A MIXED METHOD RESEARCH STUDY OF STUDENT ENGAGEMENT AND LEARNING IN SAME GENDER CLASSROOMS AT A RURAL INTERMEDIATE SCHOOL

by

Albertnetta Rutrina Hamilton

Ed.S., University of South Alabama, 2004

M.A., University of South Alabama, 1995

B.S., University of South Alabama, 1991

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The dissertation of Albertnetta Rutrina Hamilton is approved:

Joyce C. Nichols, Ed.D., Committee Member	Date
Robin M. Largue, Ph.D., Committee Member	Date
Janet K. Pilcher, Ph.D., Committee Chair	Date

Accepted for the Department/Division:

Thomas J. Kramer, Ph.D., Chair	Date

Accepted for the University:

Richard S. Podemski, Ph.D., Dean of Graduate Studies	Date

DEDICATION

To my grandmother, Mrs. Elvira Williams Brown, thank you for instilling in me the importance of an education. More importantly, I am blessed to have had a “Granny” who taught me that the value of one’s character and having good morals will carry one far. Although you are not here to be a part of this milestone in my life–I love you and will forever cherish the memories we shared.

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Albertnetta Rutrina Hamilton

The purpose of this research was to examine the impact of gender-specific classes in regard to student engagement and learning. The study determined student achievement effects, student retention rates, and stakeholder perceptions of student experiences in same-gender classrooms. The introduction provided an overview of the intermediate school's academic gaps. Two quantitative questions and 3 qualitative questions were investigated during the research. The Alabama Reading and Math Test and Software Technology, Inc. were used to collect quantitative data. Also, researcher-developed surveys were given and a case study was conducted of same-gender teachers, students, and parents. Interviews and open-ended questions were utilized to collect qualitative data.

CHAPTER I

INTRODUCTION

My teenage passion was fueled from helping others. That same passion was fulfilled when I chose elementary education as my profession. After matriculating through junior college, I graduated from a local university. My first opportunity to teach was in September 1991. I will never forget how 28 fifth graders hung on to my every word. This was an adventure which was truly rewarding for me. I was passionate and well positioned to make a difference in children's lives. I spent 8 years teaching 4th- and 5th-grade students at two elementary schools. During those years, I attained a Master's Degree in Elementary Education. As I continued to work with my class, students in other classes, and my colleagues, I soon realized people were positively responding to my work and interaction with them. It reminds me of a conversation with my former principal (now mentor) over 15 years ago. She told me I was a leader and asked if I had considered being a school principal. Our conversation made me think long and hard about what she and others in administration did every day. I quickly realized my strengths included communicating with others, planning organizational goals and strategies, and implementing a plan. Before I knew it, I was serving in numerous leadership roles at school and in the county. I absolutely loved my work. This led to me acquiring my Administrative Certification in 1998 from the University of South Alabama. I taught for 1 additional year and then applied for our county's Administrative Internship Program. My

intern appointment was split between a grades K-3 and a grades 4-5 school. I definitely encountered a challenge but one which helped to develop my leadership skills. During the following summer of 2000, I was offered the principalship at an intermediate school (grades 4-5). I accepted this position which started a journey filled with high emotion, high energy, and high stakes.

My 1st year as an intermediate principal was an experience which I will never forget. I was under 30, married with three children, very active in church and my community, and a new principal in an established school. Challenges confronted me daily as I became the second principal at this school. The former administrator, whom I attribute to playing a major part in my succeeding her, had a good reputation but had become burned out. This intermediate school was a Title I school and served about 500 4th- and 5th-grade students. The purpose of Title I schools is to improve the academic achievement of disadvantaged students. This title ensures that "all children have a fair, equal, and significant opportunity to obtain a high quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (Title I of the Elementary and Secondary Education Act of 1965, Sect. 1001). Thirty percent of 500 students at Bay Minette Intermediate School received special education services. Originally, our school was located in a predominantly African-American neighborhood with a 70% student population poverty level. About 55% of our student body was White and 45% Black. We have since moved to a new location but our demographics have remained similar.

This job assignment posed many challenges so my work hours were ridiculously long. Nonetheless, I had a mission to accomplish. During the 2000-2001 academic year,

the discipline of students was inconsistent and unsatisfying to teachers. We had nearly 1,000 Office Discipline Referrals for that year. At that time, I did not have an administrative team to help solve the existing problems. The campus needs seemed to outweigh what I could achieve. Hence, very few changes were made the first year. Rather, I listened, observed, and asked questions about the past process and school operations. As I reflect on year 1, the only thing I changed was the morning duty. In the past, students sat outside their classrooms each morning without supervision. We were housed on a campus where all doors opened to the outside. Needless to say, this posed a safety issue. To resolve this problem, all students were moved into our gymnasium where teachers rotated duty assignments.

Academically, the school was barely staying afloat. We were not the worst but certainly not at the top of the list in instruction nor behavior. I had to gain control as an instructional leader. Taking these challenges into account, I was able to weather my 1st year and begin to encourage buy in to the Together Everyone Achieves More (TEAM) concept. Our school uses this concept to promote teamwork, cooperation, and a positive spirit. I continue to be amazed by the overall family-oriented spirit and love shown at this intermediate school. During my 1st year, I dealt with a master schedule revision, negative attitudes, parent issues, poor accountability, unhappy veteran teachers, questionable safety policies, and more issues than seemed possible to resolve. Even so, the faculty and staff seemed sincere about helping me attain the vision and mission I had for this rural intermediate school.

A lot of planning occurred between May and August of 2001; I remember being so exhausted some nights. When I returned home my husband would help me get into bed

as a way to overcome exhaustion from the day. I was driven to help this intermediate school become a great place for our students and parents. We eventually received the news that an administrative intern would be assigned to help me accomplish this goal. We collaborated on what we wanted to accomplish for the year, then we set out to get it done. Our focus was instruction, discipline, and parental involvement. Our teachers analyzed Stanford Achievement Test data and we discussed strengths and weaknesses in core subjects and writing. Training was implemented to enhance classroom management. The training consisted of a series of videos which we studied throughout the year. The Office Discipline Referrals were still high, but it helped tremendously to have another administrator's help with processing referrals. Although the year ended with about 800 Office Discipline Referrals, we observed some class management improvements. Our staff also began to look at increasing parental involvement. Therefore, Parent Teacher Organization officers were appointed and regular meetings began. Our parents now had a voice that was being heard.

The staff also needed to feel they had a voice so I continued to meet with what was then known as the Building Leadership Team. This team had been in place for a while with the same members. Discussion focused more on gripes teachers had with the school, but I elected to listen. As I listened, teachers and staff alike shared some noteworthy points. Another challenge encountered was paperwork. Several plans to the district had to be submitted. I took on most of the responsibility at this juncture. I would make all stakeholders aware of the content and give them copies. No one seemed to mind that I was doing the majority of the work. Expectations continued to be shared but seemingly our school was not ready to meet some of them. We made it to the end of the

year despite the low parental involvement, the lack of meaningful staff development, major bus issues, budget cuts, and accountability stakes.

After 2 years of hard work, sweat, and tears, my renewed contract occurred early enough to continue planning for the 2002-2003 school year. Again, it was a blessing to plan with additional administrative support. This would be a make it or break it year. We had our 10-year Southern Association of Colleges and Schools accreditation visit which presented added stress. To name a few things, we revisited our mission and beliefs, developed a school-wide discipline plan, and developed school-wide goals. I was able to restructure the Building Leadership Team which became the School Improvement Team. Through some collaboration, we implemented a 2-hour Language Arts block, brought in national writer Rick Shelton to assist with school-wide writing, and began to entertain the idea of being a part of the Alabama Reading Initiative. We also implemented our first state initiative program known as Positive Behavior Supports. Positive Behavior Supports is a proactive approach in managing student behaviors. It was a school-wide initiative. Our discipline decreased significantly having had less than 600 Office Discipline Referrals that year.

The summer preceding my 4th year, our teachers committed to 2 full weeks of Alabama Reading Initiative training. As we analyzed our data, reading consistently appeared as a weak area in both grades. This was a tough year instructionally and emotionally. We were getting mixed directions from a lot of sources, our reading coach, the county reading coach, and a state reading specialist assigned to our school. To make matters worse for our school, our assistant principal was promoted to become a principal at another school. Within a few weeks, midway in the year, a new assistant principal was

assigned. It was quite difficult pulling things together as quickly this time because of our hectic agendas but collaborative efforts were successful. On a lighter, more positive note, we participated in the Powerful Conversations Network which was sponsored by Alabama's Best Practices and received Payne (1998) training, *A Framework of Poverty Training*. The Powerful Conversations Network program is designed to deepen a school's understanding and use of results-driven professional development. Participating faculties learn how they can match their own professional training needs to the specific learning needs of every student in the school. The poverty training taught hidden rules of economic class and sent the message that despite poverty obstacles, strategies exist for overcoming them. This small yet needy intermediate school was also surprisingly awarded a Comprehensive School Reform Grant. We received $100,000 for 3 years. This allotment allowed us to make many equipment and material purchases for our students, provide extended learning opportunities, and offer ongoing, job-embedded professional development for teachers and staff. As the leader, I continued to be upbeat, have a strong spiritual base, and strived to support faculty and staff.

As I moved into my 5th year as principal, I was truly thankful for many things: our stability, all stakeholders' awareness of our mission, manageable student numbers, controlled discipline, increased parent support, more collaboration, and a new administrative team member. Some areas were improving but others were not. Problems with our test scores still existed. With the No Child Left Behind mandate hanging over us, tensions were high. Official notice was received that we did not make Adequate Yearly Progress. This news infused even more pressure on the intermediate school

administration, faculty, staff, and students. Our targeted low achievement areas focused on black students, free or reduced lunch students, and special education subgroups.

The county sent in reinforcements to help but in the final analysis, some of their intended assistance may have hindered us. As I look back, I now realize our entire campus was devastated by changes somewhat beyond my control. I did not completely agree with some of the plans implemented but believed it would help our school. Our school began to receive monthly visits from the State Department of Education School Improvement Specialist as well as a weekly assigned Reading Coach. We were a part of ongoing job embedded professional development with a primary focus on reading and math. All teachers were required to administer the Dynamic Indicator of Basic Literacy Early Skills (DIBELS) which assesses phonological awareness, alphabetical principle, and fluency with connected text to progress monitor. In addition, our reading block was a minimum of 120 hours consisting of whole group and small group intervention. Teachers were also required to set up at least three student centers to be rotated during reading. These changes were certainly a challenge for the intermediate teachers. State, county, and local administrators conducted monthly walkthroughs and provided needed feedback. Time was certainly an issue as these rural intermediate school teachers struggled to teach across the curriculum, to benchmark students, and to stay abreast of the latest best practices. We collaborated with our county elementary supervisors to get the needed materials and support necessary as we struggled to meet student needs. That year we had three teachers and one staff member retire. Needless to say, year 5 was another challenging year.

I alluded to the fact that the prior year we had the district assign our fourth new assistant administrator. He continues to work at the school today as one of the highest performing assistants the school has had under my leadership. The faculty and staff were devastated when notified that we were one of 14 schools in our county that did not make Adequate Yearly Progress for the second consecutive year. Our rural intermediate school was on alert. According to the data, we did not improve. The news was heartbreaking and embarrassing because I knew that everyone worked hard, but the data did not show academic improvements. In addition, my personal life presented me with everyday challenges, two daughters in college, a husband changing job locations, and me trying to maintain my commitments to the community. I must have taken the changes even harder than I thought because I was hospitalized and required to be off work for 2 months. The stress of the job affected my health. Ironically, this incident created a healing process for me. In my absence and in spite of the hurt, the assistant principal, along with the entire school staff, kept things going. When I returned, I had a new outlook and perspective about my personal health and welfare. I sensed that the teachers and staff had a new outlook as well. We started becoming a team trying to make a better school.

The second semester of year 4, we all participated in a book study on *Whatever It Takes* (Dufour, Dufour, Eaker, & Karhanek, 2004). Afterward, we collaboratively developed our Data Driven School Improvement Plan. Data meetings, walkthroughs, positive referrals, intervention, class meetings, and Alabama Math, Science, and Technology Initiative Training were implemented. After preparation for our Spring Stanford Achievement Test/Alabama Reading and Math Test, we were more than

adequately ready. Then I received word that rezoning would be taking place. Our campus would be gaining the 6th grade level and moving to an uptown location. New challenges awaited the intermediate school. I had at least five new teachers which meant a summer of recruiting, interviewing, and hiring. The 6th year provided no relief from challenges as we focused on making Adequate Yearly Progress.

The 2006-2007 school year began with a new set of challenges. We moved onto a new campus where construction was not completed, we gained a sixth grade, and lost about 100 students and the attached funding due to our county's rezoning. In addition to those challenges, we had our 5-year Southern Association of Colleges and Schools Council on Accreditation and School Improvement review. Unlike previous years, we were able to keep the same assistant principal. Our rural intermediate school was continuing to grow despite the odds and with veteran and new teachers on staff, they blossomed as a group. We had powerful conversations and began the training on Professional Learning Communities. Our book study was Blanksteins' *Failure is Not an Option* (2004). This rural intermediate school did not fail. We made Adequate Yearly Progress for the second consecutive year.

I looked forward to my 8th year with great anticipation. Things had settled, we had about 350 students in grades four through six, and the overall morale was positive. Unfortunately, I faced a personal problem. My Granny was diagnosed with ovarian cancer. It saddens me to say that she passed in December 2008. Our Together Everyone Achieves More was awesome about keeping things going in my absence. Our Continuous Improvement Plan was submitted and approved. The following things were completed to ensure that our intermediate school continued to make Adequate Yearly Progress:

1. Professional Learning Communities.
2. Walkthroughs.
3. Edutests.
4. Common assessments.
5. Response to intervention.
6. Technology implementation (across the curriculum).
7. Book studies.
8. Amigo's (mentor program for at-risk students).
9. Alabama Reading Initiative.
10. Alabama Math, Science, Technology Initiative.
11. Considered same-gender education.
12. Data meetings and collaboration.
13. Pacing Guides.

I am proud to say we progressively improved together each year. Our student achievement results continued to increase.

We began the 2008-2009 school year with approximately 360 students. Because of the state reduction in force, we lost four teacher units which increased class sizes. We began the year with no new teachers and retained our teachers from the prior year. The high retention of teachers affirmed our book study during that year which was *On Common Ground: The Power of Professional Learning Communities* (Dufour, Eaker, & Dufour, 2005). The book challenged our school to embrace learning and to continue to work collaboratively to help students learn.

Through every situation during the past 9 years, we continued to work and support one another. After three state initiatives, a sound Parent Teacher Organization, dynamic teachers and staff, student programs and organizations, and community support, we are a Professional Learning Community with a focus on teaching, collaboration, and results.

Why Same Gender

As we continued to disaggregate our data, several things were clearly repetitive: (a) our Black males' needs were not being met, (b) our special education students' needs were not being met, and (c) our poverty students' needs were not being met. It was evident that a lot of these subgroups overlapped. We were getting desperate to find an answer. One of my fellow colleagues was experiencing similar problems so we began to discuss what we could do to help our boys and girls become successful. We studied research which supported that boys and girls learn differently. Our own data seemed to confirm the findings as well. Our teachers felt that they had tried a lot of programs and strategies, yet something was still missing. This research prompted me to introduce the idea that gender matters as students are learning. Some connected to what I shared while others had doubt. We continued to study gender differences at our school. Another local intermediate school in our county also piloted same-gender classes. The principal of this school had been one of our former assistant principals. She had some success and invited me to their school. I found that a lot of their same-gender applications came from Dr. Leonard Sax, founder of the National Association for Single-Sex Public Education. Our staff completed book studies on Gurian's *Boys and Girls Learn Differently* (2001), and Sax's *Why Gender Matters* (2005b) and *Boys Adrift* (2007). We also went through

extensive training with Sax. Several teachers accompanied me for 2 years to the National Association of Single-Sex in Public Education conference. That conference piqued our interest even more.

After administration, faculty, and staff researched the pros and cons of same-gender education, a decision had to be made. This rural intermediate school staff had to decide to pilot the program and to find the best teachers for the job at hand. It was a new approach, so I had to encourage some of the strongest teachers to participate in the pilot and those that had the desire to work in the same-gender environment. With that in mind, I requested teacher volunteers to work with the same-gender pilot program.

In the Spring of 2007, 3rd-grade parents were invited to a same-gender informational meeting. Quite a bit of interest stemmed from their attendance. We also invited the principal from another local intermediate school who had experienced success in the school's first pilot year to serve as our guest speaker. Parents listened attentively to the law on single-sex education, met the teachers of same-gender classes, and asked questions. Parents were told that because we were only piloting same-gender education in fourth grade (one class for each gender), it would be on a first-come, first-serve basis. Participating parents had to give written permission for their child to participate in the same-gender program. Before the end of the 2007 school year, we had a waiting list for our 4th-grade same-gender classes. At the start of the 2007-2008 academic year, this rural intermediate school began its same-gender pilot classes.

This dissertation chronicles my experience as an administrator working on continuous school improvement, the teachers' experiences as they worked tirelessly with all students, the students' experiences as we raised the bar, and the parents' experiences

while being challenged to become more actively involved as we journeyed though 9 years of highs and lows. In particular, I focused on the shift in 2007 to a voluntary same-gender classroom and two subsequent years of that shift. I was interested in the perceptions of teachers, students, and parents. Also, I analyzed results on student achievement and retention by gender as students moved through the same-gender program from year to year.

At the school, we made certain that our plan to pilot same-gender education was theory-based. Eisner's (2002) connoisseurship model was an ideal theoretical framework because of its focus on artistry and creativity. Eisner has shared that appropriate educational programs for students are dependent on many factors. I suggest that our same-gender education approach entails connoisseurship and criticism. Within those realms, students can be expressive and blossom in spite of challenges faced. A description of Eisner's model and how it applies to this study are provided in chapter 2.

To tackle learning of lower-achieving students, multiple approaches, strategies, and programs must exist to meet the varying needs of boys and girls. In today's accountability system, schools and districts must take the bold steps necessary to reduce academic gaps by implementing innovative programs, having high expectations for achievement, and holding all stakeholders accountable for results. However, if we are going to require students to meet expectations and to make Adequate Yearly Progress, school administrators and educators must adopt research-based theories and practices while working collaboratively to implement them. This study chronicles ways that our staff, parents, and students have made decisions to attempt to overcome achievement gaps. It specifically focuses on our implementation of voluntary same-gender classrooms.

