single-gender schools through means of testing and accountability; instead, progress measures should be authentic and develop students' critical thinking skills. Although some research suggests single-gender schools are ineffective, other factors can influence implementation (Hoffman et al., 2015). While research indicates teacher-efficacy improves with the tenure of the teacher, students in a study of a large, urban high school indicated that they did not like the singlegender model. Student survey data responses illustrated their belief that the single-gender environment was not more fun, nor did it diminish disciplinary issues (Hoffman et al., 2015). It is also relevant to note that those who did not favor single-gender schools did not recognize the learning differences between boys and girls.

#### **Boys and Girls Learn Differently**

Some research suggests that boys and girls learn differently. These claims are based on the belief that the male and female brain are wired differently. Others argue there is not merit to such findings; boys and girls do not need to be educated separately. Single-gender schools are seen as beneficial by some educators and researchers as they contend that boys and girls learn differently through various learning styles and interests (Fabes et al., 2015a). Eliot (2013) suggested the claim that boys' and girls' brains learn differently is completely inaccurate and plain wrong and has no bearing on learning. Eliot insisted that such findings are misleading and are a distortion of the underlying facts. The American Civil Liberties Union suggested that the gender stereotype of the male and female brain being wired differently is faulty (American Civil Liberties Union [ACLU], 2017). Learning styles are varied based on gender; boys benefit from hands-on activities and the use of visuals such as charts and graphs. Auditory learning is not a modality which improves learning for boys (James, 2007). While there continues to exist a debate between advocates and critics regarding the benefits and drawbacks, single-gender schools are currently increasing as whole-school models for males and females.

**Single-Gender Male Schools.** Single-gender male public schools are growing in number across the United States in response to expectations from parents, policymakers, and educators that the education of low-income and minority males be commensurate with that of girls. However, these schools are showing mixed results in meeting student achievement needs; but these schools provide other positive benefits. Some boys are failing, dropping out, and not doing well because the standard co-education model does not work for them (James, 2007). Walker (2004) pointed out this disparity, noting "One of the consistent findings has been that with so much emphasis having been placed on the development of girls, that boys are now the group being shortchanged, especially in the areas of reading and writing" (p. 1). Although data indicate the benefits of single-gender male schools are ambiguous (Hoffman et al., 2008), boys are more likely to be expressive when free from girls; meaning their participation in the arts, drama, and music

will increase (Hughes, 2006). Separating boys from girls supports teaching to learning style differences such as how space is used; boys tend to use considerably more learning space than girls and tend to be much more active (Hughes, 2006). Learning styles are varied by gender which necessitates teaching boys' explicit skills to address challenges in classrooms, such as lectures in which the learning is auditory (James, 2007). Further, boys learn better by engaging in hands-on activities, also known as kinesthetic learning. In particular, math and science courses offer such engagement through kinesthetic learning due to the resources and material which can be used to teach concepts. Beyond kinesthetic learning, boys benefit from visual learning using charts and graphs.

**Single-Gender Female Schools.** While boys and girls benefit from single-gender schools, there is a growing concern for girls as the dropout rate continues to climb. In particular, the dropout rate of Latina females is growing due to familial needs such as child care for siblings, teen pregnancy, or a stereotypical expectation that they serve as the household caretaker. Mobley (2010) asserted that girls still lack opportunities to engage with STEM (science, technology, engineering and math) at the same rate as boys, therefore leading to a future limiting college majors and careers in STEM. To address the stereotype that boys are better in science and math, Solar Preparatory for Girls opened in Dallas as a single-gender kindergarten through eighth-grade school focusing on STEM and leadership. To ensure diversity among its students, the school district established criteria for socio-economic diversity so that students of various income levels attend the school (Superville, 2016). It is important for students to have a choice whether to attend the single-gender or co-education school; however, middle school girls in the single-gender environment expressed being able to speak freely in an intellectual learning experience (Spielhagen, 2006). Similarly, Patterson and Pahlke (2011) found that student characteristics are important for students attending single-gender schools. The single-gender female school environment is more supportive, and it has positive outcomes related to academic achievement and reducing social anxiety.

Lofton (2013) conducted case study research to examine staff perceptions for successful implementation of a whole-school, all-girls secondary school reform model. The study focused on three main areas: factors, successes, and challenges in implementing the all-girls, whole-school single-gender secondary school. A cross-section of six school and district staff were interviewed ranging from teachers to the campus principal of Ford Academy and a district level leader. Key factors were identified regarding successful implementation. These factors are:

- 1. Committed faculty and staff;
- 2. Principal leadership;
- 3. Support from the board of trustees;
- 4. Coordination with district-level offices;
- 5. Community advisory council with strong community ties;
- 6. District support;
- 7. Campus vision (Lofton, 2013, p. 166)

The factors provide a framework for understanding staff perceptions for successful implementation of an all-girls, single-gender whole school reform model. Some findings were more prominent and stated as such in the study (Lofton, 2013). A factor on which all participants agreed was the importance of having a "committed faculty and staff" for the implementation including buy-in to the vision of the campus and the commitment to the practices of the single-gender model (p. 166). In addition to faculty and staff commitment, "principal leadership" was singled out as a key factor for successful implementation of Ford Academy, although according to Lofton, the principal was the only participant not to identify this as a factor. Lofton also showed a positive correlation between principal support and teachers maintaining high standards. Additionally, findings indicated school board member and trustee support played a significant role in the successful launch of Ford Academy. It appears that such support was crucial to Ford Academy's success for political reasons with the community and to provide financial resources. The final factor shared by three interview participants was "district support." Whether it be support

from district level leadership in roles of authority or departments across the district, district support was achieved through clear communications. All of the factors identified were seen as key factors for successful implementation of Ford Academy but at different levels of importance.

Lofton's (2013) research was also aimed at understanding successes experienced and challenges in implementing Ford Academy, a whole-school, single-gender girls' school. The themes which emerged regarding successes experienced were: "(1) Student achievement and development, (2) Safe, nurturing campus culture, and (3) Parent and community support" (p. 176). The research concluded with identifying challenges to successful implementation. Four themes emerged from the interviews which were noted in the findings. They were: "(1) Hiring the right staff, (2) Planning for sustainability of resources, (3) Moderating political challenges within the community, and (4) Gaining parent buy-in" (p. 180). It is important to note, some of most important factors for successful implementation serve as a challenge as well. However, it is also important to note that the research is inconclusive regarding the overall benefits of single-gender schools. Factors beyond separating boys and girls are important such as the level in which these schools are implemented (Hart, 2016).

### **Single-Gender Schools by Level**

The number of single-gender schools are growing across the United States for females and males. Additionally, they are seen at the elementary level, middle school level, and high school level. Research has been conducted for each of the three levels.

# **Single-Gender Elementary Schools**

Research on the benefits of elementary single-gender schools illustrates results are mixed; some data suggest it helps girls with mathematics and their view of mathematics while there are conflicting data to the contrary. Ridenour and Hassell Hughes (2016) conducted a study in a magnet urban single-gender elementary girls' school to examine the meaning of their lives in an urban single-gender elementary school. In this ethnographic study, eight African-American girls were interviewed three times over a two-year period to ensure their voices could provide meaning, and they found that the girls showed enthusiasm for mathematics, envisioned a future without limits, and they expressed the benefits of having a good teacher; the single-gender school allowed them to feel empowered. Tichenor, Welsh, Corcoran, Piechura, and Heins (2016) examined the attitudes of elementary school girls in mixed and single-gender mathematics classes and found responses from girls in both settings were similar; there is a need to allow them to feel accepted and comfortable in the mathematics classroom. While the results were similar, girls in the singlegender classes indicated using mathematics outside of school which may indicate teachers have highlighted the utility of mathematics. Single-gender girls' schooling is instrumental in improving achievement in math and other subject areas as well as increasing interest and performance (Tichenor et al., 2016). In contrast, a study of the effects of a school offering single-gender classes on student test scores in a North Carolina school suggested negative achievement effects in mathematics. End-of-year achievement data were lower than students not participating in singlegender classes (Strain, 2013). Solar Preparatory School for Girls, a kindergarten through eighthgrade girls' public school in Texas, is focused on Science, Technology, Engineering, and Math (STEM) to ensure girls are successful in a male-dominated field. Outside of STEM, the school choice option is intended to dispel stereotypes about girls' abilities in math and science. Solar Preparatory School for Girls is also focused on building leadership and confidence in the girls (Superville, 2016).

#### **Single-Gender Middle Schools**

While the single-gender school model can be a controversial topic among educators, the instructional model has benefits for students academically as well as emotionally and psychologically (Hart, 2015). In addition, principals who have participated in leading these schools tend to find them to be more effective, they have more positive attitudes toward them, and have found them more beneficial than co-educational school principals (Fabes et al., 2015a). The

number of single-gender schools in the United States has increased dramatically since 2006 (Hayes, Pahlke, & Bigler, 2011), and a greater number of single-gender schools have been opened at the middle school level, with many created to support the academic underperformance seen by low-income, minority, and African-American students (Datnow et al. 2001; Dwarte, 2014; Hughes, 2006).

Previous research has been conducted at the middle school level and illustrates the benefits and drawbacks. A meta-analysis was conducted utilizing quantitative studies to synthesize results of single-gender versus co-educational schooling of student outcomes in mathematics and science as well as student attitudes, interests, and motivation toward school (Pahlke et al., 2014). The findings indicated there is minimal impact when compared to co-educational settings. Wilson, Gresham, Williams, Whitley, and Partin (2013) examined the effects of single-gender instruction in a rural middle school on self-concept, achievement, and discourse. The research findings from the two rural East Texas middle schools indicate patterns of discourse and thinking among rural single-gender middle school girls was increased when compared to co-educational classes; girls demonstrated more engagement in complex thinking. However, their self-concept was not as strong as their peers in co-educational settings, and academic achievement showed no effect in single-gender instruction (Wilson, et al., 2013). Similarly, Hart (2015) compared perceptions of academic attitudes and school satisfaction among sixth-grade girls over a three-year period. Improved student satisfaction was observed among the 109 girls studied as were improvements in academic achievement. Kombe, Carter, Che, and Bridges (2016) found that neither the coeducation nor the single-gender classroom provided a significantly different student mathematics, self-concept, or classroom environment perception.

Research findings from an urban Baltimore middle school evaluating the reading achievement of African-American males and females showed mixed results. African-American males demonstrated a loss in reading achievement in the single-gender model in years one and two compared to the co-educational model. However, African-American females' reading achievement improved in the single-gender school when compared to the co-educational model (Dwarte, 2014). Hayes et al. (2011) conducted a study to examine the efficacy of single-gender schooling on peer quality effects. Their examination of middle school girls who applied for a magnet single-gender school, but were not selected, provided data indicating that there was no significant effect on academic performance between the groups of students. Mixed results were also found in a study of eighth-grade science classes in a co-educational setting in which the school was offering single-gender classes to students voluntarily choosing to participate. Sampson, Gresham, Leigh, and McCormick-Meyers (2014) aimed to determine the effect of single-gender science classes on male and female science achievement, self-concept, discourse, and perception of such classes when compared to co-educational classes. The results were mixed: the male students made the most academic gains when compared to mixed-gender classes of boys and girls or compared to single-gender girls. The girls showed a decrease in academic achievement in the single-gender classes. The level of discourse showed benefits for girls in single-gender classes, but not for the boys (Sampson et al., 2014).

Single-gender middle schools provide academic, social, emotional, and psychological benefits to girls when compared to the co-educational classroom. The creation of single-gender middle schools serves as a unique opportunity available for students and teachers (Hart, 2015) as middle school students in this setting have a greater sense of community (Riordan et al., 2008). Pahlke, Hyde, and Allison (2014) noted "Thousands of children attend single-sex schools each day, and, in the case of public schools, millions of taxpayer dollars are being spent on single-sex schooling" (p. 1042). These schools offer a place for girls to develop academically, emotionally, and psychologically. Specifically, these environments are safer and more secure for middle school girls who have social anxieties (Hart, 2015). The single-gender classroom is free from distractions, and girls can engage in class without feeling uncomfortable with their appearance when free from boys (Simpson & Che, 2016). It is because girls have better focus in the single-gender classroom that their academics improve. Although girls indicated still having an interest in boys, the learning

environment was negatively impacted by their presence (Hart, 2016). Girls are more connected to these schools based on the numeric presence of students in the same demographic group (Patterson & Pahlke, 2011). Beyond the experiences of students, teachers perceived single-gender classes to be beneficial; however, it is important to note that professional development and administrative support are important factors for successful implementation (Spielhagen, 2011).

### **Single-Gender High Schools**

Hoffman et al. (2008) noted that proponents of single-gender schools advocate for such models because of academic achievement and social reasons. In their research of a large, urban high school, teachers reported being more effective in their teaching and having greater efficacy which correlated to the longevity of their teaching. Although teachers exhibited strong feelings of efficacy, students demonstrated negative feelings toward the single-gender model, but the classroom culture was beneficial for girls when compared to the co-educational model (Hoffman et al., 2008). Young Women's Leadership School of East Harlem in New York has experienced success. In the first 10 years of its existence, all girls from every graduating class were accepted to college (Salamone, 2007). Goodkind et al. (2013) surveyed high school students in a low-income, African-American community. Students' responses suggested the single-gender environment perpetuated gender stereotypes rather than mitigating them. Students' responses were similar to those noted above: the distractions that were intended to be reduced were replaced by another distraction, and students did not feel the single-gender environment provided the educational opportunity to that of a private single-gender school. The researchers clarified that "students felt they were being punished" (p. 1179).

### **Conflicting Research**

Advocates and critics express strong arguments on both sides of the single-gender school debate; as a result, the single-gender school model is not without controversy (Hart, 2015). Educators and policy makers are likely to continue expanding school choice in search of solutions

aimed at meeting the needs of students who have not traditionally experienced success (Eckes & McCall, 2014). Separating boys and girls is controversial, and a case can be made from both sides as to the benefits and drawbacks. For example, organizations such as the American Civil Liberties Union and the National Organization of Women raised concerns of equity with these schools (Hart, 2016).