Purpose of the Study

In 2004, the federal No Child Left Behind Act (2001) recognized the need to provide local school districts the flexibility to create single-gender classrooms and schools. Historically, coeducation classrooms were predominant in public education. After working to reduce achievement gaps for several years, the administration, teachers, and staff at Bay Minette Intermediate School agreed that they were doing everything they knew to close the achievement gap and to make Adequate Yearly Progress, yet gaps existed and goals remained unmet with particular subgroups. Effective instruction and management of single-gender education classes enhances quality and efficiency of instruction and learning. Studies indicated that when boys and girls are educated in a traditional setting many of their needs remain unchartered. Same-gender education offers the opportunity to reduce the gender barriers in the classroom and provides diversified teaching practices which maximize learning (Demers & Bennett, 2007).

This study is important because it addresses the social, physical, and educational growth of children. With today's testing accountability, there still remains a large number of students who are not proficient while being taught in the traditional coeducational setting. As educators, it is our duty to educate every single child. We must be willing to embrace gender and curriculum differences in an effort to enhance the educational practices of our teachers and to motivate students to excel in all venues. Therefore, this study is needed to help determine how all stakeholders can intervene to diminish existing gender gaps which impede learning and to provide boys and girls with same-gender education opportunities which challenge them to be successful.

This study examined the impact of gender-specific classes in regard to the progress made during the learning process at an intermediate school. The study also provided important new insights and interventions for diminishing gender gaps that impede teaching and learning at Bay Minette Intermediate School.

The study research questions are

1. What was the student achievement effect of students who enrolled in same gender classrooms?
2. What was the student retention rate of those students enrolled in same-gender classrooms?
3. What were students' perceptions of learning in a same-gender classroom?
4. What were teachers' perceptions of teaching in same-gender classrooms?
5. What were parents' perceptions of their students' learning experiences in same gender classrooms?

Definition of Terms

The following terms were defined for purposes of this study:

Adequate Yearly Progress. Used to measure the achievement of schools, districts, and states over time.

Coeducation. Teaching of children in groups that are sexually heterogeneous; classrooms with girls and boys comprise coeducation.

Discipline-based Arts Education. An approach to art education that combines four disciplines: creativity, criticism, history, and aesthetics (Alexander & Day, 1992).

No Child Left Behind Act of 2001. Promoted an increased focus on reading and reauthorized the Elementary and Secondary Education Act of 1965.

Professional learning communities. Embrace learning rather than teaching as their school's mission, work collaboratively to help all students learn, use formative assessments and a focus on results to foster continuous improvement, and assume individual responsibility to take steps to create such schools.

Single-sex education. Teaching of children in groups based on the same-gender.

CHAPTER II

APPLICATIONS OF PHILOSOPHICAL VIEWS OF EISNER

Before Bay Minette Intermediate School was able to celebrate some of its successes, there were numerous growing pains. In a true effort to meet the needs of students at our school, we went back to our mission and beliefs. We needed all stakeholders to take ownership of our school's mission. The mission of our school is to provide a positive environment in which students are empowered with high levels of academic achievement as determined by the Alabama Course of Study, measured by common assessments, with a comprehensive support system to assure this outcome.

The administration, faculty, and staff at this intermediate school agreed on the following belief statements:

1. All students can learn.
2. Children learn best by being actively engaged in the learning process in a positive environment.
3. The educational process is the shared responsibility of the community, parents, teachers, staff, administrators, and students.
4. Each child is unique and will be given every opportunity to achieve a quality education.
5. It is essential to help students develop skills, attitudes, and values through character education that will prepare them to meet the challenges of the future.

As a leader, it is my utmost conviction that we must be aware of who we are and know our purpose in life. As educators we should be goal oriented and driven to stand firmly in our morals and values as they relate to educational policy, practice, and evaluation. As a staff, we link our thoughts, ideas, and beliefs as we strive to provide the kind of school we need to help our students learn and grow. To this end, the passion, philosophy, and practices of Eisner (1994) most resemble my style as a school principal.

Eisner (1994) is a modern thinker who continues to make significant contributions toward the appreciation of the educational process. He has worked assiduously in arts education, curriculum studies, and educational evaluation throughout the country. Eisner (1994) asserts

> As we seek genuinely to reform American schools, we will need to release ourselves from the grips of traditional stereotypes about what schools should be, how teaching is to proceed, what appropriate curriculum content entails, and how evolution should occur. We need to free ourselves from ideas and practices that do not serve our students well and that, in turn, generate significant inequities in children's life chances. (p. 89)

As principal of this rural intermediate school, I was constantly faced with the challenges of comprehensive school reform, high poverty, high-stakes testing, discipline, positive morale, attendance, and the list goes on. As we strived to meet these challenges, we would plan, research, and evaluate the most recent best practices that could help our school and students. As barriers came down and inadequacies were acknowledged, we experienced growth in many of our vulnerable areas. Regardless of this fact, gaps still

existed. Therefore, I began to contemplate moving beyond some of the more common institutional practices and started thinking "outside the box."

As I served this school and community, I drew from my early experiences and exposure to relationships, literature, music, the arts, and cultural diversities. This move affirms my support of Eisner's (1994) belief in developing multiple forms of literacy in our schools.

Eisner (1998) advocates that educators move beyond technocratic modes of thinking because these modes of thinking stagnate our student and teacher growth of unexpected discoveries. He goes on to say that educators must plan for expressive outcomes in which students can utilize all of their senses to not only learn but to display what they learn by getting in touch with reality. Eisner further asserts that students should be allowed to learn through a variety of forms of representation and express themselves in a variety of ways.

During my earlier teaching years, I was privy to some of these forms of representation. I worked at a Discipline-based Arts Education elementary school. Discipline-based Arts Education is an approach to arts education developed and formalized in the early 1980s by the Getty Center for Education in the Arts (1994). It is not an original theory but rather a conceptual framework that combines four disciplines: creativity, criticism, history, and aesthetics. This theory was first proposed by Bruner (Eisner, 2004) in response to the math and science explanation after the Sputnik I launch. Bruner (Eisner, 2004) exclaimed, "Students learn best when they experience a discipline in a form similar to the form of inquiry used by scholars in that discipline" (p. 27). Eisner (2004), in *The Arts and the Creation of Mind*, writes that this line of thinking appealed to

educators anxious to “meet new expectations for rigorous and substantive curricula” (p. 27). I believe my Discipline-Based Arts Education training and practices have allowed me to be more in sync with Eisner’s ideals in cultivating the artistry and creativity within each child. At our intermediate school, students have extended comprehensive arts-integrated experiences. Students have art and music classes weekly. We also have a chorus, a band, an oratorical competition, offer drama and photography, a Talent Show, a Science Club, Student Council, a dance team, and a Citizenship Club. We want our students to feel a sense of belonging. This ideal refers back to our mission and beliefs as we create an environment which is conducive to learning in all realms.

Furthermore, content and context matter in our endeavor to reform educational practices. Our school promotes global learning through research-based practices such as the Alabama Reading Initiative, Alabama Math, Science, and Technology Initiative, and Positive Behavior Supports. The key is remembering that every child is different. At this intermediate school we have moved from the concept of “your” student. We take ownership of our children (regular or special education, girl or boy, black or white).

Intermediate School’s Culture as it Relates to Eisner’s Cultural Views

Eisner (1994) proposes that education reform must be systemic. In our society, this reform would entail policies and practices being deeply rooted in the ideals to transform our schools into “robust institutions” which provide students with a rich curriculum and exposes them to multiple literacies while recognizing their individual differences. This recognition only takes place after a culture conducive to various learning experiences has been created.

Eisner (1994) suggests,

> A culture in the biological sense is a set of living organisms that can grow only if the medium in which they reside is hospitable to their growth. The school is that medium. The culture is the students and the adults who work with them. The growth we seek is the enlargement of more. To create the medium they need, we need to pay attention to matters of mix. What goes into the mix surely includes the intentions that give direction to the enterprise, the structure that supports it, the curriculum that provides the content, the teaching with which that content is mediated, and the evaluation system that enables us to monitor and improve its evaluation. (pp. 10-11)

As principal of the intermediate school, I strive to be a strong communicator who is open, honest, and fair. These traits reinforce a relaxed culture with a professional climate where educators celebrate learning, differences, and successes. The faculty and staff at this school understand what it means for our students to be happy and healthy. We understand that we cannot reach students' minds unless we touch their hearts. Students must feel comfortable with themselves and with the idea that we care about their well-being. When approaching our school community, I try to instill that we must teach using "love and logic" coined by Fay and Funk (1995). As we implement Fay and Funk's logic, it imparts unambiguous strategies about having classroom control. This approach (a) puts teachers in control; (b) teaches students to think creatively; (c) raises the level of student responsibility; and (d) prepares students to function effectively in a society filled with temptation, decisions, and consequences (Fay & Funk, 1995).

The atmosphere that I tried to create at the rural intermediate school is one of high expectations through academic and social involvement to create young minds. In *The Kind of Schools We Need*, Eisner (1998) shares the concept that the curricula we offer and the teaching methods we employ are means of creating minds. The curriculum is what Bernstein (1971) years ago called a mind-altering device. Eisner suggests the school is a culture for growing minds. Eisner further shares that as this conception of mind takes root in our conceptual life; it creates optimism for education. He emphasizes schooling has a capacity to make a difference in the kind of minds that students can come to own (Eisner). Eisner suggests that the kind of culture we create in schools, the forms of thinking we cultivate, the forms of representation we make available, the recognition of the relationship between what we give students as opportunity to learn, and the content of their experience are intimately related to a conception of inquiry that regards humans as creators of knowledge and makers of mind (Eisner).

I believe our staff applies Eisner's (1998) theory as we strive to help our students reach their maximum potential through hands-on, minds-on learning experiences. Teachers are encouraged to provide a print-rich environment where teaching and learning take place. They believe the school climate, the curriculum, the extracurricular activities, and student achievement all play a key role when building a successful place for students to learn.

School Reform and Policy

Educational reform is an issue that our county and country will always face. As educators, we live in a political world. To keep politics from driving our decisions, we

need to have a mindset which allows us to maintain more creativity and expression as we experiment with curriculum approaches that align to the diverse needs of students.

Over a decade ago in *Cognition and Curriculum Reconsidered*, Eisner (1994) presented a platform to reform education systems. He summarizes his major ideas in four points:

1. The separation of mind from the body has contributed to a narrow conception of intellect.
2. Our sensory system is our first avenue to consciousness and its development and refinement makes concept formation possible.
3. The images referred to as concepts are transformed and made public through a variety of forms which make it possible for individuals to both construct and experience particular kinds of meanings.
4. The conception of knowledge is far too limited a view of what human understanding entails. (Eisner)

Here, Eisner (1994) promotes that one major aim of education is the expansion and deepening of the meanings individuals can secure in their lives. He further discloses that humans have different aptitudes with respect to the forms in which meanings can be made. He states, “I believe that school programs should provide ample opportunities for youngsters to come ‘literate: in a wide variety of forms’” (Eisner, p. 87). I believe same-gender education was one such opportunity appropriate for our school.

In making our decisions to provide same-gender education we weighed every possible outcome imaginable. Ultimately, we all felt this program was something that could benefit some of our students. Therefore, we took a risk on enhancing the education

of our children. We also felt strongly that the same-gender classrooms needed to be a choice option for teachers and parents.

In *The Kind of Schools We Need*, Eisner (1998) asserts that children's genetic differences should be taken into account in the educational policy and practice. He further states that each child in our school should be given an opportunity to find a place in our educational sun. Eisner (1998) says "This means designing educational programs that enable children to play to their strengths, to pursue and exploit those meaning systems for which they have special aptitudes or interests" (p. 18). This statement alone prefaces our piloting of the same-gender educational program.

As a building administrator, I concur with Eisner's (1998) stance in regards to the kind of schools our children need. I understand that we cannot always change policies and mandates, but we can certainly expose our students to educational practices which excite and ignite their imagination. Our students must be challenged to be themselves, but in doing so, always strive to do their best. We must constantly remind them that our differences complement one another. At this rural intermediate school, we continue to grow from mistakes and celebrate successes. This spirit gives us the courage to explore the latest best practices rather than fads that come and go. We always focus on enhancing our student learning and engagement.

Implementation of Same Gender Classes

As I reassessed my educational philosophy and refocused on the intermediate school's existing culture, it became evident that our school was transforming. Despite economic and political issues, we were on common ground in regards to meeting the individual needs of all students. In order to meet the students' needs, we were committed

to providing parents and students with additional opportunities to pique student interests and participation and to recognize their differences. We gained insight from Eisner's contributions, and the connoisseurship model which led to the planning and implementation of our same-gender programs.

In Eisner's *The Educational Imagination on the Design and Evaluation of School Programs* (2002), he advises that no single education program is appropriate for all children. He goes on to explain that "the appropriate educational values for children and adolescents depend on the characteristics of those the program is designed to serve, the future of the context in which they live, and the values they and the community embrace" (Eisner, p. v). Despite the challenges, our same-gender education approach entails connoisseurship and criticism. Eisner's (2002) educational connoisseurship model encompasses three concepts: curriculum, teaching, and evaluation. He says, "Teaching is an art guided by educational values, personal needs, and by a variety of beliefs as generalization that the teacher holds to be true" (Eisner, p. 154). This model challenges individuals to gain information, know it, appreciate it, and then draw upon new experiences which complement existing ones.

After disaggregating and analyzing our assessment data, we believed that gender differences in learning were worth considering. We chose to give the parents and students who shared this sentiment a choice. In an effort to enhance learning, we elected to provide same-gender classes as an option to reduce classroom distractions between boys and girls.

At our school, we applied Eisner's connoisseurship model when implementing same-gender classrooms. The model is qualitative, empirical, and naturalistic. It is most

appropriate for evaluating an interdisciplinary and integrative program like the one at this intermediate school. This study's primary intent, like Eisner's model, is to bring about continuous improvement. Using Eisner's model, we realized the gender-based program needed to be flexible in providing hands-on, minds-on strategies in formal and informal educational settings. From my experiences, I see that many elementary school students are competitive by nature and they like to learn by doing. Therefore, our gender-based program provided students with multiple ways to solve problems. Our goal was for teachers to teach and assess students through explicit, implicit, and the null curriculum, to tap their senses and imaginations. The integration of Eisner's model helped teachers focus on the quality of teaching and the progress made by students. This model has been embraced by everyone at the intermediate school and its principal.

In this study, I focused on teachers, students, and their parents who elected to participate in same-gender classrooms. This study, however, is heavily influenced by Eisner's theories and approach to education. Therefore, the findings cannot be separated as only focusing on same-gender results. The results consider almost a decade of continuous improvement strategies embedded within a school that embraces Eisner's connoisseurship model.

Synopsis and Perception of Our Same Gender Program

Our same-gender program is currently in its 2nd year of implementation. Interest in same-gender education continues to increase at our school as teachers, parents, and students realize the utmost importance of providing student opportunities with ongoing demands on improving student learning with decreasing resources. Same-gender

education has been a vehicle for addressing student academic needs and social concerns on our campus.

Same-gender students at this rural intermediate school are taking pride in themselves and feeling a sense of belonging. Student attendance has been consistently high, Office Discipline Referrals have decreased, and students are participating more readily in their classrooms. Teachers of the same-gender classes share that they are building a strong community or "family" of girls and boys. Both boys and girls are engaging in more classroom activities and discussions. It is my belief that students must be exposed to critical skills, literature, music, and the arts in order to thrive in a positive learning environment.

We continue to stay abreast of the most recent research on same-gender education in public schools. Our goal continues to be to provide students with a great education in all programs at our school. We took a leap of faith to offer the same-gender option. So far our leap of faith seems to have produced significant results. Currently, about one third of our students in grades four and five are participating in our same-gender education program. Both students and parents request continuous advancement in the single-gender classes. Teachers and students are actively engaged before, during, and after school. Boys and girls discuss their lessons, projects, and activities during break time or at bus duty. Parents call, e-mail, and share something positive about their child's learning experiences. These results have been captured informally. To make better decisions about what is working and not working, I want to formalize a process for capturing and interpreting data and then share the results with teachers and parents.

Eisner (1982) shares that teaching, at its best, is an art, and educational evaluation is a process. He goes on to say that how a child learns, a teacher teaches, or how an evaluator evaluates differs by person, situation, and context. As educators, we will confront countless challenges which affect our students' engagement and learning. We must not be stagnate in meeting their needs but rather conceptualize the big picture from different perspectives. Education is about more than the curriculum or formal testing, it is a craft that celebrates differences, creativity, and successes.

Our faculty and staff have been trained and have completed several book studies focused on gender differences. I have also shared how numerous concepts from Eisner (1998) have influenced my decisions when providing same-gender classrooms as an option for parents and students. Eisner reminds us that education will have no permanent solutions to its problems; we will have no "breakthrough," no enduring discoveries that will work forever. We are "stuck" with temporary resolutions rather than permanent solutions. Therefore, the findings of this study are not meant to offer permanent solutions for schools. Rather this study provides insights to others on how this decision to offer a same-gender classroom choice option changed the culture and results of this school. This study's results identify existing negative consequences and improvement gaps.

CHAPTER III

A REVIEW OF THE LITERATURE

The review of literature conducted for this study examined the impact of gender-specific classes on student learning. The literature reviewed and described some of the outcomes and results of how schools throughout the nation have piloted and implemented gender-specific classes.

Federal Laws Affecting Single-Sex Education

The No Child Left Behind Act of 2001 was signed into law by President Bush in January 2002. This act reauthorized the Elementary and Secondary Act of 1965 and allows local educational agencies to use Innovative Programs' funds to support same-gender schools and classrooms consistent with applicable law. The Elementary and Secondary Act of 1965 also required the United States Department of Education (2002) to issue guidelines regarding applicable law within 120 days of the law's enactment. This act charged the United States Department of Education to issue new, more relaxed regulations on single-sex education.

During 2004, the United States Department of Education (Education World, 2004) revamped a proposal regarding when single-sex schools and classes would be permitted at the elementary and secondary levels. Senator Hillary Rodham Clinton and Senator Kay Bailey Hutchinson were key supporters and contributors in this plight to give public school districts the latitude to use federal funds for single-sex schools and

classes. The proposal changes allowed schools and districts to offer single-sex classes when the single-sex nature of the class is substantially related to providing a diversity of options of meeting the particular identified student needs (Education World, 2004).

Prior to 2006, classes could not be segregated solely on the basis of sex. However, in 2006, new federal regulations on single-sex public education were published. The new rules allow single-sex classrooms if it is substantially related to accomplishing a primary objective (Coleman, 2006). Coleman states, "a district or state may offer single-sex programs or have a single-sex school if the excluded sex is offered a substantially equal single-sex or coed school" (p. 3).

In an Office of Legislative Research report, Coleman (2006) shares, "Federal law generally prohibits individuals from, on the basis of gender, being excluded from participation in, denied the benefits of, or subjected to discrimination under any education program or activity receiving federal funds" (p. 2). Coleman says, "This provision, known as 'Title IX' is often cited in relation to sexual harassment or sports, but also relates directly to the question of single-sex schools and classrooms" (p. 3). Coleman further states that the Title IX statute contains some limited exceptions to the general prohibition against excluding a student from a class or activity within a coed school based on gender.

The final version of the new Title IX single-sex regulations was disseminated in October 2006. According to the former United States Secretary of Education, Margaret Spellings (as cited in Coleman, 2006), the new regulations "give communities more flexibility . . . to offer single-sex classes, extracurricular activities, and schools at the

elementary and secondary levels" and acknowledge that "research shows that some students may learn better in single-sex education environments" (p. 1).

Also, the regulations allow nonvocational coeducational elementary or secondary schools to provide nonvocational single-sex classes or extracurricular activities if

1. They are substantially related to the achievement of an important objective such as improving the educational achievement of students, providing diverse educational opportunities, or meeting the particular, identified needs of students.
2. The objective is implemented in an evenhanded manner, which may require the provision of a substantially equal single-sex class or activity for the excluded sex.
3. Student enrollment in the single-sex class or activity is completely voluntary.
4. The recipient provides to all other students, including students of the excluded sex, a substantially equal coeducational class or extracurricular activity in the same subject or activity. (Coleman, 2006, p.3)

Local education agencies are mandated to conduct periodic evaluations of single-sex classrooms and activities to validate compliance.

National Association for Single-Sex Public Education

Upon issuance of the 2006 federal regulations, former rules on single-sex education were expanded. A vast body of research and investigation shows that males and females act and learn differently in social settings (Sadker & Sadker, 1988). As educators, we sometimes fail to appreciate the important difference gender makes in learning, especially when students are in a mixed-gender classroom (Sadker, 2002).

Perceptions about gender differences have critical implications for educational expectations by teachers, parents, and students. Dr. Leonard Sax, founder of the National Association for Single-Sex Public Education, shares that its supporters are a diverse community including anyone who believes that American parents should have the option of single-sex education for their children in their own public school (National Association for Single-Sex Public Education, 2002).

The National Association for Single-Sex Public Education (2002) is a nonprofit organization founded in 2002, dedicated to the advancement of single-sex public education for both boys and girls. The organization has three major missions:

1. To provide professional development opportunities for teachers, sharing the latest research about different teaching strategies for girls and boys.
2. To serve as a resource for teachers, parents, and administrators considering single-sex educational programs.
3. To provide a clearinghouse for relevant facts and information about public schools and classrooms in the United States, as well as to promulgate new research. (National Association for Single-Sex Public Education, 2002, p. 2)

Traditionally, public schools did not offer single-sex education. According to the National Association for Single-Sex Public Education for the 2008-2009 school year, there were at least 442 public schools in the United States that offered single-sex educational opportunities. Most of the schools were coeducational schools which offered single-sex classrooms and retained some coed activities.

Early Samples of Gender School Efforts

Several studies were conducted to examine the impact of gender-specific classes and schools in regard to the progress made during their pilots. Schools across the nation elected to provide parents and students with a viable option–same-gender education. The following section provides a sample of some of the early implementations of gender school efforts in order to address the social, physical, and educational needs of children.

California Study

Datnow, Hubbard, and Woody (2001) issued a report in 2001 which scrutinized whether single-gender schooling was a viable option in the public arena. The researchers focused on experiments with single-gender education in California. In 1997, six school districts offered boys and girls single-gender academies as a result of former California Governor Pete Wilson's legislation and funding for a single-gender academies pilot program in the public school system. The report presented findings from a 3-year case study of the single-gender academies in the six districts. Over 300 indepth interviews with educators, policymakers, and students were conducted. The study also involved school and classroom observations (Datnow et al., 2001).

The purpose of the study was to assess the consequences of single-gender schooling in the public sector. The following is a summary of the major findings of the study (Datnow et al., 2001):

1. For most administrators, single-gender schooling was a vehicle for meeting at-risk students' needs and not an end in itself.
2. The success of California's pilot program was undermined by implementation challenges.

3. Most of the single-gender academies were, by design, not open to all students.
4. For most parents, California's single-gender academies were seen as an opportunity for their children to benefit from special resources and to reduce distractions from the opposite sex.
5. Educators ensured that equal resources were offered to boys and girls, but were less concerned about gender bias.
6. Traditional gender stereotypes were often reinforced in the single-gender academies.
7. Boys tend to be taught in a more regimented, traditional, and individualistic fashion, and girls in more nurturing, cooperative, and open environments.
8. The creation of separate academies for boys and girls in the same campus led to a dichotomous understanding of gender, where girls were seen as "good" and boys were seen as "bad."
9. Students received mixed messages about gender from their teachers.
10. The separation of girls and boys did reduce classroom distractions from the opposite sex; however, students still experienced teasing and harassment in the coeducational spaces of single-gender academies.
11. Single-gender arguments offered opportunities to impart important life messages to adolescents, particularly those who are severely at risk.
12. The implementation of single-gender academies had positive and negative consequences for the students and educators remaining in counterpart coeducational settings.

Public single-gender academies were not sustainable under California's policy framework. In 1999, after 2 years, four of the six districts closed their academies. Only one district continues to operate single-gender academies.

Ewing Middle School, South Carolina

Along the same lines and time frame as California, a school in Gaffney, South Carolina, piloted same-gender classrooms. According to Stevens (2006), students at Ewing Middle School have been enrolled in single-gender classrooms since 1998. Ewing Middle was the first public school in the South Carolina midlands to implement single-gender classes. Ewing Principal, Amanda Burnette, stated, "We looked at lots of research about what works best for kids who are truly struggling and it kept coming back to gender-based classrooms" (Stevens, p. 3).

Ewing Middle has a number of low socioeconomic students attending the school which serves approximately 500 students in grades 6 through 8. The school leadership team collaborated to bolster student achievement for students at all learning levels. The single-gender concept was described as one of the six highly effective school reform methods listed in Blankstein's *Failure is Not an Option* (as cited in Stevens, 2006).

In the 1st quarter, Ewing classes were mixed in gender but the school switched their students' schedules midsemester to begin their new program. The new program was called the Renewed Opportunity Center for Kids. Students are selected for the program based on their standardized test scores. There were 6 teachers and 74 students in the Renewed Opportunity Center for Kids. As do many single-gender programs, it operates as a school within a school. While other students remained in mixed-gender English and math classes for 90 minutes each, Renewed Opportunity Center for Kids students in

single-gender classes had these subjects for 135 minutes each. Students voluntarily participate in the Renewed Opportunity Center for Kids. The first year everyone recommended took part in the program.

Burnette (Stevens, 2006) reported there had been no stigma attached to the program. Marsheka Wray, a Ewing eighth grade student, says,

> At first they thought I was gonna be in a slow class, but when we got there it was totally different. I consider myself in a class that I can learn more in. My attitude's been better and my grades have gone up a lot. (Stevens, p. 5)

Cherrie Winkler, a Renewed Opportunity Center for Kids teacher, shares, "With single-gender instruction, you're throwing hormones out of the picture and you don't have to worry about looking pretty in class" (Stevens, p. 4).

Thurgood Marshall Elementary School, Seattle, Washington

Students continue to make gains at Thurgood Marshall Elementary School in Seattle, Washington, another example of a school experimenting with same-gender classrooms. According to Sax (2005a), Thurgood Marshall was a failing school in one of the city's poorest neighborhoods until the school's principal, Benjamin Wright, reconfigured the school as a dual academy consisting of all-girls and all-boys classes. The school introduced single-gender classes to try and curb behavioral issues but discovered the implementation helped make academic improvements. He goes on to report that the schools' data have been encouraging. The boys' test scores on the Washington Assessment of Student Learning reading exam increased from the 10th to the 66th percentile (Sax). In the previous coed year, not a single girl passed the math part of the Washington Assessment of Student Learning. After the gender change, 53% of the girls

passed (Sax). Wright asserts that the improvements have not been limited to grades and test scores. Discipline referrals quickly decreased from 30 office referrals per day to fewer than two a day. These improvements occurred without any additional funding or changes in class size (Sax). Sax shares that the school achieved consistently positive results each year.

Woodward Avenue Elementary School, DeLand, Florida

In 2005, Woodward Avenue Elementary School in DeLand, Florida, was the only public elementary school in Florida to offer same-gender classes. Woodward Elementary conducted a 2-year pilot in kindergarten, second-, and fourth-grade classes which revealed that students who participated with only girls or only boys outperformed their coeducational peers (Hobbs, 2005). Currently, single-gender classes are offered in each grade level (K-5) in a format that is voluntary for all stakeholders.

Principal Jo Anne Rodkey says despite what some believe or have said she did not make the change to give girls an edge (Hobbs, 2005). Woodward Elementary did not need the help academically. It was reported that despite its high numbers of low-income children, it was awarded an "A" by the state for 4 consecutive years. Florida schools receive school grades based on the change on their students' state achievement test scores. Rodkey stated she made the change for the boys. She said, "We just don't seem to be meeting their needs" (Hobbs).

Woodward's scores from the Florida Comprehensive Assessment Test showed noteworthy results. Although only about half of the elementary school's fourth-grade students in mixed classes scored at grade level or higher, 91% of the all-boys class scored at grade level or higher, and 83% of the all-girls class scored 83% or higher (Hobbs,

2005). Further data revealed that in reading, slightly more than 70% of fourth graders in traditional classes read at grade level but about 80% of those in the same-gender classes did (Hobbs, 2005).

In interviews with fifth graders in single-sex classes, students were asked what they liked about their learning environment. They responded with a common theme: there are no boys (no girls) to "bother" us (Downs, 2007).

Woodward Elementary School representatives presented at the Fourth Annual 2008 International Association for Same Sex in Public Education Conference in Memphis, Tennessee, and shared successes they were having with same-gender education classes (Woodward Elementary School, 2008). Woodward Avenue Elementary School has gained national recognition for the achievement of their boys in the all-boys classroom, particularly in reading. In the DeLand, Florida elementary school, Sax (2006) shared that the same-gender format improved performance significantly for both girls and boys and eradicated the gender gap altogether–with no change in class size or per-pupil funding.

Cambridge University Study

In June 2005, researchers at Cambridge University revealed results of a 4-year study of educational gender differences. The Raising Boys Achievement Project conducted from 2000 to 2004 focused on academic achievement issues of girls and boys in England schools (Younger et al., 2005). The researchers in this study investigated hundreds of different schools, representing a wide variety of socioeconomic and ethnic backgrounds, seeking to identify strategies which improved performance and narrowed the gender gap of both girls and boys. Reported in the study, a total of 50 schools were

involved. The schools involved were either “originator schools” (schools which had successfully improved student performance while narrowing the gender gap) or “partner schools” (less successful schools onto which the originator strategies were grafted). One of the strategies implemented was single-sex education. The researchers (Younger et al., 2005) found that the single-sex classroom configuration was exceedingly effective at boosting boys’ performance particularly in English and foreign languages, as well as improving girls’ performance in math and science.

The research from this study has shown that there is no one way to solve the gender gap in school achievement. However, intervention strategies can be effective in raising boys’ and girls’ achievement. Furthermore, it takes time to implement and monitor given strategies. The choice of an appropriate strategy must relate to the specific school context (Younger et al., 2005). As Younger et al. states,

> Nevertheless, while a school may choose a specific strategy, it is important to bear in mind that all depend at the most basic level on inspiring, imaginative, and exciting pedagogy which generates enthusiasm for learning and achievement, and on a school ethos which encourages and facilitates achievement in its widest sense. (p. 149)

TWO Academies, Richland, South Carolina

In 2003, David Chadwell, currently Southeastern Director for the National Association for Single-Sex Public Education was the boys’ lead teacher at TWO Academies which is a magnet school within Dent Middle School in Richland, South Carolina. Chadwell exclaimed, “It’s a great option because it gives students and families an alternative to learning” (Stevens, 2006, p. 3).

TWO Academies was undergoing its 3rd year of implementation during this time. It served 210 students in grades six through eight. This program was an option for any child in District Two. Students were accepted based on their grades, writing samples, and an interview. At TWO Academies, academics and electives were offered in single-gender environments. Boys and girls only interacted during lunch. Chadwell shares, "It's been very successful. The number of students moving into proficient and advanced (categories on the state's standardized test) is higher than the district average" (Stevens, 2006, p. 4).

Chadwell began his new role as the country's first and only statewide coordinator of single-gender education in 2004 (Adcox, 2007). An Associated Press writer reports that Chadwell believes boys and girls can get through the awkward middle school years when they are separated, learning in the classrooms tailored to learning styles of each gender (Adcox). Chadwell also received permission from the state to launch South Carolina's first public, all-day single-sex program. The new state school superintendent pushed to expand single-gender education in an effort to give parents more options within public schools (Adcox). Chadwell was up for the challenge. Over 70 schools in South Carolina initially offered single-gender education. Currently, 170 schools offer single-gender education.

Foley Intermediate School, Baldwin County, Alabama

According to Lee Mansell, Principal of Foley Intermediate School in Baldwin County, Alabama (personal communication, August 27, 2008), a single-gender pilot program began at their school in August 2004. Weil (2008) states that Foley is located about 10 miles from the Gulf Coast. Fifty-seven percent of Foley Intermediate School's students are White, 24% are Black, and 17% are Hispanic. Seventy percent of the

school's students receive free or reduced lunches daily (Weil, 2008). The original purpose of the pilot was to close the achievement gap for male minority students. Mansell informs that this program is strictly voluntary. To date, over two thirds of the school participates in same-gender education classes. Over a 4-year period, the school data reveal significant findings as shared by Mansell. In the 1st-year pilot, Hispanic students in single-gender classes improved more than those in mixed classes, nonWhite attendance was noticeably better in single-gender classes, and students in the fourth-grade all-girls' classes outperformed all other students in the school on the Total Reading Subtest of Stanford Achievement Test 10. In the 2nd-year pilot, students in single-gender classes outperformed students in mixed classes on the Alabama Direct Assessment of Writing. Black and Hispanic students in single-gender classes scored higher on the Stanford Achievement Test 10 than the same subgroups in mixed classes. Hispanic girls in an all girls' class showed the greatest increases in scaled scores from the 2005 administration of Stanford Achievement Test 10 to the 2006 administration of Stanford Achievement Test 10 Total Mathematics Subtest. In the 3rd-year pilot, students who were in an all-boys' class for the 2nd year scored higher on the April 2007 Alabama Reading and Math Test than any other group in the school. Ninety percent of those boys scored a "4" (exceeds standards) on the reading subtest. In addition, students in single-gender classes averaged at the 68th percentile on the Stanford Achievement Test 10 Reading Subtest while students in mixed-gender classes averaged at the 39th percentile. In the 4th-year pilot, Black, Hispanic, and White students in single-gender classes scored higher on the Stanford Achievement Test 10 Total Reading and Total Mathematics Subtests than students in each racial subgroup in mixed-gender classes. In a 2009 conference

presentation, Mansell's PowerPoint revealed that girls outscored boys on the Stanford Achievement Test 10 Total Reading and Total Mathematics (Mansell, 2009).

As Foley Intermediate School's single-gender program continues to flourish, they have received state and national recognition. In 2005, Foley Intermediate was named a Torch-Bearer School and received $2,950 from the Alabama State Department of Education for closing the achievement gap for black students. In 2007, the school received a $20,000 cash award from the State Department of Education for continuing to close the achievement gap. Nationally, Foley was featured in the *New York Times Magazine* cover story on March 2, 2008 (Weil, 2008). Bill Bender, fourth-grade teacher, was referenced in Sax's (2007) most recent book, *Boys Adrift.*

According to Weil (2008), Mansell reports that the school's single-sex classes produced fewer discipline problems, more parental support, and better scores in writing, reading, and math. Mansell goes on to say that their school has a waiting list in both grades (Weil).

Kimberly Middle School, Boise, Idaho

At Kimberly Middle School in Boise, Idaho, teachers and administrators have been impressed by their students' focus in single-gender classes. School stakeholders say it is a welcomed change. Kimberly, Idaho, is a small farming community a few miles east of Twin Falls. Principal Judy Watson shares that the teachers embraced the single-gender idea hoping to improve learning for girls (Yi, 2003).

Teachers at Kimberly Middle School reported that in the same-gender classes, girls were no longer timid but are now talking. Rieke, a teacher at the school says "We're really happy to find they are asking questions and participating and coming up with

answers themselves, really asking thought provoking questions" (Yi, 2003. p. 1). Rieke goes on to say that the boys seem less distracted and are not trying to impress other students. Further studies reveal that Kimberly teachers felt single-gender classes work best for middle school aged children because they are going through numerous physical and emotional changes (Yi).

Although it was too early to see an improvement in test scores from the 2-year experiment, teachers and administrators measured some of the same-sex classes' success by a discipline program called "Refocusing." Students who act out must complete a form and reconsider their behavior (Yi, 2003). There were 35% fewer "refocuses" in the first semester after segregating the classrooms despite an 11% increase in student enrollment (Yi).

Lyseth Elementary School, Portland, Maine

Single-sex learning is apparent at Lyseth Elementary School in Portland, Maine, where fourth-grade teachers Lorraine Taylor (all-girls class) and Paul MacDowell (all-boys class) participated in a 2-year pilot program to see if separating the boys and girls for half of the day enhanced their learning (Quimby, 2006). Lyseth is the largest elementary school in Portland with 550 students. Principal Jeff Porter stated that the single-sex classroom project stemmed from years of collaboration about gender differences at elementary schools, where there are few male role models (Quimby). Porter further shares that the gender program is an extension of the school to address various learning styles. The purpose of the initiative was to address the issue of boys lagging behind in reading and writing scores.