## Advocates

There are various underlying assumptions that advocates of single-gender schools support. They believe academic achievement will improve as a result of separating boys and girls because student interests can be met with differentiated instruction. Some believe there are biological differences among boys and girls, and others believe students in low-income settings will benefit because of the social influences (Pahlke et al., 2014). Separating boys and girls will take away distractions allowing students to focus on learning (Anfara & Mertens, 2008). Others argue that single-gender classrooms or single-gender schools can better serve low-income and minority students through improved academic achievement, student behavior, and the varied learning styles associated with boys and girls (Hughes, 2006). Hughes noted that in co-education classes, students are distracted by each other. This is not the instance in single-gender schools or classes because such distractions are diminished or do not existent. She added that boys are more apt to participate in fine arts, music, and engage in topics attached with emotion. Single-gender schools serve as a choice option typically available for only the affluent in private settings.

# Critics

Critics of single-gender schools argue they should not exist. Reasons for these claims are that separating students creates inequality, student academic achievement is not guaranteed, student socialization among genders is limited, it creates isolation, and school success is predicated on context (Anfara & Mertens, 2008). As reported by Hart (2016), "National organizations like AAUW and the American Civil Liberties Union (ACLU) remain opposed to single-sex programs on the premise that separate but equal is inherently unequal" (p. 33). The ACLU asserts that proponents of single-gender schools are perpetuating faulty stereotypes in which some claim that boys and girls are hard-wired differently. They add that such programs in low-income and minority communities were aimed at closing the achievement gap for minority males; however, the girls were left without support (ACLU, 2017). The National Coalition for Women and Girls in Education asserted that single-gender programs increase gender stereotypes, the single-gender programs do not provide equity for those not in these programs, and faulty assumptions are made about single-gender learning (Mobley, 2010). Bigler and Signorella (2011) pointed out that there are hundreds of studies on the benefits of single-gender schooling, but not "sufficient empirical evidence" to suggest it is more effective (p. 663). Some critics ask how single-gender schooling can be justified given the lack of significant empirical research supporting its success. Boys' and girls' brains do not differ much; the claim that they should be taught separately is among the weakest (Eliot, 2013). Further, critics turn to the Virginia Military Institute (VMI) and its violation of the Fourteenth Amendment of the Equal Protection Clause (Salamone, 2007) in which female students were excluded from participation at Virginia Military Institute. Consequently, such concerns have caused many single-gender schools to be closed due to the legal challenges made by opponents; the school closings were irrespective of race or cultural class, instead due to concerns of gender equity (Herr & Arms, 2004).

#### **Implementation of School Reform**

Comprehensive school reform (CSR), has played a major role in changing the educational landscape of schools across the United States over the last several decades. Much research has been conducted regarding the extent to which these reform models affect teacher practice (Rowan & Miller, 2007). Similarly, school principals are seen as central to implementation of CSR and their role places them in the position of building-level policymakers as they navigate the diverse opinions and expectations from various constituents (Schechter & Shaked, 2016). Rowan and

Miller (2007) noted the importance of making instructional improvements through explicit, welldefined instructional strategies, and effective coaching and monitoring. Thus, it is critical that teachers and leaders are collaborators in the process. Specifically, Rowan and Miller (2007) stated:

In essence, CSR design teams cannot, by themselves, implement program endorsed instructional innovations in schools; instead, they must rely on teachers and other school staff to carry out this work. From the perspective of organizational theory, then, CSR programs and local schools are in what organization theorists call a principal-agent relationship, where CSR design teams are the principals and local school personnel are the agents carrying out an instructional reform project. (p. 255)

The principal's role in leading educational reform is paramount for successful implementation; without strong leadership, the educational reform will fail. Principals often receive external reforms and must be able to frame them so that the demands do not conflict with internal goals; this requires sense-making with the teachers and staff (Porter, Fusarelli, & Fusarelli, 2014; Schechter & Shaked, 2016). As school building principals lead reform initiatives, they must be armed with strong plans to lay a foundation for effective implementation. Planning is a primary step in the reform process and can serve as the distinction between success and failure. Aspects of planning include reviewing previous performance, setting goals, adjusting and establishing structures for successful implementation (Strunk, Marsh, Bush-Mecenas, & Duque, 2016).

According to Schechter and Shaked (2016), when principals receive external reform requirements, principals only implement them partially; however, the findings from their qualitative study indicate principals adjust the reform to fit the school reality, provide care for teachers during the implementation, and use discretion regarding how the reform is implemented. That is, they use their own good judgement as to campus context and the pragmatic nature of the reform to be implemented. To add to the complexity of successful implementation, as the number of participants becomes greater in the implementation process, the less likely the implementation will be successful, and the implementation is likely to be uneven. Uneven implementation is also attributable to the decentralization and loose nature of the United States educational system. Ultimately, those closest to the reform implementation are key to quality implementation (Porter et al., 2014).

In a study conducted by Porter et al. (2014) to examine the factors for successful implementation of the Common Core State Standards (CCSR), it was found that the principal's role in framing and teacher collaboration with colleagues in a Professional Learning Community were important factors to the success of implementing the CCSRs. Teachers, however, noted the humbling experience of implementing reform and making them feel as if they were first year teachers. This was may be due to the pace with which the reform was to be implemented; teacher survey responses suggested the expectation was too fast and not enough time for quality implementation (Porter et al., 2014). In regard to training, resources, and communication, teachers expressed the benefits of training and resources, but felt they could have been improved to enhance implementation while communication was poor due to the lack of timelines, which created uncertainty among teachers.

#### **Summary and Implications**

This review offered an examination of the body of literature focusing on the legal history and background of single-gender education, an examination of school choice and the reasons parents select schools, an overview of the benefits and drawbacks of single-gender schools, research of single-gender schools by level, and conflicting research related to single-gender schools. The signing of the No Child Left Behind Act (NCLB) by President George W. Bush in 2002 allowed for the creation of "innovative" schools in the public-school sector. While Title IX limited the separation of students by gender and there still remained red tape prohibiting singlegender schools from operating, more recent legislation has opened possibilities for educators. In 2004, the Office of Civil Rights approved the implementation of single-gender schools with specific guidelines. Just two years later, NCLB was amended allowing for the use of federal funds to create "innovative" schools, such as single-gender schools.

Single-gender schools were not completely uncommon prior to this change in legislation; educators in California piloted some single-gender urban schools in the late 1990s under the direction of Governor Pete Wilson. The schools were aimed at providing a quality education to minority and low-income students. The research on the success of these schools indicated limited benefits for students, and the schools did not remain open very long. Accordingly, longitudinal data were not available. Some researchers argued that the additional resources allocated to these schools was the reason for any of the successes seen. There have been many schools operating single-gender classes subsequent to NCLB being amended in 2006. Some educators have implemented single-gender classes in co-education settings while others have implemented a whole-school model. The research seems to be inconclusive with respect to successful school reform interventions that are attributable to the makeup of single-gender student populations.

Prior to the NCLB, much of the research regarding single-gender public schools came from abroad and did not provide the relevance necessary for application in the United States. After 2006, the proliferation of these schools in co-education and whole-school implementation offered a new era for such research. The research conducted across all levels of public schooling (elementary, middle, and high school) provided an even bleaker outlook for males than females with critics arguing that single-gender schools perpetuate stereotypes for boys. In particular, lowincome, minority boys are further marginalized by these schools.

As previous research illustrates, there is debate as to whether single-gender public schools are a successful school choice option (Ridenour & Hassell Hughes, 2016). Bigler and Signnorella (2011) noted that "despite increasing popularity, single-sex education remains controversial and no consensus has been reached on the optimal gender composition of classrooms" (p. 659). Many empirical studies have been conducted to determine the benefits of single-gender schooling but have been inconclusive (Hart, 2015; Pahlke & Hyde, 2016). Goodkind et al. (2013) asserted that more research is needed on the effects on achievement of low-income minority students. The research around single-gender school success is weak; a quantitative review of research in 2005 illustrated the ineffectiveness of previous studies as they did not account for factors such as selective admissions, socio-economic status, and others (Bracey, 2007). According to Anfara and Mertens (2008), although girls tend to believe the single-gender environment is superior, the academic achievement is not improved. The success of these schools is predicated on the context and is influenced by factors like class size, teaching styles and instructional practices. Furthermore, questions continue to be raised pertaining to equity for females in such school models (Anfara & Mertens, 2008). Feminist organizations, such the American Association for University Women (AAUW) and the National Organization of Women (NOW), do not believe that singlegender schools provide educational equity (Datnow et al., 2001). According to Fabes et al. (2015a), many principals identified challenges with single-gender schooling. Additionally, others affirmed that single-gender schooling is no more effective than co-educational settings (Pahlke & Hyde, 2016). Bigler and Signorella (2011) noted:

With the advent of NCLB and greater accountability for student performance, experimentation with different methodology to produce improved results is a natural response. However, due to the historical legacy of gender and racial equity found in separate educational settings, it would be advisable for current education reforms to create single-gender public schools or classrooms to be approached with caution. (p. 63)

Although the research is inconclusive on the overall success of single-gender schools, there is evidence that single-gender schools work when implemented effectively and these schools do have benefits for some students. Specifically, there is more research corroborating the benefits of single-gender schools for low-income, minority girls in urban schools. Such benefits are improved student academic achievement, a more positive classroom or campus climate, and improved self-concept. The aforementioned are worthy in support of the opening and implementing of single-gender schools, as these schools tend to benefit students. Therefore, the argument of whether they are worthy of students is not the question; rather, the focus should be on what factors contribute to the successful implementation of single-gender, urban, female middle schools. As Lofton (2013) and Bradley (2006) suggested, additional research regarding the implementation of single-gender female schools is needed, particularly at the urban middle schools. Further, there remains a gap in the literature regarding the perceived factors of teachers who have actually participated in the successful implementation of single-gender girls' middle schools, as specific implications for future research have been highlighted.

# **CHAPTER 3: METHODOLOGY AND PROCEDURES**

The purpose of this chapter is to outline the methods and procedures used in this research. A description of the research methods and design will be provided as well as a description of the population studied. Also, the data collection techniques, data collection protocols, and data analysis procedures to be used in this study will be outlined.

## **Purpose of the Study**

Single-gender schools serve as a competitive educational choice for parents and students. This choice which came about through the amendments of Title IX (Mansfield, 2013) and the United States Department of Education issued guidelines for single-sex schools (Salamone, 2006). In addition, the No Child Left Behind Act in 2006 approved the use of federal funds for innovative schools such as single-gender schools (Pahlke et al., 2014). There are a growing number of single-gender, all-girls middle schools which provides an opportunity to examine the successful implementation of these schools. Lofton (2013) and Bradley (2006) suggested conducting studies to further examine the implementation of an all-girls, single-gender middle schools. Thus, the purpose of the study was to examine teachers' perceptions of factors for successful implementation of single-gender girls' urban middle schools.

# **Research Questions**

This research study was guided by the following research questions:

- 1. What are teachers' perceptions of the factors contributing to successful implementation of a whole-school, all-girls, single-gender urban middle school?
- 2. What are the teachers' perceptions of their experiences in the implementation of a wholeschool, all-girls, single-gender urban middle school?
- 3. What are teachers' perceptions of the challenges in implementing a whole-school, all-girls, single-gender urban middle school?

4. How do teachers address implementation challenges in a whole-school, all-girls, singlegender urban middle school?

#### **Research Methods and Design**

### **Qualitative Research Methodology**

The qualitative research epistemology refers to the construction of knowledge in the research process by the researcher and the participant. This knowledge creation between the researcher and participant is unlimited and is built within the context of the relationship. This knowledge acquisition is strengthened through their interactions (Hays & Singh, 2012). This qualitative study used an interpretivist approach in examining the teacher perceptions of the factors for successful implementation of an all-girls, single-gender urban middle school. An interpretivist approach seeks to understand subjective perceptions in a social situation (Roth & Mehta, 2002). Further, the goal of the interpretivism paradigm is to "unravel patterns of subjective understanding" rather than an objective truth (Roth & Mehta, 2002, p. 132). Thus, the perception of the participant is critical to this paradigm. According to Willis (2007), "Interpretivists argue that making meaning is a group or social process. Humans in groups, and using the tools and traditions of the group (including language), construct meaning and thus are able to share their understanding with other members of the group" (p. 4). Interpretivism was used for the study because it gave voice to individuals and provided understanding for their perspective as a group in a social situation (Roth & Mehta, 2002). Qualitative methods are justified for this research as they provide thick description (Geertz, 1973). Further, qualitative research offers a way to understand complex individual behaviors and it is exploratory in nature (Miles & Huberman, 1994).

# **Grounded Theory**

Grounded theory is used to generate propositions that may result in a conceptual framework. In a grounded theory study, interviews play an integral part of the data collection process as the researcher attempts to develop a theory, model, or framework (Creswell, 1998). The

transcript data in interviews are reviewed to determine categories of information which are similar. Categories with similar topics of information become properties (Creswell, 1998). The theory is developed through an iterative process in which the researcher reads through transcripts to establish code and continues this process as more data are collected (Hays & Singh, 2012).

Grounded theory has strengths and weaknesses as a form of research. In grounded theory, the researcher seeks to identify causal conditions, intervening conditions, and consequences; the strength of grounded theory is the continuous review of data in pursuit of the aforementioned (Creswell, 1998). A challenge faced by some grounded theory researchers is the difficulty of determining one core category serving as the central phenomenon of the study. If the researcher is not able to define categories well through the coding process, then subcategories and connections among categories will not likely be strong (Corbin & Strauss, 1990).

#### Case Study

A case study was employed to understand the perspectives of the participants. In social research, case studies are used to document the views and understandings of participants in a social context. These understandings can often be applied to other similar situations or individuals. It is important for the researcher to select cases for which much can be learned from the case study (Hays & Singh, 2012). Case studies consist of multiple data sources providing an in-depth exploration of a system within a context of a program, event, or individual (Creswell, 1998). A case study was selected so the teacher perceptions of the factors for successful implementation of the single-gender girls' urban middle school could be understood. Creswell (1998) asserted that researchers should consider which type of case study is most applicable to the given research. For this study, a single case design was followed. The focus was on a single-gender girls' urban middle school.