Maine girls and boys perform almost identically in math and science; girls outperform boys in reading and writing (Quimby, 2006). In 2006, 57% of Maine fourth-grade girls met or exceeded the reading standards on the Maine Education Assessment, the statewide achievement test, while only 45% of the boys did so (Quimby, 2006).

Quimby (2006) stresses that some parents say their children appear to be thriving in single-sex classrooms. Doug Warren, a parent of two boys and two girls, said his child Donnelly, 10, is able to have richer and deeper discussions with his classmates about books (Quimby, 2006).

Students at Lyseth were randomly assigned to the single-gender rooms but were given the option not to participate. The majority of students decided to participate. The boys say their all-boy classes make them feel as if they are on a quest.

Alex Oja, 10, described his class as a fraternity (Quimby, 2006). The girls report positive results as well. “My teacher said I need to speak up and raise my hand,” said Mamie Walsh, a 9-year old student (Quimby, 2006). She says she does so and gets her teacher’s attention.

At Lyseth Elementary School, the two teachers alternate subjects. Taylor takes the boys for math and the girls for language arts. MacDowell has the boys for reading and the girls for math. Taylor says she adapts her teaching methods to the gender of the group. She encourages the boys to move around, which research has found helps boys concentrate. She also tells the girls to speak up and ask for what they want (Quimby, 2006).

The teachers use data to drive their gender plans. Porter says they will continue to track the students through middle school to see whether their year in a single-sex setting has had any affect.

Westside Elementary School, Spring Hill, Florida

In June 2007, 12 teachers from Westside Elementary School attended a 2-day, 14-hour workshop on gender separate classroom best practices (National Association for Single-Sex Public Education, 2009). The workshop was hosted by Stetson University and led by Dr. Leonard Sax, Director of the National Association for Single-Sex Public Education.

Since August 2007, students of grades 1-5 at Westside Elementary School were given an option to participate in single-sex classes. Westside Elementary has one all-boys class and one all-girls class at every grade level. “The boys aren’t getting into trouble as much,” marveled fifth-grader Tina Rifenburgh (Marshall, 2007, p. 1). Marshall reported the girls are becoming more verbal and the boys are working hard. He described the gender relations as harmonious.

Principal Charles Johnson shares that even though they have just begun the project, he is committed to the optional program and will collect lots of data on the program’s impact (Marshall, 2007). Johnson stressed, “The research shows that boys are falling behind. We need to create an environment where they aren’t turned off to school” (Marshall, p. 3). Teachers continue to see benefits for both boys and girls from the strategies they have implemented.

Summary of Single-Sex Classroom Findings

The National Association for Single-Sex Public Education (2009) reports that currently there are at least 542 public schools in the U. S. with single-sex educational opportunities. This literature review provided an overview of a few selected schools that lead the way for others. Most of the current schools are coeducational but offer single-sex classrooms which maintain at least some coeducational activities. The research does not claim that single-sex education is a cure all for "hearing our boys cry" or for "short changing our girls." Rather, another option is open to create an environment that reduces the gender gap.

The aforementioned studies collectively reveal the following:

1. A growing number of elementary and middle schools are becoming more radical in meeting students' needs by piloting single-gender programs (National Association for Single-Sex Public Education, 2009).
2. Single-gender schools are reporting an increase in student achievement as noted by state and national data (Sax, 2005b).
3. The majority of single-gender schools operated within a coeducational school setting (Hobbs, 2005).
4. Many single-gender programs began as an attempt to reach at-risk students (Sax 2005b).
5. In nearly every instance, it was reported that the overall discipline of students improved. In some cases the improvement was significant (National Association for Single-Sex Public Education, 2009).
6. Schools choosing to pilot single-gender did some type of professional

development and collaboration before implementation (Weil, 2008).

7. A number of single-gender schools were of low socioeconomic status (Stevens, 2006).
8. A few of the pilots ended after 2 or 3 years noting a lack of funding or decrease in student enrollment (National Association for Single-Sex Public Education, 2009).
9. Administrators and teachers participating in the single-gender programs reported positive changes in attitudes, grades, and attendance (Stevens, 2006).
10. Parents of students participating in the single-gender programs shared that their children are thriving–they are happy and making progress (Stevens, 2006).

As with any research, proponents and opponents exist; single-gender education classes are no different. The following sections provide an overview of the two sides' viewpoints.

Proponents of Same Gender Classrooms

Assistant Secretary of Education Stephanie Monroe says, "The research, though it is ongoing and shows mixed results, suggests that single-sex education can provide benefits to some students under certain circumstances" (Paulson & Teicher, 2006, p. 1). Most of the current research is controversial, but there are some documented benefits of same-gender classrooms. Jensen (2004) shares that benefits of gender-specific classrooms include improved academic performance, promotion of academic diversity, and reduced discipline problems.

DePape (2006) gives three categories which comprise the advantages of single-gender classrooms for females: (a) they have expanded educational opportunity; (b) they have access to a custom-tailored learning environment; and (c) there is potential for them to exercise greater autonomy, especially in heterosexual relationships. It is believed that males also benefit from single-gender classes. Sax (2004) puts the benefits to males into two categories: (a) males receive a better-rounded educational experience and (b) teachers can custom tailor their learning environment.

According to Blazer (2006), proponents give numerous reasons for their support of single-gender schools:

1. Creates an environment that reduces distracting behavior.
2. Improves students' academic performance.
3. Provides students with more exposure to same-sex role models.
4. Reduces sex-role stereotyping.
5. Provides students with socioeconomic benefits that contribute to increased levels of self-esteem.
6. Reduces absenteeism and dropout rate.

Senator Hillary Clinton (Povich, 2002) served as a proponent. She claimed, "The idea behind providing choices in public schools is, for me, one of the best ways that we can ensure choices of learning environments that will maximize the achievements of every student" (Povich, p. 1). Clinton further stated, "I think we need to be creative, think outside the box and try to figure out what are the learning environments most likely to maximize the highest achievement for all of our kids" (Povich, p. 1).

Sax (2005a), Director of the National Association for Single-Sex Public Education, says there are two major reasons for single-sex schools: (a) that boys and girls learn differently and (b) that the absence of the opposite sex in the classroom eliminates a major distraction that hinders learning. Sax has also authored *Why Gender Matters* (2005b) to address these factors.

Sax argues, "Boys and girls learn in profoundly different ways. If you ignore those differences you end up reinforcing gender stereotypes. Therefore, you end up with fewer girls studying math, computers, and physical science and fewer boys studying languages and arts" (as cited in Reeves, 2006, p. 1). Catering to student needs, Sax contends, has proven effective. In a study conducted in Florida, for example, fourth-grade students were randomly assigned to coeducational and single-sex classrooms. In the coed classes, 57% of the girls and 37% of the boys scored proficient in the writing segment of the standardized test. In single-sex classes, 75% of the girls and 86% of the boys scored proficient (Sax, 2006).

Gurian has authored numerous books regarding the differences between boys and girls. In his latest book, *The Purpose of Boys*: *Helping Our Sons Find Meaning, Significance, and Direction in Their Lives,* Gurian (2009) shares reasons that boys are not doing well in today's society. Gurian stresses that boys need nurturing and purpose.

In a recent article, Gurian (2009) shared three main reasons males have lost sense of purpose: (a) breakdown of the nuclear family, (b) breakdown of the extended family system, and (c) social causes boys cannot control. According to Pytel (2009), Gurian believes that the traditional classroom is failing many boys. Gurian (2009) suggests, "Most teachers are not trained in how boys and girls learn differently. After a while, they

realize everyone doesn't and by then, a number of the boys are being lost" (p. 166). Gurian also reveals that school is irrelevant to males. He proposes getting more males interested in school by offering more vocational education and service learning experiences. Gurian's remedy for improving this dilemma is the single-gender classrooms option (Pytel).

Some proponents of the same-sex schooling say this opportunity builds confidence and allows students to focus more on their studies because it removes the coeducational distractions and social pressures. Salomone (2003), author of *Same, Different, Equal*: *Rethinking Single-Sex Education*, shares that there is minimal research related to same-sex schooling. In this book, she explores the benefits of single-sex education in the public realm. Salomone is Professor of Law at St. John's University. She has researched studies which suggest single-sex benefits are more evident in girls, lower income families, and minorities (Salomone).

In her paper presentation, *Rich Kids, Poor Kids, and the Single-Sex Education Debate*, Salomone (2000) states that coeducation may not be particularly ideal for urban minority students. She goes on to say that single-sex programs should be considered as an alternative since our federal system has "failed to stem the downward spiral of inner-city students" (Salomone, p. 29). Salomone stresses, "Perhaps what distinguishes single-sex programs from other pedagogical approaches is not that the research findings are inclusive, but that we have difficulty uncoupling gender segregation from its tainted history, and, more importantly, from the shameful legacy of racial segregation" (p. 29).

The United States General Accounting Office (USGAO, 1996) reported that numerous educators feel the single-gender programs have value for urban minority males.

The United States General Accounting Office stated those interviewed confirmed improved test scores, behavior, and attendance. Riordan (1994), a professor of sociology at Providence College, has conducted several studies which initially showed that Hispanic and African American students, both male and female, did better in single-gender schools on all tests than did coeducational students. In his later research of single-gender schools in four countries (Belgium, New Zealand, Thailand, and Japan), Riordan stressed that single-gender schools do not have uniform and consistent effects. He described the effects as conditional. Riordan believed single-gender schools are most effective when they are atypical. This report emphasizes that Riordan felt the most important factor contributing to the observed gains could be the parents and students make what he calls "proacademic choice," not the single-gender setting (Riordan).

Sather (n.d.) shares that supporters of same-sex education feel it helps students concentrate on their assignments, builds confidence, and removes distractions and other social issues. Sadker (1994) says, "The effectiveness of single-sex schools is a big educational question mark" (p. 52). Sadker who is the Professor of Education at American University acknowledges that studies have found that single-sex schools are more effective for girls than for boys, show only disadvantaged students benefit from single-sex education, and that single-sex schools can intensify gender stereotypes and homophobia. Sadker, a proponent, sees more advantages than disadvantages. Sadker (1994) highlights the following advantages of single-sex education for girls and boys. For girls,

1. Girls get 100% of teachers' attention.
2. The schools usually have women principals which shows women in leadership.

3. Girls' schools are more likely to have women teaching math and science, which also sends a message.
4. Without boys to inhibit them or grab the spotlight, girls speak up more freely and more often in the classroom.
5. The curriculum is likely to include women in nontraditional roles and positions of authority.
6. Girls report high self-esteem as a result of their academic achievement, not as a result of their looks or popularity.
7. On the sports field, girls do not take second place to male athletes.

For boys,

1. Gives all boys a place to be themselves, whether that self is athlete, scholar, actor, or techie.
2. Gives boys the chance to speak up in class, without fear of embarrassing themselves in front of girls.
3. Can be very effective for poorer, minority boys.
4. Addresses the unique needs of boys.

Even though single-gender classrooms may not be feasible for all, the opponents advocate that it be considered a viable option for students. With any initiative or movement, both proponents and opponents share their views. The next section provides a brief overview of the arguments presented by opponents of the same-gender classrooms.

Opponents of Same Gender Classrooms

In 2004, the American Association of University Women (The Associated Press, 2006) reported that single-sex classrooms distract from real problems in schools. Single-

sex education is a regression from the hard won gains brought about by the feminist movement. There are others who oppose all segregation. Chen (2008) shares,

> To some the idea of substantially equal schools, classes, or extra-curricular activities is reminiscent of the "separate but equal" policy for racially segregated schools. They further question how a coeducational class for both sexes can be substantially equal to a single-sex class for one sex. (p. 2)

Toppo (2002) reports that research on single-sex education has been conducted in mostly private schools; therefore, the research is inconclusive suggesting the schools are more orderly and that girls tend to do better in math, science, athletics, and social situations. Toppo goes on to suggest that the self-esteem of girls attending such schools is not necessarily better than that of girls in other schools. The overall academic results were mixed. It was noted that when studies show academic improvements in single-sex schools, the results do not hold up when factors such as socioeconomic and ability levels are factored in (Toppo).

In 2004, the American Association of University Women (The Associated Press, 2006) also reported that single-sex classrooms "would throw out the most basic legal standards prohibiting sex discrimination in education" (p. 1). Pearson (2008) citing the group's 2008 report "Where the Girls Are: The Facts About Gender Equity in Education" says the group contends there is no achievement gap and both genders have stayed the same or slightly improved in testing. This study concluded that income not gender is the determining factor for success.

Catherine Hill, co-author of the 2008 report and Director of Research at the American Association of University Women Educational Foundation shared the

following conclusions of the study (American Association of University Women Educational Foundation, 2008):

1. There is a literacy gap favoring girls. It is not new, nor is it increasing. Over the past 30 years girls scored better in reading on the National Assessment of Education Progress but the gap has stayed about the same.
2. A gender gap favors boys in math on the National Assessment of Education Progress, especially in high school.
3. White male students have an advantage over White female students in math.
4. Male and female Hispanic students have a similar gender gap.
5. Proficiency scores are improving for both boys and girls on the National Assessment of Education Progress.
6. Students from families with incomes $37,000 or below score lower in math and reading.
7. There is no gap between boys and girls entering college after high school.

The American Association of University Women Educational Foundation (1998) also published *Separated by Sex*: *A Critical Look at Single-Sex Education for Girls*. This publication emphasizes that single-sex education is not really better than coeducation. These were some of their conclusions (American Association of University Women Educational Foundation):

1. No evidence shows that single-sex education works or is better for girls than coeducation.

2. When elements of a good education are present–such as small classes and schools, equitable teaching practices, and focused academic curriculum–girls and boys succeed.
3. Some kinds of single-sex programs produce results for some students, including a preference for math and science among girls. (American Association of University Women Educational Foundation, 1998, p. 2)

According to Reynolds (2008), The American Civil Liberties Union also opposes single-gender classrooms. This organization asserts that the research upon which some initiatives are based is nonconclusive, and that "single-sex education fosters sex discrimination" (Reynolds, p. 2) and undermines the achievement of Title IX. The American Civil Liberties Union further contends that the 2006 amendments to Title IX, which have given school districts the leeway to introduce single-gender classrooms, weaken the law's original intent. Reynolds goes on to say that the American Civil Liberties Union believes single-gender education violates the equal protection guarantees of the 5th and 14th Constitutional Amendments.

The National Organization for Women (Reynolds, 2008) staunchly opposes single-gender education because of the limited studies which prove single-gender classrooms increase learning. The National Organization for Women (2004) is a nonprofit organization dedicated to making political, social, and economic changes in society in an effort to end discrimination.

The National Organization for Women (2004) and the Office for Civil Rights (2002) were on opposite sides regarding the proposed implementation of the regulations in Title IX, which facilitated the establishment of single-sex programs in primary and

secondary schools. Officials at the Office for Civil Rights felt the regulations were legally flawed. The following reasons were given for The National Organization for Women abandoning these regulations: (a) raises constitutional concerns, (b) lacks supporting research, (c) conflicts with existing law, (d) undermines diversity, (e) fails to ensure equal opportunity, (f) perpetuates sex-stereotyping and feelings of superiority and inferiority, (g) undermines work place equality, and (h) fails to adequately address harassment and discrimination.

Clearly single-gender education and its research is still in the infancy stages. Pollard (1999) suggests three points as we continue to gather more research on single-gender:

1. Look at outcomes of single-gender classes in terms of established goals.
2. Investigate systematically the impact of various types of single-sex classes.
3. Examine the context within which single-sex classes occur and the context of the communities served.

Our Supreme Court has made it quite clear that public single-sex education does not violate the guarantee of equal protection. As educators, if we pilot this viable option, it must be our goal in doing so to remedy past or present discrimination.

CHAPTER IV

METHODS

The purpose of this study was to examine the impact of gender-specific classes in regard to student progress made and standardized test results achieved at an intermediate school over 3 years. Furthermore, the study provided new insights and interventions for diminishing gender gaps which impede teaching and learning at a rural intermediate school. Specifically, the study helped determine student achievement effects, student retention rates, and stakeholder perceptions of students' experiences in same-gender classrooms. This information may help school administrators and staff plan and implement more effective strategies to meet student needs. Additionally, this information could be helpful in encouraging experimentation with innovative ideas and methodologies related to engaging students in the learning process and helping them achieve at higher academic levels.

Guided by a synthesis of research on same-gender education classrooms and a theoretical framework based on Eisner's connoisseurship and criticism model, five research questions emerged for this study:

1. What was the student achievement effect of students who enrolled in same-gender classrooms?
2. What was the student retention rate of those students enrolled in same-gender classrooms?
3. What were students' perceptions of learning in a same-gender classroom?

4. What were teachers' perceptions of teaching in same-gender classrooms?
5. What were parents' perceptions of their students' learning experiences in same-gender classrooms?

Setting of the Study

The study took place at a rural Title I intermediate school, grades four through six, during the 2008-2009 school year. Bay Minette Intermediate School, situated approximately 40 miles north of Mobile, Alabama, has an enrollment of 414 students. The school receives students from three city areas and is one of four intermediate schools in the county.

Over the past 5 years, the community and school have changed. In 2003, with grades four and five and an enrollment of approximately 500 students, the ethnic breakdown included 55% White, 40% Black, 2% Other, 2% Asian, 1% Hispanic, and 1% Native American (Bay Minette Intermediate School, 2010b). The predominant language is English. The Limited English Proficient students include approximately 1% of the school population. In 2009-2010 the intermediate school's enrollment is 414 students. The ethnic breakdown includes 53% White, 43% Black, 1% Other, 1% Asian, .24% Hispanic, and .72% Native American. English remains the dominant language. The Limited English Proficient students make up approximately 2% of the school's population (Bay Minette Intermediate School, 2010b).

According to the school's Continuous Improvement Plan (Bay Minette Intermediate School, 2010a), the community served is low to middle socioeconomic. Nearly 65% of the students receive free or reduced lunches. The parents come from very diverse backgrounds ranging from high school dropouts to parents holding bachelor's

degrees or higher. The school has two National Board Certified teachers, and Alabama Reading and Math Test scores align to the state average and are increasing each year.

This rural intermediate school participates in three state initiatives (Alabama Reading Initiative, Positive Behavior Supports, and Alabama Math, Science, and Technology Initiative). The curriculum is enhanced by teachers and staff who are trained in programs such as Talents Unlimited, Thinking Maps, Reading Renaissance, and Arts in Education. The intermediate school prides itself on being a Professional Learning Community and is becoming known for its use of technology and other extracurricular activities to boost creativity and artistry in students. The administrators, teachers, and staff continue to collaborate in an effort to meet the academic, social, and physical needs of the students.

During the 2005-2006 school year, the intermediate school began a concentrated schoolwide effort toward improvement focused on vision building, evaluation of existing programs and strategies, improvement of communication at all levels, and development of an increasing number of challenging, collaborative education choices for students. This effort has included an analysis of data from the following sources: Stanford Achievement Test 10, Alabama Reading and Math Test, School Incident Report, Software Technology, Inc. Report, and EduTest.

The staff also participate in numerous book studies. As a result of these studies, teachers are becoming more effective in meeting the needs of Black males, special education, and poverty level students at the rural intermediate school. This concerted effort has further provided the establishment of shared decision making and a process for

problem solving and schoolwide discussions which have led to the implementation of same-gender classrooms as one medium for helping the targeted subgroups be successful.

Design of the Study

The intent of this study was to examine the impact of gender-specific classes in regards to the experiences of teachers, students, and parents at a rural intermediate school. A mixed methods research design was used to address the five research questions of this study. The research study approaches included (a) an analysis of year-to-year student achievement for students in same-gender classrooms; (b) descriptive data on student retention rate; (c) a survey administered to students, parents, and teachers on how well they think students are engaged and are learning when in same-gender classrooms; and (d) a case study of students, parents, and teachers to gain a more in-depth understanding of student engagement and learning in same-gender classrooms.

Creswell (2006) states that "the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" because "mixed methods offers strengths that offset the weaknesses of separately applied qualitative and quantitative research methods" (p. 18). In this study, qualitative research methods were used to determine stakeholders perceptions of how well same-gender classrooms enhanced student learning. The collection of student achievement and retention data and scaled responses to the surveys represent the quantitative aspect of this study. In addition, narrative information from the surveys and case studies add explanations of the stakeholders' perceptions about same-gender classrooms at the school.

The study design and the alignment of the design to each research question are outlined (Tables 1 and 2). The remaining sections of this chapter describe the components provided in the table.

Table 1

Student Achievement and Retention

Research question	Participants	Data collection	Data analysis
What was the student achievement effect of students who enrolled in same-gender classrooms?	Students	Reading and Math Alabama Reading and Math Test scores 2007, 2008, 2009	Compare Alabama Reading and Math Test scores for student proficiency/improvement over the past three years.
What was the student retention rate of those students enrolled in same-gender classrooms?	Students	Software Technology, Inc. (version 121) report Class list	Compare student roster from initial same-gender class to present.

Table 2

Student, Teacher, and Parent Perceptions

Research question	Survey and case study	Data collection	Data analysis
What were students' perception of learning in a same-gender classroom?	Survey: 37 surveys given to initial same-gender students. Case study: Total of 8 students; 4 females and 4 males (2 who excel and 2 who struggle academically).	Survey Case study Semistructured interview	Thematic analysis of transcribed notes of each student. One teacher selected 4 males (2 with high grades/2 with low grades) and the other selected 4 females (2 with high grades/2 with low grades). Data were analyzed by student and compared among students. Student, parent, and teacher data were compared and contrasted.

(Table 2 continues)

(Table 2 continued)

Research question	Survey and case study	Data collection	Data analysis
What were teachers' perceptions of teaching in same-gender classrooms?	6 surveys given to all same-gender teachers. Case study: 2 initial same-gender teachers.	Survey Case study Semistructured interview	Thematic analysis of transcribed notes for each teacher. Data were analyzed by teacher and among teachers. Student, parent, and teacher data were compared and contrasted.
What were parents' perception of their students' learning experiences in same-gender classrooms?	Survey: 37 surveys were given to initial same-gender parents Case study: 8 parents total, one for each student selected.	Survey Case study Semistructured interview	Thematic analysis of transcribed notes for each parent. Data were analyzed by parent and among parents. Student, parent, and teacher data were compared and contrasted.

This research study consisted of two parts. First, student achievement and retention data were analyzed for students who attended same-gender classes for 3 consecutive years.

Second, students', parents', and teachers' perceptions of same-gender classrooms were evaluated. In this second part, data were triangulated from a survey administered to students, parents, and teachers participating in same-gender classrooms and a case study of selected teachers teaching in same-gender classrooms, students of those teachers, and parents of those students. The case study included 2 teachers who have taught in the program since the beginning of same-gender classroom offerings, 4 students (2 male and 2 female) who excel academically and four students (2 male and 2 female) who struggle academically. The parents of those students were then selected to participate in the case study.

Participants of Study

Teachers, students, and parents from a rural intermediate school were selected as participants of the same-gender study. Achievement and retention data of same-gender student participants were used in this study. Participants completed surveys. Two of the original same-gender teachers and 8 students along with their parents participated in the case study.

Student Achievement and Retention Data

Thirty-seven initial fourth-grade students from a rural intermediate school were included as participants in this study. This number decreased on achievement because some students missed a reading or math section of the Alabama Reading and Math Test. Both student achievement and retention data of the 37 students were analyzed. The students of the study ranged from 9 to 11 years of age. Participants consisted of 18 girls and 19 boys whose parents elected for their child to enroll in same-gender classrooms. The intermediate school's student body is relatively diverse in regards to race, academic

levels, and socioeconomic backgrounds. The socioeconomic status of students ranged from upper middle class to poverty class.

Surveys

The survey participants included the aforementioned 37 initial same-gender students, the 6 same-gender classroom teachers, and the parents of the 37 same-gender students. The 6 same-gender teachers ranged from 31 to 60 years of age. All of the teacher participants were White females who have taught grades four or five. Their classroom experience ranged from 3 to 13 years.

Case Study

The participants in the case study consisted of 8 same-gender students, 2 of the 6 previously mentioned same-gender teachers, and the 8 parents of the same-gender students selected. Students with high and low academic achievement levels were included. The teachers submitted 4 student names from each gender class for a total of 2 high academic level females and 2 high academic males as well as 2 low academic level females and 2 low academic males. The 2 original same-gender classroom teachers were an integral part of the case study as well. Both teachers began on the fourth-grade level. The all-girls teacher is a White female who is in her early 40s and has taught for 7 years. The all-boys teacher is a white 30-year old female who has taught for 5 years. Both teachers have Master's degrees in elementary education and have been part of the intermediate school since college graduation. The parents selected for the case study were derived by the student names given to the researcher from the 2 same-gender teachers.

Data Collection

Several types of data were collected in order to determine the effectiveness of the same-gender experiences as described by participants. These data included an analysis of student academic performance on the Alabama Reading and Math Test and Software Technology, Inc. data, participant surveys, and case study information.

Student Achievement and Retention Data

Reading and math data were analyzed on the two initial classes of same-gender students (one all-boys and one all-girls class). The data were derived from the Alabama Reading and Math Test for 3 consecutive years in grades 3 through 5 from 2007 to 2009. The Alabama Reading and Math Test is a criterion-referenced test. It consists of selected items from the Stanford Achievement Test which matches the Alabama state content standards in reading and mathematics. Additional test items were developed by the State of Alabama so that all content standards were fully covered. It is this combination of Stanford 10 items and newly developed items that is known as the Alabama Reading and Math Test. This test has a 100% alignment to the Alabama State Content Standards in reading and mathematics. There are several key purposes for administering the Alabama Reading and Math Test:

1. To access students' mastery of state content standards in reading and mathematics.
2. To report individual and group performance.
3. To report relative strengths and weaknesses of individuals and groups.
4. To provide data to study changes in performance over time.

The student performance is reported as ordinal data in the following achievement levels:

1. Level i: Does not meet academic content standards.
2. Level ii: Partially meets academic content standards.
3. Level iii: Meets academic content standards (proficient or grade-level performance).
4. Level iv: Exceeds academic content standards.

The results from the Alabama Reading and Math Test are used for accountability for grades 3 through 8 in meeting one of the requirements of the No Child Left Behind Act (2001). I used this data to determine the achievement of students enrolled in the same-gender classes over a period of 3 years.

Data from the intermediate school's Software Technology, Inc. (version 121) and class lists was used to identify the retention rate over 3 years for students who consecutively enrolled in same-gender education classes. The Software Technology, Inc. is an education data management solutions program designed to maintain student records and schedules with efficiency and accuracy. Software Technology, Inc. is integrated, modular, and provides the management of several school administrative tasks including student and teacher demographics, attendance, scheduling, grade reporting, and discipline tracking. This software assisted the researcher in determining the class assignments of each same-gender student for 3 consecutive years in grades 3 through 5 from 2007 to 2009.

Surveys

Researcher developed surveys administered to teachers, parents, and students serve as another primary data collection method for this study. This approach allowed me

to access students', teachers', and parents' perceptions about their child's learning experience in the same-gender education setting. First, permission to conduct the study was received from the Baldwin County, Alabama, school district (Appendix A). Thirty-seven surveys were then distributed to the student participants. A cover letter and student survey assent or consent forms (Appendix B) were included in the packet. The cover letter explained the purpose of the research study, assured confidentiality and anonymity, and encouraged participation. The student survey consisted of nine scaled questions and several open-ended questions such as "What do you like best/least about your same-gender classrooms?" (Appendix C). The students were asked to respond to the survey before the end of the designated school day.

The 6 same-gender teacher participants had surveys, a cover letter, and a teacher survey consent form hand delivered (Appendix D). The cover letter explained the purpose of the research study, assured confidentiality and anonymity, and encouraged participation. The survey consisted of questions that closely aligned to the student survey but was presented so that teacher input could be considered. The teachers were asked to respond to the survey within 5 days from the time they received it.

Surveys were mailed to the 37 parent participants of the same-gender students. The cover letter explained the purpose of the research study, assured confidentiality and anonymity, and encouraged participation. The survey aligned to the students' and teachers' survey questions. The parents were asked to return both consent forms and their survey within 10 days (Appendix E). A self-addressed stamped envelope was included in the packet.

Permission to conduct surveys was approved by the Institutional Review Board for Human Research Participants Protection at The University of West Florida (Appendix F). Each participant received a packet of materials including a cover letter and an Informed Consent Agreement along with the survey. All participants were reminded that completing the survey was voluntary. Parents completed an informed consent to participate and to allow their child to participate in the study. All students, teachers, and -parents of the same-gender students received the survey. The survey was confidential and anonymous.

To get a better view of the alignment among the surveys, the questions for each group are provided. The stakeholders were asked to rate their same-gender experience on a scale of 1 to 5 with 5 being the highest (5 = *Strongly Agree*, 4 = *Agree*, 3 = *Neutral*, 2 = *Disagree*, and 1 = *Strongly Disagree*). The students' questions were

1. I am successful on my work at school.
2. I enjoy learning in my classroom.
3. I like to come to school.
4. I feel valued in my classroom at school.
5. I like being in a classroom with all males (female survey would include *females*).
6. I believe that I have learned more since I have been in a classroom with all males.
7. I am glad I was put into a classroom with all males.
8. What do you like best about your classroom?
9. What do you like least about your classroom?

The teachers' questions were

1. Students in my classroom are successful at school.
2. Students in my classroom enjoy learning.
3. Students in my classroom like coming to school.
4. Students in my classroom feel valued.
5. Students in my classroom like being in a same-gender classroom.
6. Students in my classroom have learned more since being in a same-gender classroom.
7. I am glad I chose to teach in a same-gender classroom.
8. What do you like best about your classroom?
9. What do you like least about your classroom?

The parents' questions were

1. My child is successful at school.
2. My child enjoys learning in my classroom.
3. My child likes to go to school.
4. My child feels valued in his/her classroom at school.
5. My child likes being in a same-gender classroom.
6. My child has learned more since being in a same-gender classroom.
7. I am glad I chose to place my child in a same-gender classroom.
8. What do you like best about your child's classroom?
9. What do you like least about your child's classroom?

Case Study

To gather data which would enable further examination of the research questions, I applied a case study method focused on teachers, students, and parents. Semistructured interview questions were developed after reviewing the analysis of stakeholders' survey responses. Two personal interviews were conducted with each participant group. One occurred at the beginning of the study to gather information. The second interview occurred near the middle of the study to validate my interpretations of the initial interview. Each half-hour interview was analyzed and transcribed. The interviews were open-ended questions and all participants were asked the same general questions. An analysis of the interview transcriptions was used to identify common themes.

Interviews were conducted with the 8 student participants. Same-gender teachers identified students whom they felt had best benefitted or not from the same-gender program. Therefore, 2 male and 2 female students who have excelled were chosen as well as 2 male and 2 female students who have experienced difficulty in their same-gender classroom. The nine interview questions for both student interviews were similar. They included questions such as "Did you feel valued in the same-gender classroom?" "What did you learn in your same-gender classroom?" "What did you like best about being in the same-gender classroom?"

Two same-gender teacher interviews were conducted. The nine interview questions for both teacher interviews were similar (Appendix D). They included questions such as "Do you believe your students felt valued in the same-gender classroom?" and "What did you like about teaching in a same-gender classroom?" "Do you feel your students learned in the same-gender classroom?"

Two semistructured interviews were held with the 8 parent participants of this study. One parent for each of the 8 student participants was interviewed. The nine interview questions for the parent interviews were similar (Appendix E). They included questions such as: “Do you believe your child felt valued in the same-gender classroom?” and “Do you believe your child has learned more by being in the same-gender classroom?”

A second interview was conducted for all case study participants. This interview occurred after the information from the first one had been analyzed. In the second interview, I summarized my interview findings to determine the level of accuracy and to gain more insight about their original responses.

Permission to conduct the case study was requested and approved by the Institutional Review Board for Human Research Participant Protection at The University of West Florida (Appendix F). All participants were reminded that participating in this case study was voluntary and any information shared remained confidential. The researcher contacted each of the 18 participants to schedule the interviews and to respond to any questions they had regarding the process. The case study offered the best opportunity for participants to share perceptions and personal reflections regarding the influence of same-gender education classes.

Data Analysis

Merriam (1988) suggests that data analysis is making sense out of one’s data. This “making sense” begins with a search for patterns and building categories from the information. Gradually, theories are developed that explain the data and allow us to draw

inferences. Both qualitative and quantitative data were analyzed to help me answer the five research questions of this study.

Student Achievement and Retention Data

The Alabama Reading and Math Test data were compiled on the 37 students to assess proficiency and improvement for 3 consecutive years in grades three through five from 2007 to 2009. The proficiency levels on the Alabama Reading and Math Test for reading and math were gathered for each student. Only students who were in third grade at Bay Minette Elementary School and enrolled in same-gender classrooms for their fourth-and fifth-grade years were included in the study. These students' Alabama Reading and Math Test scores were compared to students at the school who were attending mixed-gender classrooms to determine if the proficiency levels differed. Because only ordinal data were provided for all students, I used descriptive statistics to view differences in movement up or down in proficiency levels.

Data generated from the school's Software Technology, Inc. (version 121) class lists were compared on 37 initial same-gender students to identify the retention rate. These data were analyzed using descriptive statistics to determine the retention rate in same-gender classrooms and to compare that rate to mixed-gender classrooms.

Surveys

The surveys in this research had two parts. Both sections consisted of items related to student, teacher, and parent perceptions about same-gender education. A 5-point Likert-type scale was used. Students, teachers, and parents were asked to rate the first seven factors from 1 to 5 with 5 being the most favorable experience of same-gender

classrooms. There are a total of nine items on the survey. The final two questions were open-ended to provide more insight into possible common themes. Surveys were completed, recorded, and tabulated to provide perceptions of same-gender experiences from teachers, students, and parents at the rural intermediate school. Descriptive statistics of each item were used to analyze each survey item and to compare the items responses of each group and to compare responses across groups.

Case Study

A case study focuses on a specific group and their beliefs, values, and attitudes that structure their behavior patterns (Merriam, 1998). Case study methodology was appropriate for this study because the participants involved were part of an intrinsically formed same-gender education group. An intrinsically bounded group is one that contains a limited number of participants (Merriam, 1998). As the researcher, I was an active participant serving as the rural intermediate school's principal. This position enabled me to gain valuable information because I had an established working relationship with same-gender students (4 girls and 4 boys) and their parents and the 2 initial same-gender teachers.

A semistructured interview was conducted with same-gender students, teachers, and parents. This study examined the experiences and perceptions of participants related to same-gender education. The notes and data collected from the case study were transcribed to provide information related to student perceptions about the same-gender classes. Transcribed data were then coded according to the emergent themes. Detailed descriptions from the interviews were analyzed to provide a deeper understanding and new insights into the themes from the open-ended questions. I looked for patterns and

observations that fit together to highlight a particular theme or idea. The data were labeled and indexed to organize the material into meaningful and manageable categories. Questions that developed from the transcribed reports were presented to participants on an as-needed, individual basis to verify data previously collected. Information shared was transcribed, read, and then tallied.

Triangulation and Reflexivity

Triangulation in this study occurred in two ways. First, this study combined both qualitative and quantitative methods. Second, data were collected from various sources: (a) student achievement; (b) retention data; (c) surveys of teachers, students, and parents; and (d) semistructured interviews as part of the case study. Triangulation serves to strengthen the accuracy of findings in qualitative inquiry and, thus, increases the internal validity of the study (Creswell, 2003). Internal validity in qualitative research is defined by Merriam (1998) as how well the research findings match with reality. Merriam further notes of equal significance was reliability or the extent to which replication of findings in a study are possible.

In qualitative inquiry, the researcher is considered to be the primary instrument for data collection and analysis and, therefore, “must be aware of any personal biases and how they may influence the investigation” (Merriam, 1998, p. 21). Nightingale and Cromby (1999) suggest that “reflexivity requires an awareness of the researcher’s contribution to the construction of meanings throughout the research process, and an acknowledgment of the impossibility of remaining outside of one’s subject matter while conducting research” (p. 22). Reflexivity then, urges us “to explore the ways in which a researcher’s involvement with a particular study influences, acts upon and informs such

research" (Nightingale & Cromby, p. 22). With this assumption in mind, I recognized a potential for bias in this study because of my own personal experience as an administrator at this particular intermediate school. Moreover, I had a compelling personal commitment and connection to the study's participants and to the intermediate school. This personal commitment led me to wanting to know how well same-gender education is working for teachers, students, and their parents. Using multiple methods and sources of data provided important insights to me and to staff at the intermediate school.