#### **Site and Participants**

The main aim of this study was to identify factors associated with the successful implementation of single-gender girls' urban middle schools. Therefore, a successful single-gender girls' urban middle school was selected for this case study due to the student academic achievement based on the Texas Education Agency's criteria of achieving six out of seven possible Distinction Designations earned in the 2016- 2017 school year (TEA, 2017) and the specific nature of the school serving middle school girls in an urban school district with successful student academic achievement. The school was in an urban Texas public school district in North Texas and was transformed from a comprehensive neighborhood school to a single-gender girls' neighborhood school in the Fall of 2016. The student enrollment was approximately 1,100 students with nearly 80% of the students coming from economically disadvantaged households. The student demographic was predominantly Latina and African-American; a small percentage of students came from various other student groups. The English Language Learner (ELL) population was just above 50%.

An important aspect of qualitative research is the participant selection process (Creswell, 1998). In this study, participants were selected through purposeful sampling. When selecting participants for the interview process, the researcher should be careful to select participants who are not shy and are willing to fully engage in the process (Creswell, 1998). Purposeful sampling allows the researcher to develop specific criteria for the sample of the study prior to engaging in the process (Hays & Singh, 2012). Based on the established criteria for this study, seven teachers were selected through a lottery process to participate in the research study. Teachers from among the school faculty who have remained at the campus from the school year in which the campus opened as a single-gender school were placed in the lottery for possible inclusion. Also, teachers in grades six through eight from core content academic areas of instruction were only included in the random group to be participants as they had a specific role in directly aiding students in the academic achievement obtained. For the purpose of this study, core content areas are identified as

reading, mathematics, science, or social studies. The race and tenure of the teachers was not considered when placing participants in the lottery process. The selection of these participants was completed through a lottery system because the research was aimed at an in-depth understanding of the varied experiences and perceptions from teachers as their experiences and perceptions will provide a thick description of the school implementation (Geertz, 1973).

#### **Data Collection Protocols**

The collection of research data was informed by many factors such as the research topic, research questions, a research paradigm, the research setting, and the role of the researcher in the study (Hays & Singh, 2012). According to Creswell (1998), determining which data to collect and how to tabulate such data can be challenging for the researcher. For the purpose of this study, data collection consisted of semi-structured interviews, document analysis, and reflexive journaling. Semi-structured interviews provide for a thick description of the phenomenon (Geertz, 1973). Field testing of the instruments was conducted in advance of the study to determine reliability and validity. Lofton (2013) granted permission for the use of interview questions employed in the researcher's study. However, they were modified to align with the research questions in this study. A list of 10 questions were used to guide the interview. Although the interview questions were previously piloted and used in Lofton's study, the instrument was piloted prior to this study with individuals who serve in a similar capacity and have similar characteristics as those in the study.

During the interview, the protocol initially developed by Lofton (2013) was followed to allow for a systematic approach to each interview. It can be found in the appendix. The questions served as the basis for the interview while allowing the participant to shape the process as the interview continued. The semi-structured interview afforded the participant to provide rich description of the phenomenon (Hays & Singh, 2012).

# **Data Collection Process**

Documents used for data collection are important because they can serve as a secondary data tool. Personal and public documents may be reviewed to provide clear understanding of a

participant's experience (Hays & Singh, 2012). For this study, the campus improvement plan, professional development agendas and resources, and teacher collaboration meeting agendas and minutes were reviewed during the document analysis process.

#### **Institutional Review Board Approval**

The researcher applied for approval from the University of Texas at Austin Institutional Review Board to conduct this qualitative research. The primary purpose of the institutional review board is to protect human subjects in the research process. Institutional review boards are a standard practice in human research (Hays & Singh, 2012). Approval of this research was also obtained from the district in which the single-gender school resides.

### **Arrangements for Data Collection**

Upon gaining approval from the Institutional Review Board at the University of Texas at Austin, approval was requested and granted by the school district in which the single-gender academy was located. Additionally, the researcher conferred with the principal of the singlegender girls' school to identify possible candidates for the study meeting the established criteria. According to Hays and Singh (2012), the specific number of participants should not be central to the researcher in preparing for the study; rather, the qualitative questions guiding the research study guided the researcher in determining the number of participants. The researcher contacted the participants through e-mail communication to arrange a time convenient for interviews to take place.

#### **Interviews**

Interviews are a widely-used strategy in qualitative research. Generally, interviews last forty-five minutes to one hour and range from five to ten questions in length. Semi-structured interviews are often accompanied by a protocol used as a guide (Hays & Singh, 2012). Semistructured or in-depth interviews were conducted on-site and lasted approximately forty-five minutes to one hour. Face-to-face interviews were conducted on an individual basis with seven teachers serving students in the single-gender girls' urban middle school who were at the campus since it opened and were teachers in one or more of the core content areas. The homogenous nature of the participants supported interviewing a sample size of seven and provided deep understanding. The interview questions were aimed at identifying the factors for successful implementation of the single-gender girls' urban middle school. In addition to the semi-structured interview, probing questions were employed to gain deeper understanding and these afforded opportunities for the participants to have more control over the interview structure and process as well as include more participant voice (Hays & Singh, 2012). Through the seven interviews, saturation of information was achieved to allow for the experiences of teachers in the single-gender girls' urban middle school to be fully understood, and any further interview information would confirm interview themes. According to Hays and Singh (2012):

Once the interview begins, the interviewee has more say in the structure and process. Even with those that do include a protocol, every interview question does not have to be asked, the sequence and pace of interview questions can change, and additional interview questions can be included to create a unique interview catered to fully describing the interviewee's experience. (p. 239)

Each interview was conducted outside of the school day at the convenience of the participant and lasted 45 minutes to one hour in length. The interviews were held in the principal's conference room in the main office and were recorded using an audio device. Prior to the scheduled interview, a protocol was developed. Protocols are an important aspect of the interview process as they provide an organizational structure to conduct the interview. Appropriate recording devices are also critical to the process for the interviewer and the interviewee (Creswell, 1998). The interview questions were used by the researcher to conduct the interview.

### **Document Analysis**

Document analysis is a data collection technique that researchers employ to gain understanding (Hays & Singh, 2012). Relevant documents were examined to understand factors contributing to the successful implementation of the single-gender girls' urban middle school. Documents included professional development agendas, teacher collaboration meeting agendas, and the campus improvement plan. The documents illustrated campus priorities and areas of instructional focus.

### **Reflexive Journaling**

Reflexivity is an important component of the research process. It is used by the researcher to help the audience understand the research process. Reflexivity is a benchmark for creating trustworthiness and credibility of the research. In doing so, researchers exhibit positive regard and empathy. Further, they listen without judgment (Hays & Singh, 2012). Journaling was used as part of the research in order for the researcher to record his understanding and perceptions of the interview responses. Reflexive journaling was used by the researcher at the conclusion of each interview. This practice allowed for reflection of the interview, and the interview responses (Hays & Singh, 2012).

#### **Researcher's Role**

Subjectivity allows the researcher to get closer to the interview data and understand the phenomenon more closely through the shared lived experiences of the participant (Hays & Singh, 2012). A colleague assisted to ensure the voice of the participant was captured in the transcription rather than that of the interviewer (Hays & Singh, 2012).

As a researcher, it is important to capture the perceptions, feelings and descriptions of the subjects being interviewed. The researcher had experience in the planning and development of a single-gender school. Thus, it was important for the researcher to be aware of his positionality when conducting the research. The researcher served in a supervisory role in the school district in

which this study was conducted. Therefore, it was important for the researcher to maintain positionality during the research process. Researchers bring bias to the research and should seek to maintain positionality (Hays & Singh, 2012). Therefore, the researcher maintained positionality by using an interview protocol and participant checks so the views of the staff members were understood through the interviews. A colleague provided support to ensure coding was reflective of the voices interviewed. In addition, the researcher bracketed his feelings to accomplish participant voice (Hays & Singh, 2012).

### **Data Analysis Procedures**

# **Data Analysis Techniques**

The data analysis process using grounded theory aims to develop a theory of a phenomenon. Consequently, the researcher applied inductive technique to generate a particular theory. Corbin and Strauss (1990) explained that grounded theory research has "specific procedures for data collection and analysis" (p. 6). The data analysis process should not begin prior to the data collection in grounded theory research; rather, the researcher must only begin analysis of data once the first piece of data is available. The data analysis process is lengthy and requires many steps or procedures and the process must be conducted in a systematic manner as to capture all relevant data (Corbin & Strauss, 1990). Creswell (1998) asserted the procedures in the data analysis process in a grounded theory study involve developing categories of information known as opening coding, then interconnecting the categories through axial coding, followed by, selective coding employed to create a "story," and concluding with a discursive process with a theoretical proposition (p. 150). According to Corbin and Strauss (1990), "Coding is the fundamental analytic process used by the researcher. In grounded theory research, there are three basic types of coding: open, axial, and selective" (p. 12).

# **Open Coding**

Open coding involves the researcher examining collected information such as interview transcripts, document analysis, reflexive journaling, and participant checks to identify categories of information. This iterative process is continued by the researcher until saturation is achieved. That is, no new codes or categories are found after further interviews or information is collected (Creswell, 1998). The open coding process is a comparative process by which the researcher views actions, events, or interactions (Corbin & Strauss, 1990). Open coding was used during the research process to determine categories of information through the interview process, participant checks, field notes, and reflexive journaling. The continual comparison of data in this process supports the researcher against bias (Corbin & Strauss, 1990).

### **Axial Coding**

During the axial coding process, subcategories are generated and should align to the category in which they are placed (Corbin & Strauss, 1990). The researcher sought to identify patterns as information was obtained to develop relationships among data; individual pieces of data did not serve as a basis for a hypothesis; instead consistent representation of such data was used as the basis for hypothesis development. The researcher should look for conditional relationships in the axial coding process (Corbin & Strauss, 1990).

# **Selective Coding**

The selective coding process involves the researcher making connections among categories to develop a central phenomenon centered on one main category. The connections between categories must be strong to substantiate the findings. When the categories are not well connected, a central phenomenon is not likely to be well identified in which all data are not well linked (Corbin & Strauss, 1990).

# Credibility

Establishing credibility in a qualitative research study is paramount in corroborating the findings in such a study (Hays & Singh, 2012). This qualitative study is aimed at offering researchers strong evidence through established criteria to determine findings.

# Transferability

This research study is not expected to be generalizable across other case studies; rather, it is expected that this case study will provide enough of a description so that others may use the findings to determine information from the study which may be applicable. It is not the goal of qualitative research to make findings generalizable, but instead, the goal is for researchers to use findings to make applicable to participants, settings, and a particular time frame as appropriate (Hays & Singh, 2012).

# Dependability

The findings from this research were expected to provide credibility to researchers with similar phenomenon. The findings should be similar when the strategies are employed with a similar phenomenon in a similar study (Hays & Singh, 2012). This study was expected to offer sound research others can agree with based on the strategies employed.

### **Data Analysis Technology**

Capturing the voices of participants is paramount in this research. Transcription software has continued to evolve to support the qualitative research process. The researcher needed to determine the most appropriate software aligning to the data collection, specifically, whether to use coding software available to aid in placing codes into categories or coding programs which support the development of a theory by use of a collection of documents (Hays & Singh, 2012). Rev.com was used in this study to record and transcribe the seven interviews and was used in the initial coding process.

This chapter outlined the methodology and procedures used in this qualitative study. The qualitative theoretical framework of interpretivism was used in this case study through a random sampling of participants constructing meaning. Their meaning was constructed through interviews, document analysis, reflexive journaling, field notes, and participant checks. Grounded theory was employed to develop a conceptual framework. The data collection protocols and procedures ensured validity and reliability were achieved and that the human subjects were protected through the University of Texas at Austin's Institutional Review Board approval.

### Triangulation

Triangulation of data through the use of various data sources was employed in this study in order to strengthen data findings. According to Hays and Singh (2012), "Triangulation is a common strategy for ensuring trustworthiness that involves using multiple forms of evidence at various parts of qualitative inquiry to support and better describe findings" (p. 207). Interviews, document analysis, field notes, and participant checks are forms of data sources, and protocols in which triangulation of data to maintain trustworthiness were employed.

Triangulation in this study was accomplished through participant checks. The researcher used participant checks to avoid bias in the process and ensure complete understanding was achieved from the interview. Participant checks can be done immediately following the interview or after the interview has been transcribed. If the participant check is conducted following the transcription of the interview, the participant can review the transcription to ensure the interpretation of the participants is accurately portrayed (Hays & Singh, 2012). Participant checks are conducted by the researcher to ensure the perceptions of the participants is accurately reflected; participant checks support maintaining trustworthiness of qualitative research through reliability and validity. Further, conducting research with the lens of curiosity rather than with the knowledge of the particular topic is important. Additionally, participant checks provide for greater trustworthiness in the interview process (Hays & Singh, 2012). Participant checks were conducted

at the conclusion of each interview to ensure the voice of the participant was provided in a correct account. As part of the research process, data was triangulated by reviewing the interviews through coding and themes, reflexive journaling, and participant checks. Finally, each of the multiple sources of data collected were triangulated to verify results; this included interviews, participant checks and reflexive journaling. Finally, data analysis procedures of coding helped to ensure trustworthiness of the data. Chapter 4 will provide contextual understandings of the site location and the aspects of the school which make it unique.

# **CHAPTER 4: CASE STUDY CONTEXT**

Girls' Middle School is unique, and the contextual characteristics are important to understand in advance of the emerging factors. The campus is located in a north-central Texas urban school district in a community of majority single-family homes. It was transformed from a co-education middle school to an all-girls, single-gender middle school in the 2016- 2017 school year. The campus originally opened as co-education campus serving students in grades six through eight and was repurposed to the comprehensive neighborhood single-gender campus just a few years upon opening its doors to students. Prior to its transformation to a single-gender school, the campus had only been open for three years as a neighborhood middle school. Consequently, the building is new and it has many of the 21st century upgrades parents and staff would expect.

## **Study Context**

### **Student Demographics**

The student demographic makeup of the campus from the co-education campus and the composition subsequent to becoming a single-gender school has remained essentially the same except for the change in gender makeup. While the campus is composed of all female students, the overall enrollment has increased slightly to over 1,200 students from 1,100 the previous school year. The student body consists of 79% Hispanic girls and nearly 19% African-American girls, with 90% on free or reduced lunch. Students receiving special education services represent under 10% of the overall population, and 17% of the girls are identified as Talented and Gifted. The student demographic population at Girls' Middle School is similar to student enrollment across the district in which the campus is located.

**Campus Staff.** Given the large student enrollment, the staff is correspondingly large as well. In the 2016-2017 school year, there were 65 teachers serving the students. 80% of the teachers were female and 20% male. There was rich diversity in teaching staff as 52% of the staff were African-American, 12% were Hispanic, 23% were White, and 9% were listed as Other.

Experience levels varied significantly across the participants, with 11 teachers with zero years of experience, 22 teachers with one to three years of experience, eight teachers with four to five years of experience, and 21 teachers with six or more years of experience.

During the first few years the co-education campus was in operation, the student achievement data were consistent with other middle schools with similar student demographics. The student achievement of the campus was not strong. Consequently, the principal and community members began to discuss the possibility of transforming the co-education campus to a single-gender school serving all female students in the attendance zone; it would not have entrance requirements. As a result of interest expressed by the principal, campus leadership team, community members, and staff, approximately six months of planning and writing an application for district approval to become an all-girls, single-gender campus ensued.

In addition to the application and planning process, the campus prepared for the subsequent school year to engage a significant portion of the female student population in grades six through eight in a pilot program in an effort to apply the collective learning and research garnered for effective implementation. There were about 375 students who participated in the pilot program. A specific focus was placed on promoting a positive culture and climate among the female students. All of the female students enrolled in the pilot program opted in, and the remainder of the students continued in the co-education classes for the school year.

To prepare for the launch of the pilot program on the co-education campus, the campus administrators and a group of teachers began to publicize the option for girls to opt in to attending the pilot program for the 2015-2016 school year. Initially, parents and students met the possibility with resistance. However, as the details were crystalized over time, there was a more positive response to participating. Through their efforts to promote the pilot option, the team visited with parents at apartment complexes within the community, held parent meetings at the campus, and obtained written approval from parents for their child to attend the pilot program. Ultimately, each

grade level from sixth through eighth were able to host a full team of teachers and students collectively working on one team with a common set of students.

As the pilot was launch during the 2015-2016 school year, the principal, a team of teachers, and other campus administrators, engaged in the planning and preparation process with many constituents internal and external to the campus for the possibility to implement the single-gender girls' school across the entire campus. Monthly meetings were held with the local city's Chamber of Commerce to share the status regarding the progress of the planning as well as to garner input and feedback to further advance the planning. In addition, research and the benefits learned from various site visits and literature were shared in the meetings. Attendees ranged from the local council members, pastors, community members, alumni from the feeder pattern high school, school district personnel, and school staff. The persons in attendance represented a broad cross-section of the community and well represented the local school community.

A site-visit team conducted visits of single-gender female schools around the state, and other site visits were conducted outside of the state. The findings and experiences were shared for consideration as the monthly meetings were held. While some of the single-gender schools were magnet, some were comprehensive and were in urban communities. These characteristics were considered since Girls' Middle School is in an urban community.

As the school year ended, the campus had implemented the pilot program for the entire school year and saw strong progress. Beyond developing a positive culture and climate, a main outcome to be measured from the pilot was the improvement in student achievement. The Texas Education Agency (TEA) released the State of Texas Assessment of Academic Readiness (STAAR) results. There was significant growth at the campus; in particular, the pilot program showed even better progress relative to co-education classes in the building.

The campus was given approval by the school district to proceed as an all-girls, singlegender neighborhood middle school for the following school year (2016-2017). Consequently, all girls from the campus would remain on the campus due to it becoming their neighborhood singlegender school, or they had the option to transfer to a nearby middle school. Additionally, all of the male students from the attendance zone were to attend a neighboring middle school which would become the neighborhood middle school for the boys.

The principal and the principal's supervisor led monthly meetings with school district personnel from many departments to engage in planning for the school transformation initiative. These meetings facilitated the ability to achieve significant progress in a short period of time due to all of the various departments being in attendance and committing time and resources to the campus planning. School district personnel and their respective departments were very supportive of the initiative; however, when there were challenges or any resistance, there was collective commitment from the superintendent and cabinet level team members. Thus, any challenges were able to be quickly resolved.

The superintendent approved the school to be implemented, and with this support, cabinetlevel members correspondingly provided support for the program by communicating the importance of various departments contributing necessary time and resources as the campus leadership engaged in the planning and preparation process leading up to the launch in 2016-2017. As part of the support provided, leaders from approximately 20 different departments committed to meeting with the principal and the principal's supervisor on a monthly basis to collectively discuss the progress made toward the program launch. The meetings consisted of the principal supervisor and the principal leading the monthly meetings in which all department leaders provided an update on their department's work. In addition to updates, the principal would make requests and share with each department how they could provide additional support. The meetings were a productive means to get many internal stakeholders in one meeting to collectively contribute to the single-gender model.

The campus fully implemented the all-girls, single-gender middle school model following the pilot program in the 2016-2017 school year. To support this effort, prior to the start of the school year, the principal secured some guest speakers who were nationally known for their expertise in single-gender education. They provided professional development for several days to help the teachers understand some of the teaching techniques from which girls would most benefit.

Along with the single-gender model, the campus established a STEAM (science, technology, engineering, arts, and math) focus. STEAM provided creativity and originality for teachers as they delved into teaching practices which were geared toward offering the girls a targeted focus in math, science, and technology. This has allowed the girls a unique learning experience in which the campus has thrived as evidenced by winning various competitions, such as in robotics. To enrich their learning in STEAM, the advisory period was used every other week to bring guest speakers and science-based activities into the school day. Also, the school district provided meaningful resources and funds for the campus. Hands-on materials were allocated to the campus to create a Makers Space, a lab used to enhance the science technology through real-world experiences. Above and beyond the resources and material provided for the students, a Tier 1 university in the state partnered with the school to provide 15 staff members access to earning a master's degree aimed at developing science and technology proficiency in the classroom.

While the campus transformed to a single-gender campus, it continued to offer athletics and other extra-curricular activities to students. Due to the number of girls on the campus, the athletic offerings were doubled in most sports so that more opportunities were made available. For example, when the campus was a co-education school, only one eighth grade basketball team competed in Urban Interscholastic League (UIL); but with the large increase in female students, a second eighth grade team was added. Similarly, this was done in each UIL sport offered at the campus. Thus, more of the girls were able to remain in sports with the increase in teams participating. The creation of more athletic teams and extra-curricular activities served as an asset to the school. Nearly all the female students opted to stay at the campus as it became full scale single-gendered; very few girls elected to attend the neighboring co-education middle school.

**Master Schedule.** The administration and staff established some targeted time and components in the master schedule which were aimed at ensuring student and staff engagement in

activities to reinforce school priorities. In particular, an advisory period was created for daily engagement among teachers and students. The time was created so that teachers could spend time with the female students attending to gender specific topics, conversations, and activities related to self-concept as well as provide academic interventions. Instructional courses were set prior to the start of school that promoted college-readiness, such as Advancement Via Individual Determination (AVID), technology-based courses, and various arts courses. They served to strengthen the schoolwide STEAM approach. After-school extra-curricular activities added value to the STEAM focus, such as arts classes, Robotics competitions, and other science related activities.

**House System.** In an effort to develop campus culture and community among the girls, a "House System" was developed. The House System consisted of a team of teachers all sharing the same group of girls, who were randomly selected across grades six through eight. These girls were shared by a group of core content teachers who assisted the girls with developing a House name, logo, and activities which promoted a connectedness and common House identity. Each House met every other Friday, on a regular basis, to engage in team-building activities among students and activities promoting group connectedness. While the administration provided guidance on the structure, the curriculum and topics were developed by a local non-profit organization that works with girls. As a result, teachers only had to learn and implement the curriculum; not create the curriculum.

Advisory Period. An advisory period was established in the master schedule to ensure intentional actions were taken to promote student culture. Advisory periods were held every other Friday for 45 minutes so that teachers could engage the girls in small group discussions to promote "girl power" and to allow them an opportunity to discuss other topics outside of academics. These discussions were intended to facilitate meaningful dialogue with the girls, promoting a more positive campus culture. STEAM was also a topic infused into the advisory time throughout the school year. **Teacher Collaboration.** Teacher collaboration time was also created within the school day through creative master scheduling. Core content teachers—teachers providing instruction in reading, math, science, and social studies—taught six class periods out of eight. They were provided one period for personal planning and the other off-period was set for daily teacher collaboration. Several days each week were dedicated to collaboration among teachers within the grade level content area, and the other days were marked for collaboration for teacher teams. During grade-level collaboration, teachers discussed content, pedagogy, and necessary resources for upcoming lessons. Also, there was an expectation by the administration regarding the integration of STEAM into lessons when applicable. Teacher teams were to collaborate on projects integrated across multiple content areas as well as social and emotional aspects of students within their teams. Collectively, teacher collaboration time provided teachers the opportunity to strengthen their teaching, develop the STEAM focus, and plan for activities to improve the social and emotional well-being of the girls.

**Campus Leadership.** The campus had a large leadership team due to high student enrollment. The campus leadership team was composed of the principal, four assistant principals, and three instructional coaches. In addition to the formal administrative roles, teacher leaders played an integral part in the school. The Campus Instructional Leadership Team (CILT) was a group of teacher leaders selected by the principal representing each department at the campus. The overall structure of the campus leadership begins with the principal, and is not limited to solely the administrative team. Rather, leadership cascades from the principal to assistant principals to teacher leaders.

**Principal.** The principal had been in the role for four years prior to the launching of the whole-school, single-gender model. Prior to serving as principal at Girls' Middle School, she served as an elementary principal for 10 years, as well as 20 years serving in other roles. In all, it is important to note that she had been employed in the district for more than 30 years. Such

experience afforded her good institutional knowledge of the school district; thus, navigating the barriers often seen in large school districts were not as challenging for her.

Assistant Principals. The assistant principals varied in their level of experience. Three of the assistant principals had multiple years of experience, and one assistant principal was new to the role. Each assistant principal supervised a core content area across all three grades. Therefore, each was responsible for providing guidance, coaching, and expectations to teachers in the respective content areas. Teacher collaboration occurred daily due to teachers having a collaboration period in addition to a personal planning period in the school day. Assistant principals were responsible for the quality of the teacher collaboration time and providing meaningful learning to teachers on a regular basis. The learning was often provided in coordination with the campus instructional coaches given their instructional expertise.

**Campus Instructional Leadership Team.** The Campus Instructional Leadership Team (CILT) was composed of the principal, assistant principals, instructional coaches, and one teacher leader from each core content area. Additionally, representatives from special education, AVID, and fine arts were on the team. The role of the team was to provide input to the principal and administrative team as well as to carry information back to their respective departments. The principal held standing meetings with the teacher leadership team every two weeks. The meetings were organized through established agenda items that focused on instructional priorities, STEAM, planning the single-gender school, and other instructional topics.

## **Teacher Participants**

Seven interview participants were randomly selected for this case study using predetermined criteria. In order to maintain their anonymity, pseudonyms were created. The information presented does not provide any level of risk for unmasking their identity. All participants were campus classroom teachers who had been at the campus for two years, from the time it transformed into an all-girls, single-gender school.

## Jordyn Matthew

Jordyn had been teaching for four years in total. Prior to coming to Girls' Middle School three years ago, she served as a kindergarten teacher in a neighboring school district. In addition to teaching, she had experience in curriculum and instruction. Jordyn earned her bachelor's degree in the natural sciences majoring in human ecology at a top tier university in the state. She was working on her master's degree in psychology. Her teaching certificate was a generalist in grades four through eight. She went through an alternative teacher certification program.

She heard about the campus from a friend, and as a result, decided to apply. When she arrived at the campus, it was co-education and later transformed to the single-gender school. Jordyn began teaching sixth-grade reading during her first year at the campus, but subsequently was moved over to teaching math mid-way through the school year.

Jordyn explained her involvement in the implementation of the school through helping to promote the school uniforms, supporting the advisory period discussions around bullying and social media, and helping with the school lock-in. Jordyn referenced the significance of working with the girls concerning self-esteem during advisories and the lock-in. In addition, when she spoke of the uniforms, Jordyn stated regarding the girls, "Dress well, work well." Her comments indicate the importance of helping develop a positive image for the girls.

## Ezra June

Ezra was an eighth-grade math teacher with four years of teaching experience. She also taught seventh-grade math for a short period of time. In total, Ezra had taught at Girls' Middle School for three years. She held a bachelor's degree in applied arts and science from a university within the state and a master's degree in math curriculum. Her teaching certification was earned through an alternative certification program and she had a teaching certificate as a generalist grade four through eight.

During the year of the pilot program, Ezra taught co-education classes in which the composition of boys and girls was predominately boys, and she found them to be easier to teach

math. Her decision to stay with the campus related to her relationship with her team of teachers and her campus leadership team. The switch to an all-girls campus was challenging for Ezra.

Initially, Ezra responded that she did not have any involvement with the implementation of the single-gender model. However, upon reflection, she stated, "I think for us, just providing the administration our feedback on how to handle the girls is what molded us to different things." Ezra also referred to professional development, advisory period, and scaffolding the way in which she teaches. She went into some detail regarding the various uses of the advisory period and how it could be used for intervention through computer work, intervention to accelerate academic progress, or to "get the girls caught up where they need to be."

## **Brooklyn King**

Brooklyn came with a wealth of experience as she has taught for 13 years, some of which were spent teaching in another state. This was her fourth year on the campus, and she was happy in the school district. Prior to moving to Texas, she had taught in a neighboring state for a year and a half. She had a bachelor's degree in English from a university out of state. Brooklyn also had a master's degree in education and teacher leadership from an on-line university. Her teaching certification was in reading and language arts in grades four through eight, and she possessed and English as a second language (ESL) generalist certificate. She earned her teaching certification in the same school district in which Girls' Middle School resides.

Initially, Brooklyn chose to teach at Girls' Middle School because of the location and because of the opportunity to teach at a brand-new school. Once it became an all-girls school, she noted, "And that just made me wanna [*sic*] establish roots here, because it was an opportunity for me to actually be a part of a foundation for a new school." She was a team member in the pilot program and enjoyed seeing the girls grow.