My goal as the principal of the school is to provide students with the best opportunity to achieve academically. This study gave me a chance to study our actions to moving to voluntary same-gender classrooms. My staff and I will use the results to identify positives in our approach and areas that need improvement.

CHAPTER V

RESULTS OF DATA ANALYSES

I used a mixed methods approach to examine teacher, student, and parent perceptions of gender-specific classes and improvement in student achievement and retention at Bay Minette Intermediate School. I sought to provide new insights and interventions for diminishing gender gaps that impeded teaching and learning at a rural intermediate school. To do so, data were collected from various sources and audiences of the gender-specific classroom. Surveys and semistructured interviews gave me a way to triangulate information as I analyzed the findings. The four sources of data analyzed were (a) student achievement data; (b) student retention data; (c) surveys of students', teachers' and parents' perceptions; and (d) case study interviews with students, teachers, and parents from a rural intermediate school to determine their perceptions on same-gender education.

I analyzed the data to answer five specific research questions:

1. What was the student achievement effect of students who enrolled in same-gender classrooms?
2. What was the student retention rate of those students enrolled in same-gender classrooms?
3. What were students' perceptions of learning in a same-gender classroom?
4. What were teachers' perceptions of teaching in same-gender classrooms?

5. What were parents' perceptions of their students' learning experiences in same gender classrooms?

Student Achievement

Research Question 1 examined the achievement of students who enrolled in same-gender classrooms as measured by their Alabama Reading and Math Test data from 2006 to 2009. Descriptive data including ratios and percentages are provided in several tables as a way to analyze the student achievement data. Results are reported for the same-gender classrooms and the mixed classrooms as well as the subgroups. I analyzed student achievement data in two ways. First, I reviewed the number of students decreasing in at least one proficiency level from third to fourth grades and from fourth to fifth grades. Second, I analyzed the number of students who met proficiency level three in fourth grade and in fifth grade.

Movement in Proficiency Levels

Ratios and percentages indicate movement in proficiency levels from grades 3 to 4 and 4 to 5 for the students enrolled in same-gender and mixed classrooms (Tables 3 and 4). The Alabama Reading and Math Test has four levels with level three representing proficiency. The tables show the number of students who moved up, stayed the same, or moved down proficiency levels. One of the worst declines in student achievement is students making a downward movement in proficiency levels from one grade to another. Therefore, I gave close attention to the decrease column while analyzing student achievement data for students in same-gender classrooms.

Table 3

Analysis of Movement in Proficiency Level (Third to Fourth Grade)

Classrooms	Increased proficiency level	Maintained proficiency level	Decreased proficiency level
Boy reading	12%	76%	12%
Girl reading	17%	78%	6%
Mixed reading	10%	71%	20%
Boy math	12%	82%	6%
Girl math	11%	61%	28%
Mixed math	12%	49%	39%

Table 4

Analysis of Movement in Proficiency Level (Fourth to Fifth Grade)

Classroom	Increased proficiency level	Maintained proficiency level	Decreased proficiency level
Boy reading	6%	82%	11%
Girl reading	6%	83%	11%
Mixed reading	12%	71%	17%
Boy math	12%	71%	18%
Girl math	17%	78%	6%
Mixed math	20%	68%	12%

The girl's Alabama Reading Test (Table 3) had the greatest increase at 17%. The lowest Alabama Reading Test increase of 10% was the mixed Alabama Reading Test group. The boy's Alabama Math Test and the mixed Alabama Math Test both increased

by 12%. The girl Alabama Reading Test and the boy Alabama Math Test had the lowest percentage of students decrease in proficiency level. The group with the highest decrease in proficiency level was the mixed-math group at 39%.

When comparing the increase in proficiency ratios to the decrease in proficiency ratios the following results appear:

1. The same number of boys in the same-gender classrooms moved up at least one proficiency level and moved down at least one proficiency level in reading.
2. More boys in the same-gender classrooms moved up at least one proficiency level than moved down in math.
3. More girls in the same-gender classrooms moved up at least one proficiency level than moved down in reading.
4. More girls in the same-gender classrooms moved down at least one proficiency level than moved up in math.

The data (Table 4) reveal the movement in proficiency levels from fourth to fifth grade for reading and math. The mixed classroom Alabama Reading and Math Test students show the highest ratio of movement upward in proficiency level in math and the next to the highest downward movement in reading (17%). The highest downward movement in math occurred for boys in the same-gender classroom (18%). In general, girls in the same-gender classrooms show the best trend in movement in proficiency levels in math. That is, the majority of the girls moved up one level or maintained proficiency in math.

For reading, the movement pattern was about the same for boy and girl same-gender classrooms. The fifth grade scores show that more students in same-gender

classrooms did not move up or down in proficiency levels. This finding differs from the 4th grade scores. More scores showed movement up in proficiency levels in the same-gender classrooms. The mixed-gender students had relatively aligned patterns of up, down or no movement in fourth and fifth grades.

When comparing the increase in proficiency ratios to the decrease in proficiency ratios (fourth to fifth grade) the following results appear:

1. More boys in the same-gender classrooms moved down at least one proficiency level than moved up in reading.
2. More girls in the same-gender classrooms moved down at least one proficiency level than moved up in reading.
3. More boys in the same-gender classrooms moved down at least one proficiency than moved up in math.
4. More girls in the same-gender classrooms moved up at least one proficiency level than moved down in math.

In comparison of the proficiency level movements over 2 years, it was important to compare percent maintained plus percent increased to percent decreased. Fewer students in the same-gender classrooms moved down at least one proficiency level in the fourth grade. Overall, in the fourth grade, the girls excelled more in reading than did boys and the boys excelled more in math. In fifth grade, the performance of boys and girls same-gender classrooms in reading was about the same.

In the fourth grade more boys than girls in the same-gender classroom maintained or moved up at least one proficiency level in math. In fifth grade this pattern flipped. More girls than boys maintained or moved up at least one proficiency level in math.

In summary, when analyzing the student achievement data by viewing the movement down in proficiency level from one grade to another, I report two conclusions:

1. Girls in the same-gender classrooms showed fewer students moving down in math.
2. Boys in the same-gender classrooms failed to show improvements of fewer students moving down in reading and math.

In addition to movement in proficiency levels for all students in each of the classrooms, I reviewed movement in subgroups (Tables 5 and 6). Only frequencies are reported because of the small numbers of students in each subgroup.

Table 5

Analysis of Movement in Proficiency by Subgroups (Third to Fourth Grade)

Classroom	# of increased proficiency level		# of maintained proficiency level		# of decreased proficiency level	
	Reading	Math	Reading	Math	Reading	Math
Black boys same-gender	1	2	5	4	0	0
Black girls same-gender	0	0	4	0	0	2
Black same-gender						
Boys and girls	1	2	9	4	0	2
Black mixed-gender	1	4	14	9	5	7
Low SES boys						
Same-gender	2	2	9	7	0	2

(Table 5 continues)

(Table 5 continued)

Classroom	# of increased proficiency level		# of maintained proficiency level		# of decreased proficiency level	
	Reading	Math	Reading	Math	Reading	Math
Low SES girls						
Same-gender	3	0	5	4	0	2
Low SES same-gender						
Boys and girls	5	2	14	11	0	4
Low SES mixed-gender	3	4	13	8	2	6

Note: SES stands for socioeconomic status

Table 6

Analysis of Movement in Proficiency by Subgroups (Fourth to Fifth Grade)

Classroom	# of increased proficiency level		# of maintained proficiency level		# of decreased proficiency level	
	Reading	Math	Reading	Math	Reading	Math
Black boys						
Same-gender	0	1	4	3	1	1
Black girls						
Same-gender	0	1	4	3	0	0
Black same-gender						
Boys and girls	0	2	8	6	1	1

(Table 6 continues)

(Table 6 continued)

Classroom	# of increased proficiency level		# of maintained proficiency level		# of decreased proficiency level	
	Reading	Math	Reading	Math	Reading	Math
Black mixed-gender Low SES boys Same-gender	2	4	16	13	2	3
Low SES girls Same-gender	0	1	9	8	2	2
Low SES Same-gender Boys and girls	0	1	6	5	0	2
Low SES Mixed-gender	0	2	15	13	2	4
	2	3	13	12	3	3

Note: SES stands for socioeconomic status

The data (Tables 5 and 6) show that in general very little difference occurs in subgroup performance for same-gender and mixed-gender students. The number in each subgroup is low but based on the number of students who tested in that subgroup. To compare mixed-gender and same-gender classrooms, I provide the ratios for the added frequencies for both the boy and girl same-gender classrooms. This data allows for a comparison to the mixed-gender classroom.

The group to benefit the most from the same-gender classrooms when viewing these two tables appears to be both same-gender Black subgroups (boys and girls). The Black subgroup for same-gender classes either maintained or moved up in reading and

math in the fourth grade. All but 1 student continued this trend in fifth grade. This result did not hold true for Black children in mixed-gender classrooms; however, fewer shifted down in proficiency levels in the fifth grade than shown in fourth grade. The same-gender classrooms did not seem to have a high effect on students who live in poverty.

Students Meeting Proficiency Levels

I analyzed student achievement including viewing the percentage or frequency of students who met proficiency levels (level 3) on the Alabama Reading and Math Test. The results by overall groups and by the two subgroups are provided (Table 7).

Table 7

Students Meeting Proficiency Level

Proficiency met	Same-gender boys		Same-gender girls		Same-gender Boy and Girl		Mixed-gender	
				Grade				
	4th	5th	4th	5th	4th	5th	4th	5th
% Met Reading								
Overall	76%	76%	94%	94%	86%	86%	80%	85%
% Met Math								
Overall	70%	82%	78%	78%	77%	80%	80%	80%

The percentage of proficiency level met at fourth and fifth grade is provided and then compared with the combination of boy and girl same-gender to the mixed-gender classrooms. The following results appear when viewing same-gender classrooms only:

1. In reading for fourth and fifth grade, same-gender girls had higher numbers meeting the proficiency level and girls and boys showed no improvements in numbers meeting proficiency levels from fourth and fifth grades.
2. In math for fourth grade, girls had higher numbers meeting the proficiency level. In fifth grade, boys had higher numbers meeting proficiency levels. Boys showed improvements in numbers meeting proficiency levels from fourth and fifth grade and girls stayed the same.

When reviewing the comparison of girls and boys in same-gender classrooms and those in mixed-gender classrooms, it appears that there is very little difference in achievement of the two groups over the 2 years. In fact, in fifth grade, the percentage of students meeting proficiency levels in reading and math were almost identical.

The frequency of students meeting proficiency by subgroups in the same-gender and mixed-gender classrooms is provided (Table 8). The number of students represented is low but is based on those students tested in subgroups.

Table 8

Students in Subgroups Meeting Proficiency Level

Subject	Same-gender boys		Same-gender girls		Mixed-gender	
			Grade			
	4th	5th	4th	5th	4th	5th
Reading Black boy	3	3			7	9
Math Black boy	2	3			6	6
Reading Black girl			3	3	8	8
Math Black girl			2	2	8	8
Reading low SES boy	9	8			6	8
Math low SES boy	7	9			6	5
Reading low SES girl			6	6	4	4
Math low SES girl			4	4	4	5

Note: SES stands for socioeconomic status

The following results appear for reading. In the same-gender classrooms for reading all but one subgroup had the same number of students in the subgroups proficient as they moved from fourth to fifth grade (boy Black, girl Black, girl low socioeconomic status). The frequency of low socioeconomic status boy in same-gender classrooms decreased in fifth grade. In the mixed-gender classrooms, the girl subgroups show the same number meeting proficiency levels in fourth and fifth grades (Black and low socioeconomic status). In the mixed-gender classrooms the frequency of boys achieving proficiency increased for both subgroups (Black and low socioeconomic status).

The following results appear for math. In the same-gender classrooms for math all but the Black boy subgroup had the same number of students at proficiency level as they moved from fourth to fifth grade. The Black boys improved. In the mixed-gender classrooms both the girl and boy Black subgroups had the same number of proficient students in fourth and fifth grade. The low socioeconomic status boy had one boy who met proficiency in fourth grade but did not do so in fifth grade. The low socioeconomic status girls had one girl who met proficiency in fourth grade but did not do so in fifth grade.

Student Retention

Research Question 2 was designed to examine the retention rate of students enrolled in same-gender classrooms as measured by annual class lists and the Software Technology Institute. The Software Technology Institute, Inc. (version 121) program identified all students assigned to the same-gender classrooms from 2007 to 2009 and their attendance history (Table 9).

Table 9

Student and Class Retention

Grade	Original # of students	Transferred out	Promoted	% Rate
		Boys		
3rd to 4th	22	1	21	95
4th to 5th	21	0	21	100

(Table 9 continues)

(Table 9 continued)

Grade	Original # of students	Transferred out	Promoted	% Rate
		Girls		
3rd to 4th	21	1	20	95
4th to 5th	20	2	18	90
		Mixed gender		
3rd to 4th	71	13	58	82
4th to 5th	58	14	44	76

I examined the retention rate of the students enrolled in same-gender classrooms as measured by their yearly enrollment, transfer, and promotion. All students enrolled were promoted to the next grade and all but one continued in the same-gender program. During the 2008-2009 school year, two female students transferred to another school. No male students transferred that year. In the traditional class, the transfer rate was higher which lowered the retention rate for mixed-gender versus same-gender education classes. The retention rate for same-gender classes for the boys was the highest for both years of the study. In general, the same-gender classrooms have higher retention rates than do the mixed-gender classrooms.

Qualitative Data

One intention of this research was to gather, analyze, and interpret data to examine stakeholder perceptions of students' experiences in same-gender classrooms. Seventy-six surveys were administered to students, teachers, and parents at a rural intermediate school. Participants included 37 of the initial same-gender students, the 6

same-gender classroom teachers, and 33 of the 37 students' parents. Each group of participants was relatively diverse in regards to their race, academic levels, and socioeconomic backgrounds (Table 10).

Table 10

Participants in Same gender Study

Participants	Number	Race	Socioeconomic status	Special education
Students	37 Total			
	18 Females	6 Black	7 Free or Reduced Lunch	5 Females
		12 White		
	19 Males	10 White	9 Free or Reduced Lunch	7 Males
		7 Black		
		2 Other		
Teachers	6 Total			
	6 Females	White		
Parents	33 Total	13 Black		
		18 White		
		2 Other		

I conducted a survey of same-gender teachers, students, and the students' parents using a 5-point Likert-type scale. The participants were asked to rate their same-gender classroom experience on a scale of 1 to 5 with 5 being the most favorable response. The survey contained nine items designed to collect information about the perceptions of

same-gender education in their classrooms at a rural intermediate school. For same-gender classrooms, teacher, student, and parent surveys consisted of nine items that assessed perceptions of their same-gender classroom experiences. In addition, the survey consisted of two open-ended questions, “What do you like best about the same-gender education experience?” and “What do you like least about the same-gender education experience?” All participants were given a letter of introduction and were asked to sign an informed consent form, in accordance with The University of West Florida Institutional Review Board requirements.

Teacher Surveys

The 6 teachers who taught same-gender classes at the school responded to the teacher survey. The frequency of responses with ratings of 1 to 5 by question is presented (Table 11). The overall mean on the surveys for teachers was 4.76.

Table 11

Frequency of Responses for Teachers

	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Teacher 6
Statement 1: Students in my classroom are successful at school.	5	4	5	4	4	5
Statement 2: Students in my classroom enjoy learning.	5	4	5	4	5	5

(Table 11 continues)

(Table 11 continued)

	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Teacher 6
Statement 3: Students in my classroom like coming to school.	5	4	5	5	5	5
Statement 4: Students in my classroom feel valued.	5	5	5	4	5	5
Statement 5: Students in my classroom like being in the same-gender classroom.	5	5	5	4	5	5
Statement 6: Students in my classroom have learned more since being in the same-gender classroom.	5	4	5	4	5	5
Statement 7: I am glad I chose to teach in a same-gender classroom.	5	5	5	5	5	5

Teachers rated all items with a 4 or 5 rating, indicating that they had a favorable perception of the students' experiences in same-gender classrooms. The responses to statement one on the survey revealed all 6 teachers felt their students were successful at school. Three of the 6 teachers gave statement one a rating of 5. The other 3 teachers gave statement one a rating of 4. Responses to statements two and three revealed each teacher believed their students enjoyed learning and liked attending school. Four out of the 6 teachers rated statement two most favorable with a rating of 5. Five teachers rated statement three with a 5 indicating that they believe their students liked coming to school. Five teachers gave a rating of 5 to statement four and five when it came to their students feeling valued and liked being in the same-gender classroom. In response to statement six, 5 of the 6 teachers believed that their students had learned more academically in the same-gender classroom. All 6 teachers rated statement seven most favorable, revealing that they were glad they had volunteered to teach in a same-gender classroom.

A summary of responses to statements eight and nine of the survey instrument are provided (Table 12). The teachers explained what they like best and least about their same-gender classroom.

Table 12

Open-ended Responses for Teachers

Teacher and gender of their classroom	Likes best about single-gender classroom	Likes least about single-gender classroom
Ms. Williams: All-boys class	I feel the boys are more comfortable in the all-boys class. They are open to sharing and feel that they have become a family.	I worry about name calling.
Ms. Cromwell: All-boys class	I like the camaraderie and the family sense that our classroom has. I love that the boys enjoy coming to school.	Our classroom is crowded and hard to move around in.
Ms. Draper: All-girls class	Teaching to the style that enables girls to learn best. I like to inspire the girls to be the best and "break the glass ceiling". The girls are usually compassionate and supportive of each other.	Solving the problem of girls not being kind to each other as they could be and leaving other girls out. We signed a contract at the beginning of school to address this issue. It helped but did not totally solve the "odd man out" problem.

(Table 12 continues)

(Table 12 continued)

Teacher and gender of their classroom	Likes best about single-gender classroom	Likes least about single-gender classroom
Ms. Brunson: All-boys class	The competition and enthusiasm about learning is what I like best about my classroom.	Lack of student organization is what I like least about my classroom.
Ms. Salter: All-girls class	I enjoy the way the class can discuss topics and issues in a way they could not if it was a traditional class.	Our girls did a great deal of increase in Math this year with the online program VMath with only 3 computers. I wish we had more computers in the classroom for the girls.
Ms. Baxter: All-girls class	The thing I like best about my classroom is the peers and teacher/student interaction.	I feel that we do not have enough space in our classroom for the number of girls in the class. Girls need space.