When reflecting on her involvement in the implementation of the single-gender school, Brooklyn spoke of her support through mentoring new teachers on the campus. She recalled, "that gave me the opportunity to really give new teachers and some of the teachers who were on campus who weren't privy to some of the study materials and some of the different programs." She also talked about creating STEM activities to implement in the eighth-grade reading curriculum.

#### Yasmeen Owen

Yasmeen earned her bachelor's in psychology in a reputable university out of state and was working on her master's degree in curriculum and instruction with a focus on STEM. The university in which she was earning her degree partnered with the school to promote STEM in the curriculum, and many staff members participated. She expected to complete the coursework within a year. Her teaching certificates were generalist grades four through eight and English as a Second Language (ESL).

She came to the United States as a teenager and moved to Texas as she began her teaching career. Gaining her teaching certification through the school district's alternative certification program five years ago, she also began her teaching career that same year at another campus within the same district as Girls' Middle School. Yasmeen transferred to Girls' Middle School the year the campus launched the girls' pilot program, one year prior to going full-scale as an all-girls middle school. According to Yasmeen, "I thought it was very interesting hearing that it was going to be all girls public school at that." She was excited to see how working with only girls was going to be different (emphasis). She was a sixth-grade social studies teacher and served on the campus instructional leadership team representing the social studies department. She also served as an AVID elective teacher.

Yasmeen's recollection of her involvement in implementing the single-gender model was minimal. According to Yasmeen, "I was just, in my opinion, just a regular teacher coming to work to educate the students. That's it. And shaping behavior versus just solely focusing on content." She did not feel as though her involvement shaped the creation of the systems on the campus or the way in which the school operated.

## Samantha Maverick

Samantha was a veteran teacher in the science department and had taught for five years, all of which are on the campus of Girls' Middle School. She earned her bachelor's degree in health science from a university within the state and was working on her master's degree in curriculum and instruction with a focus on STEM. Like Yasmeen, she expected to complete the coursework within a year and participated in the same program from the partnering university. Samantha earned her teaching certificate through the school district in which Girls' Middle School resides and was certified in science grades four through eight.

She taught seventh-grade science and seventh-grade pre-advanced placement science. Prior to the campus going to scale with the all-girls model, she taught in the pilot program and subsequently chose to stay as it became an all-girls middle school. She felt the single-gender model made her a better teacher because she had to change the way in which she taught. Samantha noted, "But then once we became single-gender, I found that I had to flip some of my activities or engagements." Samantha felt the social-emotional dynamics vary among boys and girls; girls benefitted from more emotional support.

Outside of attending professional development, Samantha did not feel she had much involvement in the single-gender implementation. She did, however, share how attending the professional development prompted her to do some reading regarding the way girls learn and it was enlightening. Specifically, Samantha talked about the differences in how girls' and boys' respond to classroom engagement differently.

## Mackenzie Hayden

Mackenzie earned her bachelor's degree in secondary education in English from a university in another country and earned her master's degree in instructional design and technology from outside of the United States as well. She earned a teaching degree in college and only needed to get certified in Texas to meet the state requirements.

65

Mackenzie had been teaching for 19 years and taught seventh-grade reading and language arts. Only three of her years teaching had been at Girls' Middle School. Additionally, she was the content lead for her department. Regarding the campus progress, Mackenzie stated that, "Everything we do here is in alignment with the \_\_\_\_ISD student achievement goals and as far as growth, we have seen a lot of growth." She also noted that the campus was not just a single-gender school, but a STEAM school.

As it relates to implementing the single-gender model, Mackenzie felt as though she was involved. She noted, "Our principal, back then, she was very good when it comes to disseminating the information." Mackenzie felt that part of her role was to share information with teachers regarding the rollout of the model and any information newly learned.

## **Noa Grace**

Noa earned his bachelor's degree in science exercise and sports science from a well-known Texas university. Taking an alternative certification path to teaching and beginning his educational career at this campus, Noa received his teaching certificate through a state licensed teacher certification program. He had teaching certificates in generalist grades four through eight, Physical Education from early childhood through 12th grade, Health from early childhood through 12th grade, and English as a second language (ESL).

Noa became a sixth-grade English and language arts teacher out of college and had been teaching for the last five years as well as a serving as an athletic coach in volleyball, basketball, and softball. He began teaching the second year the campus was in existence, a co-education campus at the time. Noa elected to remain at the campus as it transformed into an all-girls school explaining, "I believe it is very important that you have a male figure." In addition, he felt it was important that he be able to demonstrate success at an all-girls school. Noa had seen the school change over the past five years; the first few years were challenging, but the school evolved.

Noa was very clear about his involvement in implementing the single-gender model: "My involvement was creating meetings with the teachers during the summer about what classes they would have, what the culture would look like, how do we want them to walk down the halls." He believed the creation of the pilot program the previous year, in 2015-2016, was an important aspect of the overall implementation. Table 4.1 below provides background information from interview participants. Specifically, their years of service as a teacher and the number of years in Girls' Middle School. In addition, the teaching certification earned as well as the type of teacher preparation program they attended is provided.

## Table 4.1

## Participant Demographic Information

Participant	Ezra June	Sam Maverick	Brooklyn King	Yasmeen Owen	Noa Grace	Mackenzie Hayten	Jordyn Matthew
Total Teaching Experience	5 years	5 years	13 years	5 years	5 years	19 years	3 years
Girls' Middle School Experience	4 years	5 years	4 years	3 years	5 years	3 years	3 years
1st Degree Earned	Bachelors in Applied Arts and Science	Bachelors in Health Science	Bachelors in English	Bachelors in Psychology	Bachelors in Exercise Sports Science	Bachelors of Secondary Education - English	Bachelors of Arts in Natural Sciences – Human Ecology
2nd Degree Earned	Masters in Math Curriculum	Masters in Curriculum and Instruction	Masters in Education and Teacher Leadership	Masters in Curriculum and Instruction		Masters in Instructional Design and Technology (English)	Masters – Instructional Design and Technology (English)
Certifications	Generalist 4-8	Science 4-8	Reading/ Language Arts 4-8 ESL	Generalist 4-8 ESL	Generalist 4-8 P.E. EC-12 Health EC-12 ESL	ELAR 4-8	Generalist 4-8 ESL
Certification Program	Alternative Certification	Alternative Certification	In-District Alternative Certification	In-District Alternative Certification	Alternative Certification	College	Alternative Certification

## Summary

This chapter provided an overview of Girls' Middle School and a brief description of the seven interview participants. Chapter Five will present the research questions for this study, teacher interview perceptions, and findings from the interviews.

## **CHAPTER 5: FINDINGS**

This chapter includes a presentation of the findings from the data collection with the interview participants and document analysis as outlined in Chapter Three. The contextual information provided in Chapter Four was intended to ensure consistency and compatibility of the research site with the need for greater understanding of organizational planning, and curriculum and instruction factors that uniquely support an all-girls, single-gender urban middle school. The purpose of this study was to identify teacher perceptions related to their experiences in implementing a whole-school, all-girls, single-gender urban middle school. The following research questions guided this study:

- 1. What are teachers' perceptions of the factors contributing to successful implementation of a whole-school, all-girls, single-gender urban middle school?
- 2. What are the teachers' perceptions of their experiences in the implementation of a wholeschool, all-girls, single-gender urban middle school?
- 3. What are teachers' perceptions of the challenges in implementing a whole-school, all-girls, single-gender urban middle school?
- 4. How do teachers address implementation challenges in a whole-school, all-girls singlegender urban middle school?

While successful implementation was defined in this study as achieving one or more Distinction Designations from the Texas Education Agency, during the data collection process, two specific examples of what participants saw as success emerged. It was also important to initially determine what participants saw as successes. According to the participants, there were two major illustrations of success achieved in the single-gender school implementation. These included improved student achievement and the creation of an optimal learning environment with specific structures to support their academic, social, and emotional needs.

Teacher perspectives illuminating the success of student achievement were clear. They were very proud of the progress students had collectively made on state assessments and of data

collaboration among teaching staff. While some participants made explicit reference to state assessment achievement, others touted the progress teachers had made in using data to improve instruction for the girls. Ezra noted:

I would say one of the biggest successes was the data. Was [*sic*], you know, they typically say that the girls can't do math better than the boys. But I think because we were so data driven, that whether that was the case or whether it wasn't, by watching the data, it allowed us to always adjust our lessons and to just ensure that they were learning, you know, at the right level of rigor and to the right diverse questioning to where they performed. I mean, actually outperformed the boys, actually!

The creation of an optimal learning environment was described differently among the seven participants marking its impact and significance; however, their responses were consistent in their benefits of how the learning environment and structures represented a success to the school. Participants perceived the creation of a positive environment for students and staff. Contributing to the building of this environment was the advisory period, establishing a House System, and focusing on empowering the girls. Participants were emphatic regarding how the learning environment and structures were different from that of a co-educational school. In the single-gender girls' middle school, girls were able to be more open. Jordyn explained:

Our culture is totally different from other schools. I know the house system has the girls have sisterhood. There seems like the empowerment lessons that we give . . . You can see that they appreciate it, they enjoy them, and they are happy. They learn about other women. They feel represented. You'd be surprised the things they share out with you. So, it's really good. The culture is great! The behavior is great!

The interactions observed among students and the way in which they behaved was different from

teachers' experiences in previous co-education urban middle schools. Noa remarked:

Even the way they talk, and the way that they walk, and the way that they interact. And now you have girls deciding to try out for sports and band. I mean it's, it just wasn't like that when it was co-ed. It's just like, they're happy, you know they're happy because they are smiling and they are learning.

The learning environment was better as a result of the single-gender model due to less distractions for the girls. Mackenzie explained:

Girls are easily distracted by boys, but this year when we moved into full implementation, I can see that the girls are more settled. They're less distracted and behavior is controlled. My philosophy as a teacher is: behavior first, then learning. So, I think what happened last year when we went full implementation, I can attest my philosophy worked.

Similarly, Sam noted, "I think it's a better learning environment . . . like the girls are more engaged and more focused in class than they were before."

When specifically referring to how campus success was achieved, it was evident that participants believed that student achievement and the learning environment were examples of success. Their perceptions supported the fact that Girls' Middle School achieved state Distinction Designations.

The following section presents the results from the study. Findings are reported regarding each of the four research questions.

### **Research Question #1**

# What are teachers' perceptions of the factors contributing to successful implementation of a whole-school, all-girls, single-gender urban middle school?

Data revealed several factors for successful implementation based on participant perceptions. There were primary factors that were paramount to the school implementation and secondary factors which were also important. Primary factors were those identified by a majority of participants consistently articulating the same theme. Secondary factors were those that emerged from fewer participants.

**Primary Factors.** Teachers participating in this study were consistent in their belief that the school was successful. Their responses regarding the factors for successful implementation underscored their pride and feelings for the important work in operating the girls' school. Although there was consensus of the school success, there were variations in their perceptions of the most prevalent factors for the successful implementation. Three primary themes emerged from the interviews including administrative leadership, administrative expectations, and staffing.

Administrative Leadership. Administrative leadership emerged as an essential factor for the implementation of the single-gender, urban, girls' middle school. Administrative leadership

was defined as setting clear standards with regard to instruction and all aspects of the school. Additionally, this leadership required holding everyone accountable for their work and valuing all team members. The teachers in the study explained that administrative leadership encompassed the principal and the administrative team. They noted how the role of the administrative team was central to ensuring teachers followed through in all aspects of the job from the delivery of classroom instruction to engagement during planning periods to the planning and preparation leading up to the launching of the single-gender school. According to Jordyn, "Everything starts with leadership, the principals, because they set the expectations for their teachers ... it's just kind of like a chain of command."

Participants who listed administrative leadership as an important factor were also clear about the administrator's role and the importance of establishing standards. Yasmeen explained, "I just want to add that the success of not just our school, but any school comes from the top first." The role of administration is to set standards and manage them. Jordyn's experiences were similar: "Leadership. The Leadership is definitely . . . how your principal or your leader even of your team, is, how they set their standards that really sets everything apart." Ezra reiterated, "I would say the people that's in charge." They were emphatic, having a leader who set expectations from the top helped to promote the campus progress. Brooklyn noted, "I think the promise of being somewhere where you know you contributed to the changes and you were an active participant you felt valued." Brooklyn's recognition of being part of a team in which the administration valued her contribution to the all-girls school illustrated the important role of administrative leadership.

Administrative Expectations. Another major theme that emerged from the data was related to expectations from the administration as a key factor in Girls' Middle School success. Administrative expectations were defined as the administration being clear about the work-related duties inside and outside of the classroom. Participants explained that administrative expectations were necessary to ensure teachers were active participants in work-related duties in and outside of the classroom. Beyond classroom expectations, participants referred to other aspects of their job such as data meetings and teacher collaboration meetings. Data meetings required commitment from teachers and teacher leaders. Administrative expectations were explained clearly so that data meetings became a priority. Jordyn asserted:

Another thing that I appreciate is it is data driven, but positively. Of course, any time you bring up data, it could be negative because you know... most people just want to be on top ... and that's where the leadership comes in, at the end of the day, if you're a leader, for your team, you want the whole team to do well.

Data also revealed that participants were willing to meet administrative expectations in the classroom, as well as in other teacher-related duties. In particular, Brooklyn spoke of the importance of the principal articulating expectations to the staff in various aspects of the school:

So, I think that's what helped the school, I feel like, just putting that challenge to us to make us be better teachers, to make us be more aware of our students, and what they are going through, whether it's academically or emotionally or whatever. That just all the way helped us turn it around.

The participants' reflections illustrated the critical role of the principal and administrative team in ensuring expectations are met. Administrative expectations were an important factor in the single-gender urban middle school.

*Staffing.* Participants described the significance of having the right staff on the team. According to participants, staffing is defined as the selection of campus employees which includes teachers, teacher assistants, custodial staff, and cafeteria staff. The principal's selection of teachers and staff appeared to make the difference for the school; in other words, hiring the right person matters. Ensuring the campus maintain strong teacher quality began with the teacher selection process. The all-girls environment required a difference. Noa explained, "I wanted to say that it really matters what type of person that you hire to teach at a school." Along with the primary factors outlined above, other factors were deemed important by the participants.