Student Surveys

Thirty-seven students out of 41 responded to a set of survey statements I developed to align with the teacher and parent survey content. The survey provided data from students about their classroom experiences.

Male Survey

I received 19 completed surveys. Responses from the male surveys to statement one revealed that 11 males felt successful in their schoolwork (a 5 rating). Seven additional males rated statement one with a 4. The responses to statement two (enjoyed learning in class) were mixed. Twelve males rated this statement most favorable with a 5. Four males gave a rating of 4. Three rated the item a 3. There were 5 most favorable responses to statement three indicating these boys liked coming to school. Four males also rated statement three with a 4. Six males gave this statement a 3. Two ratings of 2 were given to statement three. Two males even rated this statement with a 1. In statement four, 12 ratings of 5 were given in response to students felling valued in the classrooms at school. Five students rated statement four with 4s. One student each rated this statement with a 3 and a 2. Responses to statement five revealed that 7 males liked being in a class with other males and gave a rating of 5. Eight males rated statement five with a 4. The remaining ratings were 3s. In response to statement six, 14 of 19 males gave the highest possible rating that students indicate they believe they have learned more since being in a classroom with all males. The remaining ratings for statement six are 4s. The responses to statement seven revealed that 11 males shared they were glad to be put into a class with all males. Five males rated statement seven with a 4. The remaining 5 males gave a rating of 3. I noticed that the 4 students who had rated statement 5 (liked being in the class) with a 3 gave the same rating to statement seven (glad I was put in this class).

Responses to statements eight and nine of the survey instrument allowed initial same-gender male students to explain what they like best and least about their classroom. What they shared collectively is presented (Table 13).

Table 13

Male Student Open-ended Question Responses

Likes	Dislikes
Computers	Nothing
Teachers	People being mean
Energy releasing time	Getting into trouble
No girls	No girls to pick on
Field trips	Losing students
Making learning fun	

Female Survey

I received 18 completed surveys from the girls in the same-gender classrooms. Responses from the female surveys to statement one revealed that 13 females felt successful on their schoolwork (rating of 5). The 5 remaining females gave a 4 rating to statement one. Fifteen of the girls gave the most favorable rating of 5 to statement two revealing they enjoy learning in their classroom. Unlike the male students, 13 female students like coming to school and rated statement three with a 5. One student rated this statement with a 1. The responses to statement four were mixed. Twelve female students rated feeling they were valued with the most favorable rating. Three students gave statement four a rating of 4. There were two ratings of 2 for this statement. In response to item five, 15 out of 18 females gave the highest rating possible for this item indicating most girls liked to be in a class with all girls. However, there were two ratings of 1 to statement five. The female students felt they had learned more since being in the class with all females. Fifteen students gave statement six a rating of 5. Two students rated

statement six with a 4. There was one low rating of 1. Most of the female students were also glad they were put into a classroom with all girls. Fourteen students rated statement seven most favorable with a 5. This rating was in line with statement five, a very similar item to question seven. Responses to statements eight and nine of the survey instrument allowed girls to explain what they liked best and least about their classroom (Table 14).

Table 14

Female Student Open-ended Questions

Likes	Dislikes
No boys beating	Drama
Boys aren't distracting	Some girls being mean
Getting to be girly	Arguments
Get more turns to be leaders	Gossip
Talking about girl stuff	Small room
Going through the same changes	The color pink is not every girl's favorite color

Parent Surveys

Thirty-three out of 37 parent surveys were analyzed on a set of same-gender statements about their child's experiences. The survey instrument helped to obtain same-gender parent perceptions.

Male Parent Surveys

I received 18 surveys from parents of the boys' class. Responses to statement one were all favorable in regards to parents' beliefs that their child was successful at school.

Sixteen parents gave a rating of 5 while 2 parents rated statement one a 4. In response to statement two, all 18 parents gave a rating of 5, offering that their child enjoys learning in the classroom. Statement three revealed that parents of the male students felt that their child liked going to school. Sixteen parents gave a rating of 5 while 2 parents rated statement three a 4. The parents' rating for statement four revealed a rating of 5 from all parents but one who gave a rating of 4 in support of their child feeling valued at school. All 18 parents rated statement five favorable with a rating of 5 indicating their child liked being in the same-gender classroom. The ratings for statement six revealed that 17 out of 18 parents believed their child had learned more since being in the same-gender classroom. Therefore, parents of boys gave this item the highest possible rating. One parent rated item six a 4. All 18 parents gave statement seven a rating of 5 for being glad that they chose to place their child in the all-boys classroom.

Responses to statements eight and nine of the survey allowed the parents to explain what they liked best and least about their child's same-gender classroom experience (Table 15).

Table 15

Parents of Male Students Open-ended Question Responses

Likes	Dislikes
Good teachers	Left blank or stated "nothing"
Making learning fun	Likes everything

(Table 15 continues)

(Table 15 continued)

Likes	Dislikes
Less distractions	Overcrowding situation
Learning to be gentlemen	Concerned about social skills
Learning more than before	
Sense of belonging	
Self-confidence	

Female Parent Surveys

I received 15 surveys from the parents of the all-girls class. Responses to statement one revealed, 10 of the 15 parents rated statement one a 5 while the remaining 5 gave a rating of 4 indicating they believed their child was successful at school. In response to statement two, parents believed their child enjoyed learning in the classroom. Eleven parents gave a rating of 5 while 4 parents gave a rating of 4. The ratings for statement three were mixed from the parents of the all-girls class. Survey responses revealed the parents did not believe their child always like going to school. Six parents gave a rating of 5, 7 parents gave a rating of 4, 1 parent gave a rating of 3 and 1 parent a 2. In statement four, 6 parents gave a rating of 5, that their child felt valued in their classroom at school. Six parents gave a rating of 4 and 2 parents gave a rating of 3. Ten parents believed their child liked being in the single-gender classroom. Four parents gave a rating of 4 in response to statement five. One parent rated statement five a 2. Responses to statement six (parents believed their child learned more) revealed that 8 parents of the girls had the most favorable view. Five parents rated the item a 4. Two rated the item 3.

Overall, the parents were glad that they chose to place their child in a same-gender classroom. Eleven of these parents gave a rating of 5 and 5 gave a rating of 4 on statement seven.

Responses to statements eight and nine of the survey instrument allowed female parents to explain what they liked least and best about their child's same-gender classroom experience (Table 16).

Table 16

Parents of All-Girls Open-ended Question Responses

Likes	Dislikes
Good teachers	Left blank
Her being allowed to deal with all girls	Sometimes struggle with leadership
Being able to talk freely about girl issues	Class has gotten bigger
Less distractions	Girl drama
Her being with friends	

Summary

The mean scores for the surveys were (a) teachers at 4.76, (b) boy students at 4.73, (c) girl students at 4.56, (d) boy parents at 4.95, and (e) girl parents at 4.50. Survey averages for each group was relatively high with the range of 4.5 to 4.95. The boys and the parents of boys gave higher ratings to the survey questions than did the girls and their parents. Also, teachers have the second highest average.

The survey responses revealed that participants had similar and different perceptions about same-gender education. Overall, everyone including the students felt

they were successful in the same-gender classes. The teachers felt the boys and girls liked coming to school. The boys did not all share their sentiments. The girls enjoyed attending school. The boy parents really believed they liked going to school. The girl parents had varying views ranging from 2 to 5. The majority of students, teachers, and parents felt that more had been learned by the students since being part of the same-gender class. Survey responses revealed that adults were much happier about choosing same-gender classes than the boys and girls. The girls were happier about being together than the boys.

The open-ended responses revealed likes and dislikes of the same-gender classes by students, teachers, and parents. Everyone agreed that learning was fun and that they had good teachers. The dislikes shared by all were arguing, drama, and increased class sizes.

Case Study

This research focused on the same-gender educational experience of students, teachers, and parents at a rural intermediate school. The study examined three specific groups and their beliefs, values, and attitudes which structured their behavior patterns (Merriam, 1998). A cross-case comparison was conducted to highlight central themes (Richards, 2005). I used semistructured interviews to gather more in-depth information from teachers, students, and parents.

The participants in the case study consisted of 2 of the original same-gender classroom teachers, 8 same-gender students, 4 from each of the gender classes, and the 8 parents of the same-gender students. Teachers submitted 4 names of high and low-performing students. The 8 parents selected for the case study were parents of those same-gender students.

Qualitative data were collected and analyzed using open-ended questions in personal interviews. The semistructured interview instrument helped to make interviewing the different stakeholders more systematic and comprehensive by delimiting in advance the explored issues (Patton, 2002). I gave attention to the structure of the interviewees' responses and to their individual feelings. Perceptions of the interviewee unfolded during the interviews. The same questions were asked of all respondent groups when conducting the interviews. A majority of the interviews were conducted in the privacy of my office at the rural intermediate school. The rest were conducted by phone. All the parent follow-up interviews were by phone.

A total of 18 personal interviews were conducted. Individuals who participated in the case study also completed the survey that was included in the analysis for the research group. A semistructured approach was used, providing a framework for the discussion but allowing for deviations whenever appropriate. The interviews were scheduled and conducted at the convenience of each participant. Most of the interviews took between 15 to 25 minutes, although some lasted longer. Second interviews were conducted to validate some of the first interview responses. Each participant was associated with the rural intermediate school.

Boy Same Gender Interview Participants

In my effort to truly understand the same-gender perceptions of the male gender teacher, students, and parents interviewed, I came to the conclusion that each group (teachers, parents, and students) shared commonalities and challenges about their gender experiences. Two high achieving and 2 low achieving students were selected to participate as well as their parents. Interview responses did not differ between the two

student subgroups. Therefore, the results are reported for the combined subgroups (low and high). This same pattern holds true for the female interview participants.

Commonalities

The teacher of the male students interviewed believed her students enjoyed learning, liked coming to school, and were successful in school. All 4 boys agreed that they enjoyed learning mostly because their teacher made it fun. The parents' responses supported those shared by the teacher revealing their child liked coming to the intermediate school and experienced success there. As the participants continued to share their perceptions, it was evident that all of the male case study participants were excited about being a part of the gender classes at the rural intermediate school. The teacher of boys holds the belief that her students felt valued because they were shown respect. All 4 of the parents shared her sentiments. These participants repeatedly expressed how comfortable they felt in the male same-gender class environment. The teacher, all 4 males, and 3 of the 4 parents believed the students had learned more since being in the same-gender classes. The fourth parent shared their child had learned about the same. Several parents shared that their boys could better express themselves. The teacher said that the boys had now become "gentlemen." Parents and students believed the strength of the male same-gender classrooms was the teacher.

Challenges

The teacher of the all-male class shared that lack of space continues to be a problem in her class, but she is working through the dilemma. Parents agreed that the all-boys class has grown in size, to over 30 students. These large numbers affect specific

attention given to the boys. This factor could contribute to the reason 2 of the boys did not always feel valued in class (one high achiever and one low achiever). An overall consensus of concern from the male-gender case study participants were the ongoing arguments in the all-boys class.

Girl Same Gender Interview Participants

Similar to the boys' classroom, common threads existed across the groups (teachers, parents, and students) about their same-gender experiences for the girls' classrooms.

Commonalities

The teacher of the female same-gender class interviewed believed her students liked coming to school for socialization and learning. She also shared that her students enjoyed learning and experienced success in her class. Each of the 4 girls agreed they enjoyed learning because the teachers made it fun and there were no interruptions from boys. The females' parents' responses supported those shared by the teacher disclosing their child (high-and low-performing females) enjoyed coming to school to learn and to be with her friends. As the participants continued to share their perceptions, it was evident that all of the female case study participants were thrilled about being a part of the female gender classes at the rural intermediate school. The teacher of the female same-gender class related that her students felt valued because she tells every girl in their room she is special and important. All 4 girls shared her sentiments by saying they were happy in their class. The teacher, all 4 female students, and their parents expressed they were glad they chose to be a part of same-gender education at the rural intermediate

school. All of the female case study participants felt they had learned more since being in the same-gender classroom. One parent shared her daughter is not distracted as much. The teacher stated she believed the girls felt freer to participate in classroom discussions. Two of the girls said they were a lot more focused on their work. Students and their parents believed the strength of the female same-gender classroom was the teacher.

Challenges

The female same-gender teacher shared that cliques sometimes form in the all-girls classroom but she moderates the potential conflicts. Students and parents agreed. Parents shared that the all-girls class had grown in size. They liked it better when there were not as many girls in the classroom. This factor (class size) could contribute to the fact that 3 of the parents stated their children sometimes felt valued in the same-gender classroom. The theme “girl drama” surfaced with all three groups. For example, one parent shared that girls can be catty.

CHAPTER VI

SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

This chapter provides (a) a brief review of the study, (b) an interpretation of results, and (c) a relationship of the results to the literature. Conclusions and recommendations are made from the analyses of the study. The purpose of this research was to examine the impact of gender-specific classes in regard to student progress made and standardized test results, student retention, and stakeholders' perceptions at a rural intermediate school over 3 years. I used a mixed method research design to analyze different data collected in this study.

Between the 2007-2009 school years, approximately 40% of the rural intermediate school students were participating in the same-gender education program. Using a synthesis of same-gender research and a model of Eisner's theoretical framework, this school has taken bold steps in implementing a program, which closes some achievement, attendance, and discipline gaps of students. It is important for schools and districts to provide parents with viable options for meeting student needs. At the rural intermediate school, the same-gender education program is perceived as an important opportunity to reduce the gender barriers in the classroom and provide diversified teaching practices which maximizes learning (Demers & Bennett, 2007).

Summary of Achievement and Retention Results

This section provides a summary of the results for the first two research questions. The first question focused on student achievement and the second question is on student retention.

Student Achievement

I provided a summary of the findings to Research Question 1, "What was the student achievement effect of students who enrolled in same-gender classrooms?" Data collected and analyzed for this question included the third, fourth, and fifth grades math and reading scores on the Alabama Reading and Math Test for the same students enrolled in the same-gender classrooms over a 2-year period. Descriptive statistics (frequencies, ratios, and percentages) were analyzed and compared because the Alabama Reading and Math Test scores are reported as ordinal data. Four major areas of data analysis were reported including (a) number of students who moved up, maintained, or moved down a proficiency level; (b) the same as item "a" for two subgroups, black students and students living in poverty; (c) the number of students who achieved proficiency (level 3); and (d) the same as item "c" for subgroups.

Movement in Proficiency

To get a sense of achievement from this lens, I compared the number of students who moved up to the number of students who moved down. The expectation is for students to at least maintain their level. Therefore, moving down would be considered extremely negative. I hypothesized that if the number moving down was higher than the

number moving up, then as a school we need to take a closer look at achievement from this perspective to ask why this is occurring.

One of the comparisons showed an equal number of movement up and movement down in proficiency levels:

1. For movement from third to fourth grade, the same number of boys in the same gender classrooms moved up as moved down at least one proficiency level in reading. Three of the comparisons showed more movement up than down in proficiency levels.
2. For movement from third to fourth grade, more boys in the same-gender classrooms moved up at least one proficiency level than moved down in math.
3. For movement from third to fourth grade, more girls in the same-gender classrooms moved up at least one proficiency level than moved down in reading.
4. For movement from fourth to fifth grade, more girls in the same-gender classrooms moved up at least one proficiency level as moved down in math. Four of the comparisons showed more movement down than up in proficiency levels.
5. For movement from third to fourth grade, more girls in the same-gender classrooms moved down at least one proficiency level as moved up in math. For movement from fourth to fifth grade, more boys in the same-gender classrooms moved down at least one proficiency level as moved up in reading.
6. For movement from fourth to fifth grade, more girls in the same-gender classrooms moved down at least one proficiency level as moved up in reading.

7. For movement from fourth to fifth grade, more boys in the same-gender classrooms moved down at least one proficiency level as moved up in math.

When analyzing student achievement from this lens to determine how same-gender classrooms affect boys and girls, we would look at movement in proficiency (Table 17).

Table 17

Movement in Proficiency

Gender	Grade and Subject
Boys showed greatest gains in improving proficiency levels	3rd to 4th math (boys)
Girls showed greatest gains in improving proficiency levels	3rd to 4th math (girls)
	3rd to 4th reading (girls)
	4th to 5th math (girls)
Boys showed declines in proficiency levels	4th to 5th math (boys)
	4th to 5th reading (boys)
Girls showed declines in proficiency levels	3rd to 4th math (girls)
	4th to 5th reading (girls)
Boys showed no gain or decline in proficiency levels	3rd to 4th math (boys)

A pattern exists for declines in proficiency levels when moving from grades 4 to 5. Boys and girls showed more declines than moves up in proficiency level for reading. Boys showed a decline in math whereas girls showed a move up in proficiency levels. For girls, this finding seems hopeful since girls showed more declines than moves up in proficiency levels in math from third to fourth grade. From this perspective when looking

at the data, the news is not as good for boys. The comparison of proficiency levels show the boys trending down from one grade level to another. This same pattern tends to align to the subgroups (Black and low socioeconomic status) as well. The shift from fourth to fifth grade for boys in same-gender classrooms seems to show the potential for a decline in proficiency level for boys. This finding also occurred for girls in reading as they moved from fourth to fifth grade.

One of the biggest negatives is seeing a loss in proficiency level from one grade to another for any child. Therefore, more investigation to determine the characteristics of boys who seem to be trending downward could identify existing obstacles for leaders and teachers in very descriptive ways. This information may be helpful to others as they attempt to be proactive to provide quick and meaningful interventions.

When analyzing test results we tend to look at numbers that meet proficiency levels or numbers that move up one level to another or the number of level ones moving to level twos. We seldom take the opposite view by analyzing the number of students moving down and answering the question "why" this is occurring. This study provides an example for following this analysis approach and can contribute to assist others in doing so. One additional study could be to do an in-depth case study of students in this negative situation.

Proficiency Level Met

I compared the number of students who met proficiency levels with other groups. The results of overall proficiency levels met for the combined same-gender classrooms compared to mixed gender shows proficiency levels almost identical for both reading and math in the fourth and fifth grades.