Many participants discussed having the right staff and ensuring those teaching the girls are cognizant of the instructional demand. A strong staff was paramount to ensuring the development of a positive campus culture. Yasmeen explained, "We also need staff that actually want to be here." Speaking to the role of staff in developing the girls' self-esteem, Noa explained, "How they interact with teachers. How they feel more open. I mean you can literally see how, like they'll say, 'hi.' Like you'll see the girls walking with their heads up as opposed to girls walking with their heads down." Bringing the right staff together to serve the girls was identified as an important factor to the all-girls, single-gender urban middle school implementation.

**Secondary Factors.** There were other factors that some participants identified as contributing to the successful implementation of the single-gender girls' urban middle school. Three secondary factors emerged, including the development of campus culture, professional development, and a pilot program. These factors were also perceived to be important to the success of the school.

*Development of Campus Culture.* According to the data, campus culture was also considered a contributing factor to the successful implementation. Campus culture was viewed as creating an environment conducive to meeting the social and emotional well-being of the girls. It also referred to the interactions between teachers and students in which a mutual respect was established so the girls would become more open to speak freely in class and in the school. Jordyn's comment underscores the impact of culture: "I think our girls are more comfortable.... They've grown confident. Our culture. Our culture from the students up to the teachers, the administrators. Our culture is totally different from other schools."

The participants noted the significance of understanding how to talk with the girls as they were more emotional, and this required a different level of conversation to build the positive culture. Supporting the social and emotional well-being of the girls was also an aspect of the campus' success. Jordyn recognized the girls' needs by stating, "cause of course, girls are

emotional beings, so just kind of letting us know how to deal with them and trying to figure them out."

Campus culture was inclusive of student and teacher buy-in. According to the data, buyin was described as being essential to the implementation process for the students and staff because working on a campus with all female students would require a different level of emotional support. As Jordyn explained, "One of the steps they wanted to do was have buy-in for the girls, and one of the buy-in was creating a sisterhood, similar to sororities." In addition, it appeared that the staff also had to recognize the level of expectation regarding interactions with the girls. The need to ensure that even the staff had to be committed to a new campus culture was evident in the planning year. In reference to the planning year leading up to the implementation of the school, Yasmeen noted:

We had to find out what teachers and staff members in general, even custodial staff that wanted to stay to work in an all-girls school. We lost quite a lot of people. We also conducted social emotional training when we did come back to work.

**Professional Development.** Providing learning experiences to understand what was required to implement the all-girls, single-gender middle school emerged as a secondary factor. Participants described professional development or training as an avenue to gain knowledge of how girls learn so they could effectively support gender differences of the girls as they provided instruction. Mackenzie shared, "Teachers were trained how to teach and handle girls in the classroom. I really liked the training because it was relevant and very much needed." Brooklyn also found the professional development to be a critical aspect to success, noting "We went to a training that spoke about the differences, like gender differences. Educating males versus educating females. They told us about under what conditions girls versus boys learn. Something as simple as lighting. Something as simple as seating." In addition, Sam shared:

A lot of the training had to do with the female brain versus male brain. And like how to engage girls versus how to engage boys—how to deal with discipline with girls versus how to deal with discipline with boys.

*Pilot Program.* According to participants, prior to the launching of the all-female, singlegender middle school, the campus participated in a pilot program to observe the benefits and spend a year understanding the model. A pilot program was explained as a small-scale implementation of the intended future school. The pilot program allowed for everyone involved to experience how a single-gender middle school would operate. About 100 students in grades six through eight respectively participated in the pilot. In total, approximately 300 students and 20 staff members took part in the pilot program. While some of the participants were involved in the pilot and some were not, several of them cited the pilot program as a factor for campus success. Yasmeen provided her recollection of the pilot program:

This was a very successful program although I was not in the penthouse, which is what we call it. Okay, even though I wasn't up there, I heard a lot of good things about it. The whole entire third floor had all girls from sixth, seventh, and eighth grade. They rolled out the uniforms. They went on a lot of field trips. They had great scores compared to the co-ed school.

Brooklyn's experience as a teacher in the pilot program also illustrated the benefits of participating

in it. She explained:

We tried to incorporate a lot of the STEM activities into our pilot program that year. And so, as eighth-grade reading teachers, we changed the way we did our culminating projects at the end of the year. The kids had to do a social justice project, and we tried to gear it towards social justice issues that girls were involved in, and worked with social studies teachers.

Taken collectively, the primary and secondary factors participants identified were seen as integral to the successful implementation of the whole-school, all-girls, single-gender middle school. Although there were three primary factors of administrative leadership, administrative expectations, and staffing, the secondary factors of campus culture, professional development, and the pilot program were cited as factors also seen as attributable to the campus' successful implementation.

## **Research Question #2**

# What are the teachers' perceptions of their experiences in the implementation of a whole-school, all-girls, single-gender urban middle school?

Data revealed that study participants' responses regarding their experiences with teaching in the single-gender school were similar. Two main themes emerged: (1) establishing positive relationships with the students and (2) developing different teaching strategies to meet the instructional needs of the students.

**Relationships with Students.** Establishing positive relationships was a consistent theme emerging from participants' perceptions in implementing the single-gender classroom. Participants only spoke of the relationships established with students and not necessarily about teacher to teacher relationships. Participants characterized relationships as teachers creating effective communication and engagement which led to stronger bonds between teachers and students. As teachers interacted with the girls, they recognized the importance of engaging in purposeful conversations and interactions with the girls due to some of their attitudes toward school and the need to develop the girls' confidence. Mackenzie explained:

So, I had to be very creative and I had to be very cognizant when it comes to how I handle them because they are so fragile. They're so fragile, so I'm very conscious every step that I do each day.

The relationships also manifested in how teachers responded to girls' classroom actions. When there was a need to address inappropriate behavior in the classroom, teachers had to consider how they responded to such behaviors. Teachers employed positive reinforcement with students. Positive reinforcement included the use of techniques to praise students for desired actions in the classroom, which yielded a better result in overall student behavior. Noa remarked:

I'm kind of the teacher . . . where if somebody's not acting right, they send them to my room. So, I would determine whether or not I need to address that girl or it was, I need to talk to her, it just depends. Positive reinforcement . . . I'm really good about picking up on those things.

According to the participants, it was important to establish positive relationships with the girls in order to engage them in productive classroom learning. These relationships established through the way teachers addressed girls' behavior, mentoring the girls, positively reinforcing their actions, and allowing a boisterous classroom in which the girls could be loud and expressive.

Further, participants explained how relationships with the girls was stronger as a result of having just girls at the school. Participants shared how the classroom environment is different in the co-ed school due to the presence of boys. In the single-gender school, girls tended to be louder and less inhibited. Thus, teachers were able to better relate to the students in the girls' school. According to Brooklyn:

I truly enjoyed working with the girls. I felt much more comfortable with my interactions with them because, as I think about things I can say to my girls that I would not dare say in front of male students.

Positive teacher-student relationships afforded teachers the opportunity to provide relevant instruction through meaningful teaching strategies.

**Teaching Strategies.** Participants articulated the significance of employing specific teaching strategies in order to maintain students' engagement and motivation. Teaching strategies were exemplified as teaching techniques tailored to meet the unique learning needs of girls. Classroom instruction needed to be different from the way in which instruction was provided in a co-ed classroom; participants explained that the girls had different learning needs. Ezra conveyed, "finding more ways to simplify the teaching strategies for certain standards to better suit how they learn and understand." Creativity in lesson planning and seeking the input of the girls in planning the lessons were techniques also employed by teachers to include more effective teaching strategies. Brooklyn explained, "The kids had to do a social justice project, and we tried to gear it more towards social justice issues that girls were involved in, and worked with social studies teachers." Sam shared, "But I would say the biggest change for me . . . would've come with my lessons. Like lesson planning, like engagement . . . even some lab activities, I felt like the girls weren't getting into it as much as when I had boys." Sam added:

I started asking for more student input. Because if there was something that I couldn't think of, I would let them know like, "Hey, we're about to do this, what do you...?" I would pretty much ask for student ideas.

Similarly, Noa noted, "We want to keep high-level teaching. We want to use all the strategies in AVID that we want them to be able to do." Advancement Via Individual Determination (AVID) is a course aimed to prepare students for college. Participants talked about the importance of providing relevant instruction.

Participants' experiences in teaching in an all-girls school reflected their need of establishing relationships and varying teaching strategies to meet the academic needs of the girls. Building positive relationships with the girls as well as instituting creativity into classroom lessons was seen as a benefit to their classroom success. However, they did experience some implementation challenges.

## **Research Question #3**

## What are teachers' perceptions of the challenges in implementing a whole-school, allgirls, single-gender urban middle school?

Four primary challenges in implementing the all-female, single-gender, urban middle school surfaced from the data. These challenges included: (1) instructional preparation and planning, (2) communication, (3) consistency in procedures, and (4) resistance from the girls.

**Preparation and Planning.** Data revealed that challenges resulted from a need to spend more time preparing and planning lessons to meet the instructional needs of the girls as well as to ensuring emphasis on science, technology, engineering, arts, and math (STEAM) component. Preparation and planning included anticipating lesson objectives and instructional resources in advance of delivery of instruction. An aspect of the preparation and planning process was teacher to teacher collaboration as well as engagement to strengthen teaching. This included the focus on developing and enhancing the STEAM component of Girls' Middle School. Participants explained that girls learn differently, so the planning requires thoughtful consideration of how they learn best and which activities would most effectively engage them. Mackenzie explained: Lesson planning . . . not because I don't know how to write lesson plans, but I have to be mindful of my lessons, my subject matter and all that. Because, number 1, I have to make sure that lessons are aligned to STEAM given that we are a STEAM school. Number 2, I have to be mindful that my lesson will expose the girls to . . . So, when I'm planning, when I'm doing my lesson plan, I have to make sure that, okay that I really need, the main thing, my real-world connection.

Participants realized that to better prepare, they needed to rely on research. Mackenzie shared, "I need more research-based strategies." It appeared from the data that much time and effort was needed for developing quality lesson plans.

Data also revealed that teachers experienced certain difficulty in meeting the needs of second language learners when planning lessons. Apparently, second language learners struggled in the classroom due to limited language proficiency. Some students were not fluent in English, and this became challenging for teachers and students. Jordyn explained:

I think as far as instructional, I think getting a lot of our . . . Hispanic kids, getting them comfortable with trying to speak English, and then a lot of our students were . . . transitioning out (Spanish to English), so I know that that's different, but being comfortable having them not feeling embarrassed.

**Communication**. According to the data, communication was perceived as a challenge. Communication tended to be difficult because not all staff members received the same information through a streamlined approach that was consistent, clear, and allowed all staff members to have the same knowledge about the implementation. Lack of effective communication was found to affect the ability to implement campus practices and procedures, and it caused staff to be unaware of administrative expectations. As Mackenzie explained, "I feel like we weren't really in the know about a lot of things." Effective communication would have provided greater consistency among the students and staff. Consequently, implementation across the campus would have been improved. These communications should have been provided so that one stream of communication consistently flowed to staff. Noa noted:

Having one liaison person that would be able to [say], okay, this is what we are doing, this is what's going on. Here's our communicator. You know, to be that person in between. But sometimes it just, it wasn't there. And they were just like, okay, so what's going on? And we were hearing rumors, and I hate hearing rumors.

**Consistency in Procedures.** Data also revealed that a lack of uniformity in procedures was challenging. Participants characterized this challenge as the need for consistency in procedures at the campus to establish specific ways for campus operations. Participants expressed the need to have clarity about procedures for the staff to ensure uniformity in how the campus operates and that all students and staff understand school policy. This was a challenge for school success, according to some of the participants. Brooklyn illustrated:

We definitely had to be consistent with our implementation of our procedures and policies . . .. And that became a challenge, because there were areas where people were following and staying consistent and everybody was like, "Well, why should I keep up? They are just gonna [*sic*] drop it and come up with something new next week." Teachers are, and kids are the same way. Kids started to feed off that from the teachers.

Sam made a similar point: "They [students] just had questions about everything, like any rule that administration came up with, they were like, 'Why, why, why?" Sam explained that the challenge with consistency could have been addressed by developing more buy-in from teachers and staff.

**Resistance.** Some of the challenges related to consistency in clear procedures may have contributed to resistance from the staff, and at times, from the students. Some students did not want to conform to some of the procedures and requirements of the campus. The data revealed the difficulty of the absence of some girls' acceptance and support. This was referred to by some as "pushback" from the girls. Participants explained pushback to be the resistance by the girls as some were not interested in attending the campus, although their parents enrolled them in Girls' Middle School. They explained that such resistance resulted from girls not wanting to attend an all-girls school, while others did not support changes in campus requirements. Brooklyn explained, "You would get this a lot from the girls, where they didn't want to be at the school anyway. They wanted to be with the boys, so you had to deal with that." Similarly, Sam shared, "It was pushback from the girls ... they had an issue with the skirts like, 'Why do we have to wear them on Wednesdays?" The implementation of the aspects attributed to the single-gender school became more difficult for the teachers due to some of the resistance demonstrated by the girls.

This resistance was frustrating to the teachers; thus, it made their job of teaching the girls more difficult.

It appears the teachers encountered some difficulties with the implementation of the allgirls, single-gender, urban middle school. Although the aforementioned challenges were viewed as barriers, the teachers found ways to resolve them.

### **Research Question #4**

# How do teachers address implementation challenges in a whole-school, all-girls single-gender urban middle school?

As previously reported, participants identified the challenges in implementing the wholeschool, all-girls single-gender, urban middle school as preparation and planning, communication, consistency in procedures, and resistance from the girls. Data revealed these challenges were addressed through three practices: (1) building relationships, (2) differentiating instruction, and (3) implementing advisory.

**Building Relationships.** As reported elsewhere, building relationships with students was an important factor. However, building relationships with faculty and staff also emerged as a way to address challenges. Participants were consistent in highlighting the importance of relating to the girls and connecting girls with each other to support their needs. Additionally, some participants spoke of connecting teachers with each other to support the implementation of the allgirls single-gender, urban middle school. For example, Noa explained how he builds relationships with new teachers. He explained, "This is how you do this, this is how you do attendance. This is how the kids walk down the hallway." Whether student to student, teacher to teacher, or teacher to student, building relationships appear to reduce the challenges in implementing the singlegender school. Similarly, Brooklyn stated:

I think the promise of being somewhere you know you contributed to the changes and you were an active participant and you felt valued, I think that goes without saying. I think I've been able to grow at this school, and I see nothing but possibilities.

Building relationships among students and staff was also emphasized by the document analysis. For instance, the campus improvement plan included a goal specifically focused on development of campus culture through relationships. The goal stated, "Strengthen campus culture through opportunities for students, staff and stakeholders to work within and across teams, producing excellence in academic, socioemotional, and community initiatives." The goal statement illustrated the intentionality of the campus to build relationships as a specific goal.

**Differentiation of Instruction.** According to participants' responses, one way of addressing an instructional challenge was to provide differentiation of instruction. Participants described differentiation of instruction in various ways, such as securing student collaboration and scaffolding instruction. The differentiation was needed to support students with language challenges. In reference to the challenge of preparation and planning, and the language challenge some of her students faced, Jordyn noted, "So, for the language challenges, we always encourage our students to talk. Usually, the girls will have no problem helping the other girls who don't speak English well." Although it was not specifically an instructional strategy, Jordyn shared that it helped the students feel more comfortable as the relationship would improve learning. In addition, Mackenzie's way of addressing instructional challenge was to engage the girls in "the best type of engagement or activities that would really bring out their maximum potential."

Differentiating instruction required providing teachers with support regarding the different learning styles for girls. Several teachers referred to girls' learning differently. Brooklyn shared, "Well, we had a different training at the beginning of the year. We went more in depth in . . . the cognitive function and the brain studies of boys and girls." According to Ezra, "I had to scaffold more with my teaching. I guess I came up with a more like a specific problem-solving method that I knew that they could use to kind of help the girls better understand problems."

**Implementing Advisory.** The data revealed that another way of addressing the noted challenges was creating an advisory period. The main goal of advisory was to allow teachers to facilitate activities. The advisory periods were aimed at supporting the students' social and

emotional well-being. Students were organized into "Houses" in an effort to create a family-like atmosphere. According to document analysis:

The goal of the House system was to provide opportunities for students to cultivate stronger relationships with their peers and faculty. These structured times were designed to encourage students to engage with members of their House or members of other Houses, helping them to develop interpersonal skills, team building and offering opportunities for self-reflection.

Five aspects of foci outlined in the teacher handbook were: (1) self-awareness, (2) selfmanagement, (3) social awareness, (4) relationship skills, and (5) responsible decision-making. In addition, weekly topics were established with specific activities for teachers to engage the girls. The advisory period was also noted as a leverage point to address the challenge of resistance and communication. Yasmeen shared, "Right now, well through advisory, we are trying to teach the girls how to deal with each other in a better way. Advisory happens every Friday for 45 minutes."

According to participants, developing relationships between students can take place outside of the school day as well. During advisory period, students have an opportunity to discuss their experiences outside of the school day such as extra-curricular activities. Sam shared:

There was really nothing we could do as a teacher, other than try to keep them engaged or try to find some type of like extra-curricular activity, ... I'd even tried to pair up girls with students who I thought, you know, who were good students and had good heads on their shoulders to see if them finding a new group of friends would kind of help.

Advisory was aimed at promoting a more positive campus culture and to address some of the challenges associated with girls getting along with one another. Jordyn explained, "Also, the advisories were different. For advisory, there was more dialogue about bullying and social media. I felt like there was more girl drama, which means more mean girls, versus if it was a heterogeneous . . ."

Through their efforts to address challenges, teachers recognized the significance of building positive relationships with the girls and teachers, differentiating instruction, and implementing advisory. These were effective ways to support the students' experiences and the challenges associated with implementing Girls' Middle School.

In summary, this chapter included the teachers' perceptions of the factors for successful implementation of the whole-school, all-girls, single-gender, urban middle school. Also, it included teachers' experiences, challenges, and how the challenges were addressed. Chapter six will provide the summary of findings, conclusions, a theoretical framework, and recommendations for future research.

## **CHAPTER 6: SUMMARY, CONCLUSIONS, AND IMPLICATIONS**

This chapter includes a brief overview of the study, a summary of findings with connections to existing literature, an explanation of the theoretical framework from the study findings, and implications for future research and for practitioners.

## **Problem Statement**

Students in American public schools are not performing academically at the same level as their peers throughout the world. As a result, educators are seeking to find alternative schooling options which will meet the educational needs of students. Single-gender schools have become a more prevalent schooling option (Fabes, et al., 2015b; Pahlke & Hyde, 2016). However, for many years, this option was not available due to the 1972 Federal legislation with Title IX restricting the separation of boys and girls by any entities receiving Federal funds. Single-gender schools were absent in the educational market place until early 2000 (Mead, 2003). In 2002, President George W. Bush signed the No Child Left Behind Act which permitted the separation of gender as a school choice option. While it was intended to afford educators more autonomy in educating students, there were still restrictions due to Federal funding; schools could not use such funds to support these schooling options (Salamone, 2006). Consequently, No Child Left Behind was amended in 2006 and single-gender schooling became a viable option (Mansfield, 2013). The single-gender school model is controversial, but it has the potential to meet the instructional needs of learners. In particular, it can support the psychological and emotional development of middle school girls (Bigler & Signorella, 2011; Hart, 2015). While there has been much debate regarding the benefits of these schools, the academic benefits are still inconclusive (Fabes et al., 2015b; Hart, 2015). The number of single-gender schools has grown across the United States, and there exists a need to further examine teacher perceptions of factors for successful implementation of the whole-school, all-girls, single-gender schools (Lofton, 2013).

## **Purpose of the Study**

According to Hubbard and Datnow (2005), single-gender schools provide a positive experience for low-income and minority students, and they suggest the opportunity should be made available to more students. However, Salomone (2003) pointed to the need to determine specific evidence that leads these schools to be successful; evidence that relates to successful planning, goal setting, strategies, interventions, organizational structuring conducive to student learning and teacher collaboration, and overall implementation attributable to the single-gender aspects of the student population. Therefore, the purpose of this qualitative case study was to examine teacher perceptions of the factors for successful implementation of the whole-school, all-girls, single-gender, urban middle school. Additionally, this study aimed to examine teacher perceptions of the implementation, challenges, and how they addressed those challenges.

## **Research Questions**

The following research questions guided this study:

- 1. What are teachers' perceptions of the factors contributing to successful implementation of a whole-school, all-girls, single-gender, urban middle school?
- 2. What are the teachers' perceptions of their experiences in the implementation of a whole-school, all-girls, single-gender, urban middle school?
- 3. What are teachers' perceptions of the challenges in implementing a whole-school, all-girls, single-gender, urban middle school?
- 4. How do teachers address implementation challenges in a whole-school, all-girls, single-gender, urban middle school?

## **Overview of Methodology**

This qualitative case study used an interpretivist design to give voice to participants through their lived social contexts to examine teacher perceptions of factors for successful implementation, experiences, challenges, and how challenges were addressed in the whole-school, all-girls, single-gender, urban middle school. An interpretivist approach allows the researcher to understand subjective perceptions in a social situation (Roth & Mehta, 2002). Qualitative research methods provide thick description from participants' perspective (Geertz, 1973) and offer a way to gather data on complex individual behaviors (Miles & Huberman, 1994). Thus, teacher voices constructed meaning through semi-structured interviews. Grounded theory was used in this study in an attempt to generate a proposition to develop a theory, model, or framework (Creswell, 1998).

The data collection process consisted of seven semi-structured interviews and document analysis in an effort to understand teachers' perspectives as they constructed meaning from their experiences in a social context. These data collection techniques were used to gain a deeper understanding of a case study (Hays & Singh, 2012). Purposive sampling was used by the researcher to understand the factors for successful implementation of the whole-school, all-girls, single-gender, urban middle school. Purposive sampling was used in this study to establish criteria for participants. Such sampling allows the researcher to set boundaries for meaningful data collection (Hays & Singh, 2012). According to Corbin and Strauss (1990), open, axial, and selective coding are employed in grounded theory research to analyze collected data.

## **Summary of Findings**

This study aimed to examine teachers' perceptions of factors which uniquely influenced successful implementation of the whole-school, all-girls, single-gender, urban middle school. In addition, the researcher examined teacher experiences during the implementation, the challenges they faced, and how they addressed such challenges. Through the data collection processes, major findings emerged. This section includes a summary of the major findings.

## **Factors Contributing to Successful Implementation**

The data collection process consisted of conducting interviews and document analysis which highlighted factors for the successful implementation of the whole-school, all-girls, singlegender, urban middle school. The key findings contributing to the successful implementation of the school model include: 1) administrative leadership and expectations, 2) professional development, and 3) development of campus culture.

Administrative Leadership and Expectations. The importance of administrative leadership and administrative expectations is congruent with other research (Hubbard & Datnow, 2005). In the current study, administrative leadership was found to be a critical factor in the successful single-gender implementation. This leadership was central in ensuring expectations were set by the administration and monitored. Whether it was classroom instruction, teacher participation in collaborative planning periods, or staff members contributing to the aspects of the single-gender implementation, administrative leadership was a key factor identified by teachers for single-gender success. As existing literature underscores, principal leadership is very important to the implementation success; principals must have the capacity to lead the campus. These findings are congruent with other research relating to administrative leadership. Administrators are a key factor in the single-gender school success as they must advocate for resources, and curriculum which is best suited to meet the academic needs of students (Hubbard & Datnow, 2005). Support from administrators is a key component in teacher satisfaction and success in the single-gender school (Spielhagen, 2011). Fabes et al. (2015) also asserted that principals chose to implement single-gender schools to improve expected student outcomes, behavioral expectations, and to meet stakeholder interests to provide the instructional model.

The study findings point to the need for the administration to set expectations for the staff. In particular, administrative expectations must be clear regarding instructional priorities and teacher collaboration. This is congruent with previous research. For instance, setting high expectations and staying committed to the campus vision was a key factor in Lofton's (2013) study. In addition, having consistency in leadership at the campus was found to be an integral success factor (Hubbard & Datnow, 2005).

**Staffing.** According to the findings, staffing is a critical factor to the whole-school, allgirls, single-gender urban middle school success. Identifying the right staff for the school is an important element to ensure success. Staffing was inclusive of teachers, teacher assistants, and other support staff throughout the campus. The administrative team ensured that new staff were willing to commit to instructional and administrative expectations. These findings are congruent with Simpson and Che (2016), who pointed out importance of the relationship between staff and students at a middle school single-gender school. Such positive relationships may lead to more positive academic outcomes.

**Development of Campus Culture.** The findings suggest that developing campus culture is a contributing factor to successful implementation of the whole-school, all-girls, single-gender, urban middle school. Campus culture is the collective commitment of students, teachers, and staff members in creating an environment in which there is buy-in for meeting the needs of all involved. With the development of relationships, the social and emotional well-being of the girls is central to the development of the campus culture. The intentional campus actions and the student staff interactions were identified as the ways in such culture development. Development of campus culture was seen as meeting the social and emotion needs of the girls. These needs can be met through positive interactions between students and teachers as well as between students. Extant literature illuminates the significance of middle school girls having a strong connection to the school; such a connection correlates with positive future academic achievement as well as persistence in their school work (Patterson & Pahlke, 2011). As others suggest, girls find the single-gender environment a place where they feel safe and can seek support from teachers and be accepted by their peers (Hart, 2016; Hoffman et al., 2008; Simpson & Che, 2016).

**Professional Development.** According to the findings, teacher professional development is an important factor for successful single-gender school implementation. Specifically, professional development centered on the most meaningful ways to engage the girls to establish an open, communicative classroom environment. Professional development is inclusive of gender differences and for teaching strategies to be able to support girls in the classroom. This finding aligns with previous research by Spielhagen (2011), who noted that continuous professional development is an integral aspect in providing effective instruction in single-gender schools. Teachers must be provided with the teaching strategies best suited to scaffold instruction and meet the instructional needs of English language. Hart (2016) pointed to teacher fit as the most important factor in the creation of a single-gender school. Teachers in the all-girls, single-gender school must be motivated to teach in the environment and committed to the instructional model. With the right professional development, teachers can thrive.

**Pilot Program.** The findings indicated the benefit of having a pilot program prior to launching the full-scale, whole-school, all-girls, single-gender, urban middle school. Girls' Middle School created a pilot program for interested female participants in grades six, seven, and eight the year prior to the whole-school launch. The findings were positive: the student results of students participating in the all-girls program were stronger than those of students within the school who were not participating in the pilot program. In addition, the campus climate was found to be more positive than the co-educational classrooms within the building. There does not appear to be any research that has demonstrated a positive effect of pilot programs prior to launch of similar schools. However, Hubbard and Datnow (2005) found that the 12 pilot schools implemented in California prior to the reauthorization of No Child Left Behind yielded minimal benefit. Rather, they found that the schools were successful due to the extra resources provided to the schools. When these resources were no longer provided, the schools demonstrated decline.

## **Teachers' Experiences in the Implementation**

Building relationships with the girls in the single-gender school and delivering effective teaching strategies are integral to the all-girls school success.

**Relationships with Students.** Building relationships with students is critical. The findings underscored the benefits of building relationships with the girls. Relationships can manifest in the daily interactions between students and staff as well as girl-to-girl interactions. Additionally, addressing girls' classroom behavior through positive reinforcement transforms the ways in which teachers focus on the girls' classroom behavior. As Simpson and Che (2016) affirm,

girls are able to be more expressive in class and are able to take risks in the single-gender, middle school classroom. Hubbard and Datnow (2005) found that caring teachers are necessary in the single-gender school to promote a positive classroom environment. Thus, establishing a positive environment for girls is necessary (Tichenor et al., 2016).

**Teaching Strategies.** The findings from this study comport with extant literature relating to tailoring teaching strategies to the gender-specific student population. Classroom instruction tailored to the individual needs of the girls offers different ways to provide quality instruction. Teacher lesson planning inclusive of girls' voice in the design further enhances the girls' participation. Allowing the girls to provide some ideas in the lessons brought relevance to the learning. The varied teaching strategies provide motivation for the girls and increase their classroom engagement. This is congruent with the assertion that arming teachers with training on single-gender education and the most effective way to teach using brain research to promote teaching strategies based on gender is an important factor for successful implementation (Crawford-Ferre & West, 2013). Teachers can focus on how they organize their classroom instructional time to meet the instructional needs of the girls (Hart, 2016).

## **Challenges Encountered in the Implementation**

Findings surfaced two challenges in implementing the all-girls, single-gender, urban middle school. These included preparation and planning for instruction, and consistency in procedures.

**Preparation and Planning for Instruction.** The findings from this study confirm the importance of preparation and planning in the single-gender school, which may be seen as developing relevant lessons for the girls. Teachers experienced challenges in the implementation of Girls' Middle School. Careful instructional planning and preparation is critical to ensure student success. Intentional teacher lesson planning is required to meet the learning styles of the students including those who are second language learners. Existing literature supports the importance of

empowering girls in the instructional content; teachers should provide a voice for the girls in understanding how they make meaning for their learning and this can have implications for teacher planning and preparation (Ridenour & Hassell Hughes, 2016). Hoffman et al. (2008) found that teachers who enjoyed teaching in the single-gender classroom felt they demonstrated greater success teaching in the gender-specific classroom and it required a different type of planning and preparation.

**Consistency in Procedures.** Setting clear and consistent procedures for smooth campus operations emerged as a challenge. There is an apparent need to have uniformity across the campus. Such uniformity may come from setting clear and consistent procedures, communicating the procedures, then implementing them across the campus. Without the procedures, students and staff are not cohesive in the way in which they operate. These findings support existing research. According to others, the single-gender environment provides a higher level of order in the classroom than the co-education classroom (Riordan et al., 2008).

## **Strategies to Address Implementation Challenges**

Challenges in the all-girls, urban middle school can be addressed by two main strategies: building relationships and differentiating instruction.

**Building Relationships.** Building relationships appears to be a key in addressing implementation challenges. Whether addressing resistance from girls regarding uniforms or an aspect of the single-gender model, cultivating positive relationships is important. Student-to-student relationships foster the type of learning environment conducive to optimal education for the girls. These findings are in concert with existing literature. As Hubbard and Datnow (2005) noted, establishing social and emotional connections in the single-gender environment is important for school success. Schools should work toward forging strong relationships with the girls and the families of the girls as partners (Ridenour & Hughes, 2016).

Another strategy to build relationships between teachers and students is the creation of advisory groups. These advisories constitute a venue for teachers to engage the girls in areas outside of the academic realm. Therefore, social and emotional learning needs to be a major focus of discussion. Advisories may also benefit the girls in promoting a more positive campus culture. Thus, these findings add to the body of literature regarding the value of advisory in the all-girls, single-gender, urban middle school.

**Differentiating Instruction.** Findings highlight the importance of differentiated instruction to meet the unique needs of the girls. Furthermore, differentiation is one way to meet the needs of the students who are second language learners. As others suggest, providing girls with differentiated instruction promotes a positive attitude for instructional content (Tichenor et al., 2016). Such differentiation requires teachers have instructional autonomy in choosing the curriculum (Herr & Arms, 2004).

#### **Grounded Theory Framework**

Grounded theory was used in this study in attempt to develop a theoretical framework from the data collection process. According to Corbin and Strauss (1990), grounded theory research has established procedures and also allows for flexibility in the process. Unlike many qualitative practices, grounded theory data analysis begins immediately as data are collected. Data are analyzed in an attempt to establish a theoretical framework. Participants' semi-structured interviews were the primary source for data collection, and pertinent document analysis supported these findings. In the data analysis process, open, axial, and selective coding were employed to develop a conceptual framework.

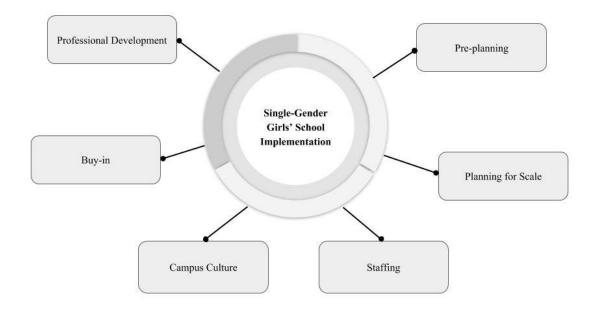
## Attributes to Implement the Single-Gender Urban Middle School

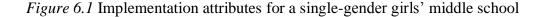
The following section describes the emerging theoretical framework based on the findings of the study. Taking the findings collectively, this study is explained as attributes to implement an all-girls, single-gender urban middle school.

- 1. Pre-planning. The pre-planning process involves the campus principal, administrators, and teacher leaders engaging in a discussion regarding the possibility of transforming the co-education school or an existing campus into a single-gender girls' middle school. This pre-planning process involves holding community meetings, sharing information with the staff and getting buy-in, conducting campus visits of existing single-gender girls' middle schools, writing a formal proposal plan for approval, hosting monthly community meetings, and working with central administration for support. The pre-planning process takes approximately one school year and sets the stage for a pilot program to be implemented the following year. The development of campus culture serves as an important contributor as the right culture would promote positive views of the single-gender model and generate collegial discussion.
- 2. **Staffing.** A strong staff is paramount in developing a positive campus culture. Staff members aid in the emotional well-being of the girls on a daily basis. Beyond the classroom, girls engage in many interactions such as lunch and walking in the hallway before and after school. During these unstructured times, staff members serve as a positive influence on the girls. Furthermore, a strong staff will ensure effective implementation of the school model. Specifically, the nuances of the single-gender model are critical to implement for campus success; this requires staff who are committed to the model.
- 3. **Buy-In.** Creating buy-in is integral to the single-gender school. The success of the program hinges on this desire and interest of the teachers to be in the unique model. Thus, establishing buy-in among the teachers strengthens teacher commitment and understanding of the implementation of the program. Understanding the benefits of educating girls in a single-gender school was seen as important to the teacher participants. Providing teachers with these benefits gives a rationale for implementing the program and illuminates the potential successes the teachers will have in teaching the girls.

- 4. **Professional Development.** Professional development is an essential aspect of the allgirls middle school model. Teachers must be equipped with the instructional practices that align with the learning needs of the girls. Arming the teachers with such practices prior to the start of school allows them a greater opportunity for success from the beginning.
- 5. Pilot Program. The pilot program was unique to Girls' Middle School and proved to be a very important attribute in the single-gender school development. The pilot program is a corner stone for development of campus culture due to the manageable size and the careful details in rolling it out. A pilot program consists of a group of core content teachers in each grade level sharing a group of students in core content areas. Parents and students are afforded a choice to opt-in to the pilot program or remain in the co-educational classes at their respective grade. Teachers are also given the opportunity to opt in to teaching in the pilot program. During the year of the pilot program, several priorities should remain as the focus for the teachers and administrators: developing a positive culture through structured activities such as an advisory period with specific curriculum, taking the girls on college visits, and engaging them in instructional strategies which are tailored to engaging girls. During the advisory periods, intentional lessons and activities should emphasize empowering the girls. The pilot program is used to implement the model on a small scale in order to ensure going to full scale is attainable. The pilot program offers the school community the opportunity to determine adjustments needed when going to scale and provides data points in staff and staff culture as well as student achievement.
- 6. **Planning for Scale.** While the pilot program provides the school community a view of how to implement the model on a smaller scale, planning to take the single-gender model to full scale requires much more effort, intentionality, and collaboration between the administration, teacher leaders, staff, and community. The planning to take the single-gender school to scale occurs simultaneous to the school implementing the pilot program as there is not a gap year in which the school closes. Consequently, the collective school

community has to plan for the upcoming school year in launching the single-gender model across the whole school while ensuring the current school year is a success. This is a difficult task. Some of the planning requires adequately staffing the campus with teachers and support staff who demonstrate an interest and desire to commit to the campus. Administrators and teacher leaders must continue to conduct visits to other single-gender schools and engage in research of best practices to be implemented. Employing teaching strategies which bring relevance and engagement to an all-girls' classroom is an important factor and promotes a collaborative classroom culture.





A visual representation was created based on the data collection in this study and the aim of this study was to examine the factors for successful implementation of the whole-school, allgirls, single-gender urban middle school (Figure 6.1).

**Implementation.** As the school year begins and a campus launches at scale, some of the attributes listed above promote the successful implementation of whole-school, all-girls, single-

gender, urban middle schools; however, a key factor in the campus success during implementation is the administration's ability to provide effective communication to students, teachers, staff, and the broader community. Timely, frequent, and clear communications are integral to the successful single-gender implementation. The communications will remind teachers about administrative expectations relative to instructional planning, preparation, collaboration, campus procedures, and utilization of teaching strategies. It will also aid in development of campus culture so that teachers continue to be cognizant of expectations in forging relationships with students and among students. Building of relationships by teachers with students is done during instructional time and during advisory periods. Thus, pushback from the girls will be minimized due to teachers' intentional actions to build relationships and invest time in actions leading to the promotion of campus culture.

The previously-outlined attributes of pre-planning, staffing, buy-in, professional development, pilot program, planning for scale, and implementation may lead to successful implementation of an all-girls, single-gender, urban middle school. They may also contribute to developing a positive campus culture within this unique educational context. Each attribute involves implicit or explicit actions considering the importance of developing campus culture with students and staff. It was consistently present in each step of the process.

#### **Implications and Concluding Thoughts**

The aim of this qualitative case study was to examine teachers' perceptions of the factors for successful implementation of the whole-school, all-girls, single-gender, urban middle school as well as teachers' experiences, challenges, and how those challenges were addressed. Resulting from the data, the following propositions are provided:

 Campus culture is an essential aspect of successful implementation of middle schools. Establishing a positive campus culture creates a campus environment conducive to optimal learning.

- 2. Certain factors contribute the successful implementation of the all-girls, single-gender, urban middle school. These may include administrative leadership and expectations, staffing, development of campus culture, professional development, and pilot program.
- 3. The implementation of the all-girls, single-gender middle school model requires establishing positive relationships with students and developing teaching strategies to meet the instructional needs of the students.
- The all-girls, single-gender, urban middle schools face certain challenges during implementation. This may include instructional preparation and planning of instruction, and consistency of procedures.
- 5. Addressing emerging challenges during the implementation of the all-girls, single-gender, urban middle school may be addressed by building relationships, differentiating instruction, and creating advisory period.

### **Study Limitations**

This case study may have limited applicability to other settings such as co-educational schools or schools serving students outside of urban communities. The aim of this qualitative research was to uncover factors which are applicable to the girls' single-gender, urban settings and other girls' single-gender settings. This case study research focused on a single campus and included a small group of participants. It did not include administrators, students, or parents. Thus, the results may have limited generalizability. Additionally, Girls' Middle School was located in a comprehensive neighborhood which served students from the community in contrast to many other single-gender models of its type in which the students are admitted through an application process, often identified as magnet schools. In addition, the recall of participants may have limited information recall as a result of the time that has passed. As such, there may be limited generalizability and transferability. This will depend on the consumers of the research.

**Implications for Practice.** The implementation of a school reform model such as Girls' Middle School illuminate factors school district leaders, school building leaders, and teachers can refer to as they plan for the creation of similar schools. In particular, the factors for successful implementation can serve as guides in the planning and collaboration process of all stakeholders. Also, those interested in transforming a school into an all-girls, single-gender, urban middle school may prevent the challenges by building relationships and differentiating instruction. Classroom teachers can benefit from engaging in professional development that promotes strategies to support how students learn best and meeting the needs of gender differences.

### **Final Conclusions**

Girls' Middle School is a thriving all-girls campus in an urban school district that is demonstrating that the reform model benefits students, staff, and the school community. The careful attention provided by the administration, teachers, staff, and community have illustrated how a collective commitment toward student success leads to improved student academic outcomes. Student achievement at Girls' Middle School has improved significantly. The planning, goal setting, strategy designs, and implementation factors appear to line up with the effective research school findings within the general school reform literature. The study did not yield sufficient teacher perception information identifying successful planning and strategy implementation factors uniquely attributable to a gender-specific student population.

### **Recommendations for Future Research**

This single-case study focused on a single school serving all girls. It only included interviews with teachers and used document analysis data sources. Therefore, additional research may focus on all-girls, single-gender elementary or high schools. Further, research may also consider expanding the pool of participants to include administrators, students, and parents.

# Appendix

## **Guided Interview Protocol**

- Tell me about yourself.
- Tell me about the school.
- How did you decide to work at this school?
- What is your current job assignment?
- What was your assignment during the implementation year of the single-gender middle school?
- Describe your involvement in the implementation of the single-gender model on this campus.
- Walk me through the steps this campus took during the implementation of the singlegender model on this campus.
- Tell me about your own experiences during the implementation?
- Looking back on your experience, what do you think are the necessary steps when implementing an all-female, single-gender middle school?
- Are there any steps you would omit? Why?
- Are there any steps you would add? Why?
- Are there any steps you think should be changed?
- What were some of the successes experienced on this campus during the implementation process?
- Why do you consider them successes? What do you think contributed to these successes?
- What were some of the challenges you experienced on this campus during the implementation process?
- Why do you consider them challenges? What do you think contributed to these challenges?
- How were those challenges addressed?

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### Vita

Brian Lusk grew up near Pittsburgh, Pennsylvania and attended and graduated from Ringgold High School in 1991. He earned his Bachelor's degree at California University of Pennsylvania in Elementary Education. In 1996, he and his wife moved to Dallas, Texas where he started his teaching career as a third-grade self-contained teacher. Brian earned his Master's degree in Educational Administration at Texas A & M University-Commerce in 2001. Subsequently, he began his first administrative position as an assistant principal. Over the following 17 years, Brian served in multiple school leadership roles as an assistant principal, principal, and moved into central office roles as executive director as well as a deputy chief of School Leadership. He had the opportunity to join The University of Texas at Austin Cooperative Superintendency Program with cohort 27 in 2016.

This manuscript was typed by the author.

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