When reviewing the data for subgroups, most subgroups in mixed- and same-gender classrooms had about the same performance level as judged by meeting proficiency level. Most of the difference occurred in the boy subgroups (black and low socioeconomic status) for both same-gender and mixed-gender classrooms. In particular the low socioeconomic status boys had the most negative results. For reading, the frequency of the low socioeconomic status boys in the same-gender classrooms decreased in fifth grade. For math, the low socioeconomic status boy in the mixed-gender classrooms had one boy who met proficiency in fourth grade and did not do so in fifth grade. As shown, the type of classroom (same-gender or mixed) did not seem to be a determining factor for the decline in low socioeconomic status boys scores. The type of classroom does not seem to be the influencing factor of movement up or down in student achievement.

Student Retention

Research Question 2 is "What was the student retention rate of those students enrolled in same-gender classrooms?" Research Question 2 was determined using the Software Technology Institute, Inc. (version 121) program attendance information. The results of the Software Technology Institute, Inc. data showed that retention rate in the same-gender program were higher than those of students enrolled in mixed-gender classrooms.

Based on the results of the attendance data, I was easily able to answer Research Question 2. It was determined that overall, there was a high retention rate for girls and boys in the same-gender classes with all boys having a near perfect retention rate in both years. All students enrolled in the same-gender classes were promoted to the next grade

level. The retention rate in the same-gender classrooms was considerably higher than in traditional mixed-gender classrooms.

Summary of Stakeholders Perceptions

Perceptions of the same-gender education experiences in a rural intermediate school were shared by students, teachers, and parents. The following section gives a summary of the stakeholder's survey and interview responses.

Student Perceptions

Research Question 3 is "What were students' perceptions of learning in a same-gender classroom?" Research Question 3 was determined using a Likert-type scale (open-ended questions) and interview responses from the boy and girl students. The results from the boy Likert-type scale responses revealed that most of them felt successful in their work at school, enjoyed learning in the same-gender class, and believed they had learned more since being in a classroom with all boys. The boy Likert-type scale responses varied from ratings of 3 to 5 in the following areas: liked coming to school, liked feeling valued in the classroom, and liked being in a classroom with all boys. The open-ended question responses from the boys revealed their likes and dislikes of the same-gender classes. Boy students liked their teachers because they made learning fun. They also liked having the extra computers, having energy release time, field trips, and not having girls in their class. Their dislikes included having no girls to pick on, having people being mean, getting into trouble. Several boys shared they had no dislikes about the same-gender experience. During the boy interviews, they shared information about themselves, their learning experiences, and gave their best and least likes about their same-gender

experiences. All of the boys said they felt successful in their work. The boys said that not only could they concentrate better, but also their grades improved. All 4 boys responded favorably about being in a class with all males. It allowed them to express their opinion and it was fun. Overall, the boys shared they felt valued in class. One student said sometimes other boys talk about you and it hurts your feelings. All of the boys felt they had learned more since being in the all-boys class. Every boy shared that he liked his teacher. Least likes were getting into arguments and losing energy release time.

Similar to the boys, results from the girl Likert-type scale responses revealed that most of them felt successful in their work at school, enjoyed learning in the same-gender classes, and believed they had learned more since being in a classroom with all females. One girl gave a rating of 1. The girl Likert-type scale responses varied from ratings 3 to 5 in the following regards: enjoy learning in the classroom and being glad to be in a classroom with all females. The open-ended question responses from the girls revealed their likes and dislikes of the same-gender classes. Girl students liked that boys were not distracting, getting more turns to be leaders, and talking about girl stuff. Their dislikes included drama, arguments, some girls being mean, gossip, and the pink colored classroom. During the girl interviews, they shared information about themselves, their learning experience, and gave their best and least likes about the same-gender experience. All of the girls said they felt successful in their work. Some reasons given were they try their best and they make good grades. All 4 girls responded favorably about being in a class with all females. It allowed them the opportunity to not hear boys beating on desks and it was fun. Overall, the girls shared they felt valued in class. Responses ranged from they are special to they feel happy in class. Three of the girls felt they had learned more

since being in the all-girls class. One girl said she had learned about the same. The girls shared they liked their teachers and Tea Party Tuesdays. Least likes were drama and math.

The data support some of the findings presented on the studies conducted for same-gender education in regard to student achievement and perceptions. Boys and girls at Bay Minette Intermediate School enjoyed learning and felt successful in their schoolwork. This finding is evident by increases in their Alabama Reading and Math Test scores and the fact that by observation and the interview responses, the students appear happy. The boys and girls are also very fond of their teachers. This response would prompt me to certainly keep the same-gender teachers in place as long as they are willing to volunteer. It was quite clear that the boys and girls distract one another for different reasons. In an effort to protect the high same-gender retention rate, I will use these findings to try to continue offering the same-gender option. Overall, the student perceptions were positive.

Teacher Perceptions

Research Question 4 is "What were teachers' perceptions of teaching in same-gender classrooms?" Research Question 4 was determined using a Likert-type scale (open-ended questions) and interview responses from teachers. The results from the boys' teachers Likert-type scale responses revealed they felt students in their class were successful at school, enjoyed learning, and felt valued in their classroom. The boys' teacher's Likert-type scale responses also supported that the teacher believed the boys liked being in the same-gender classroom and believed that students in their classroom had learned more since being in the same-gender class. The boys' teachers liked the fact

the boys were comfortable, open to sharing, felt part of the family, and were competitive and enthusiastic about learning. Their dislikes included name calling, crowded classrooms, and lack of student organization. During the boys' teacher's interviews, the teacher shared information about herself and about her students' learning experiences. The teacher also gave her best and least likes about her same-gender experiences. The teacher believed the boys enjoyed learning because they have told her and their attendance is good. The teacher also believed students felt valued in her class because she shows them respect. She shared that her students have learned more since being in her classroom because they felt comfortable and able to express themselves. The teacher liked the fact her class is a family and she has taught them for 2 consecutive years. Her least like is the lack of space.

The results from the girls' teachers' Likert Scale responses revealed they felt students in their class were successful at school, enjoyed learning, and felt valued in their classroom. The girls' teachers' responses also supported that teachers believed the girls liked being in the same-gender classroom and believed the students liked being in the same-gender classroom. The girls' teachers were all glad they chose to teach in a same-gender classroom. The open-ended question responses from the girls' teachers revealed their likes and dislikes about the same-gender classroom. The girls' teacher liked the fact she could teach to the style that enabled girls to learn best. Another teacher shared she liked the way the class could discuss certain topics and issues. The other teacher shared she liked the peers and student and teacher interaction. Their dislikes included solving problems of girls being unkind to one another, lack of space in classrooms, and too few computers. During the girls' teacher's interviews, the teacher shared about information

about herself and about her students' learning experience. The teacher also gave her best and least likes about their same-gender experiences. The teacher believed the girls enjoyed learning because she presented the lesson in a direct and explicit manner. The teacher also indicated students felt valued in her class because she makes them feel important. She shared students have learned more since being in her class because they feel more free to participate in discussions and activities. The teacher was glad she chose to teach in a same-gender classroom. She liked the fact there is unison of learning in her class. Her least like is "cliques."

The data support some of the findings presented on the studies conducted for same-gender education in regard to student achievement and engagement and teacher perceptions. Teachers at Bay Minette Intermediate School believed students in their classroom were successful at school and enjoyed learning in their classes. This finding is evident by the teacher and student surveys and interview responses. I believe the retention rate data help confirm that they enjoy coming to school, feel safe, and are continuing to improve in reading and math as evidenced by their Alabama Reading and Math Test data. The teachers are glad they chose to teach in a same-gender classroom. During the interviews, their responses were genuine and caring. I observe them regularly as they interact with their classes, with each other, and with me. These findings further confirm that I try and retain not only the same-gender education program, but its teachers as well. Overall, the teacher perceptions were positive.

Parent Perceptions

Research Question 5 is "What were parents' perceptions of their students' learning experience in same-gender classrooms?" Research Question 5 was determined

using a Likert-type scale (open-ended questions) and interview responses from the parents. The results from the boys' parents' Likert-type scale responses revealed they felt their children were successful at school, enjoyed learning in their classroom, and liked going to school. The boy's parents' Likert-type scale responses also suggested that the parents believed the boys felt valued, liked being in a same-gender classroom, and believed they had learned more since being in a same-gender classroom. Parents were glad they had chosen to place their children in a same-gender classroom. All top ratings of 5 were given. The open-ended question responses from the boys' parents revealed their likes and dislikes about the same-gender classroom. The boys' parents praised the good teachers, felt the teachers made learning fun, said there were less distractions, saw development of self-confidence, and loved the fact that their boys were learning to be "gentlemen." The parents' dislikes included overcrowding. Many of the parents left this question blank. Some shared they liked everything about the all-boys class. During the boys' parents' interviews, parents shared information about themselves and their families, their children's learning experience, and gave their best and least likes about their children's same-gender experiences. The parents believed the boys were successful at school because they enjoyed going to school, made straight A's, and one has been staying out of trouble. The parents also believed their children felt valued in the classroom. Parents liked how the children were treated and how the teachers cared. Overall, the parents felt their children had learned more since being in the all-boys class. One parent shared her son could learn in any setting. Another parent said her son is focusing more on his work and not the girls. The boys' parents liked the fact that the teacher has taught them for 2 consecutive years, they liked the teacher, and 1 parent said she liked the fact

her child was learning to be a boy. During the interview, none of the parents expressed any dislikes about the same-gender classroom.

The results from the girls' parents' Likert-type scale responses revealed they too felt their children were successful at school and enjoyed learning in her classroom. The girls' parents believed their child felt valued and had learned more since being in a same-gender class. Parents were glad their children in the same-gender classroom. The open-ended question responses from the girls' parents revealed their likes and dislikes about the same-gender classroom. The girls' parents were complimentary of the good teachers and liked the fact there were less distractions. Parents shared the girls were able to discuss girl issues. The dislikes included girl drama, bigger class sizes, and the fact that sometimes there is a struggle with leadership. Several parents left the dislike question blank. During the girls' parents' interviews, parents shared information about themselves and their families, their children's learning experience, and gave their best and least likes about their children's same-gender experiences. The parents believed the girls were successful at school because they enjoyed going to school, are learning more, and made straight A's. One parent shared her daughter is a social butterfly. The parents also believed their children felt valued in the classroom. Reasons given are the child fits in more and another parent shared that her child has done much better. Overall, the parents felt their children had learned more since being in the all-girls class. One parent shared that her child is not distracted as much. The girls' parents liked the teachers and the fact they have been very helpful. Other parents liked that their children were more focused and had the same friends. Two parents had no dislikes. The other two parents said girl drama was a concern and that the girls can be "catty."

The data support some of the findings presented on the studies conducted for same-gender education in regard to student achievement, student engagement, and student retention as it relates to parents' perceptions. As a whole, parents of Bay Minette Intermediate School believed their children are successful at school and enjoy learning in their classrooms. This belief is evident by the parents, teachers, and students' survey and interview responses. It is a fact that the continuous high retention rate and the same-gender waiting lists help to confirm that parents want a choice about their child's learning environment. Same-gender education is a viable option for students and parents at the intermediate school. Although achievement data have not soared, parents believe their children are active participants in their learning environment. The parents are excited about their child's same-gender classes and continue to recommend that others try this option. During the interviews, the parents were complimentary of the same-gender program, the teachers, and the positive effects that are carrying over to their children. These findings further confirm that we strive to continue providing an option which can maximize student achievement, student engagement, student retention, and learning.

Summary Comparison of Results for Teachers', Students', and Parents' Perceptions

Throughout the qualitative part of this study, commonalities and differences exist. The results of these commonalities and differences are evident by the student, teacher, and parent responses shared on surveys and during the interviews.

Commonalities

The Likert-type scale responses revealed that students, teachers, and parents agreed in regards to the following: success in school work, enjoyment of learning, and

being glad that same-gender education was an option. The students, teachers, and parents believed more was learned since being in a same-gender program. The open-ended responses revealed that students and parents liked the teachers and were glad they made learning fun. Also, all stakeholders liked the fact that there are less distractions. Everyone disliked the drama and arguing. One additional dislike mentioned by some students, the teacher, and the parents was an increase in class size. In general, the positive support and comments gathered from these perceptions motivate Bay Minette Intermediate School to continue offering same-gender education classes. If we can create an environment where students are thriving, where teachers are stepping "outside the box," and where parents are staying abreast of their child's learning–it is well worth it.

Differences

The Likert-type scale responses revealed that students, teachers, and parents shared the same perception when it came to students liking to go to school. Some extreme responses existed from boy and girl students, particularly the boys. Teachers and parents gave reasons supporting why they believed just the opposite. Also, not all students felt highly valued in class, respected, and even part of a class family. The open-ended responses revealed that the girls liked Tea Party Tuesdays. Some parents liked that their children were more focused in the same-gender setting. Although differences and dislikes were shared, the Alabama Reading and Math Test data are promising. The intermediate school can use this data for improvement. Also, the same-gender classes continue to attract students, teachers, and parents. Therefore, we have made a difference in regard to student learning and engagement. The overall perception of students, teachers, and

parents at Bay Minette Intermediate School is very encouraging as we anticipate our 4th year of same-gender education.

Discussion

In the final analysis of my study, I expound on several important aspects from my literature review. Our school chose to pilot same-gender education to help close socioeconomic and achievement gaps. Our data showed that three Alabama Reading and Math Test subgroups had significant gaps. According to a 2001 California study, most administrators used single-gender schooling as a vehicle for meeting at risk students needs (Datnow et al., 2001). This study also informed that the separation of girls and boys did not reduce classroom distractions. At Woodward Elementary, Principal Rodkey offered same-gender classes because the traditional setting was not meeting the boys' needs (Hobbs, 2005). Also, Sax (2005a) shared that Thurgood Marshall Elementary was a low socioeconomic status failing school trying to decrease behavioral issues. In a Cambridge University Study (Younger, 2005), single-gender improved boys' language performance and girls' math and science performance. Principal Mansell (2009) at Foley Intermediate School piloted same-gender classrooms to close the achievement gap for minority students. Their program produced fewer discipline problems, increased parental support, and improved writing, reading, and math scores (Mansell). Lyseth Elementary School's same-gender program addresses student learning styles (Quimby, 2006). The program's intent was also to tackle the issue of boys lagging behind in reading and writing. Lyseth's parents shared that their children seem to be thriving in single-sex classrooms (Quimby, 2006). The review of this literature gave me more insight on how other schools are creatively working to close educational gaps.

My study addressed the following past findings from the literature review. The Bay Minette Intermediate School's stakeholder perceptions revealed that even though our students participated in the same-gender education program, some distractions existed among the same-gender classes. Several students still experienced teasing and harassment. Boys argued and the girls were described as catty. This finding confirms that students taunt and tease one another whether in the traditional or same-gender classroom setting. I feel within our same-gender settings, teachers were able to minimize a lot of this "drama" through class meetings, student pledges, and parental involvement. Also, it appears the structure of the same-gender program has motivated our parents to be more involved in their child's education. Several literature reviews informed that student participation in same-gender classes increased parental involvement. One of our primary reasons for offering same-gender classes was to help close the gap for our boys, particularly our Black males. Schools across the nation are striving to close the achievement, socioeconomic, attendance, and behavior gaps of not only Black males but of all targeted students. At Bay Minette Intermediate School, these are still areas of concern. Some minimal increases occurred for a few males but too few to be of significance. The comparison of proficiency levels for boys is not promising. The same pattern tends to align to the subgroups as well. These results are disheartening, but we will use this data to assist with continuous achievement improvement.

Although same-gender classrooms at our school has not given us the achievement results we anticipated, we have seen other positives surface. Our students are excited about coming to school and being part of the same-gender classes. Once in the same-gender classes, they typically stay. The boys' class and their parents were particularly

pleased that their teacher taught them for 2 consecutive years. Participation in same-gender has been ideal for boy and girl students' motivation and self-esteem. In many instances, students felt more comfortable speaking up and being heard without embarrassment or fear. Also, the attendance of same-gender students is consistently high. They enjoy learning because their teachers make it fun. The discipline referrals of the students in same-gender classes have also decreased. These factors alone encourage me to continue promoting this viable option to students and parents at Bay Minette Intermediate School.

As I look to year 4 of offering same-gender classes, our goal will be to use Alabama Reading and Math Test data, stakeholder survey data, and feedback from case studies to better meet our students' needs. We have participated in extensive staff development in Alabama Reading Initiative, Alabama Math, Science, Technology Initiative, Positive Behavior Supports, Response to Intervention, and many more. I have concluded that quality training without effective teaching minimizes student growth. We have wonderful, caring teachers in the same-gender program and as a whole. This conclusion is evident by the stakeholder perceptions shared. Nonetheless, in order to have improvements in student achievement, engagement, and learning, the instruction delivered by our teachers must be strategic, differentiated, and have lots of rigor. There is no doubt about it–it is all about student learning and engagement. We are obligated to give students our very best. In Black and Williams' study (1998), the focus was on formative assessment. Their findings reveal that when teachers provide ongoing feedback and assessment, increasing student learning is more likely. The Black and Williams' study further showed that teachers who used classroom formative assessment practices

significantly improved their students' performance on standardized tests. The highest gains occurred for lower performing students (Pilcher & Largue, 2009). This study would assist the teachers and me in becoming more effective educational leaders as improved test scores and low socioeconomic status gaps are two of our school's targeted areas.

As we focus on student achievement and learning, I must be cognizant in knowing that teachers are the key ingredient for student learning. Marzano (Marzano, Marzano, & Pickering, 2003) shares that individual teachers can have a major impact on student achievement. I concur with Marzano's rationale; effective teaching must exist no matter what the educational setting.

In my study, parents and students recognized that the classroom teacher is the key to effective instruction. They believed the strength of the same-gender classrooms was the teacher.

Recommendations for Future Research

There appears to be significant opportunity for further research regarding the impact of student engagement and learning in same-gender education. Expanding to a much larger sample population would provide the obvious benefit of a much greater statistical base and cross section of participants. A wider geographic area would allow inclusion of a different population and add the regional differences for evaluation. An outside researcher who is not directly involved with the study's participants could also help in giving a different perspective on the same-gender program.

Another recommendation for future research would be in regard to student achievement. It might be helpful to use interval data such as Stanford Achievement Test 10 data. I chose not to use the Stanford Achievement Test 10 data for two primary

reasons: (a) our county is phasing out the Stanford Achievement Test 10 as a county standardized test and (b) the Alabama Reading and Math Test weighs more for accountability in Alabama at this time. I chose to use the most relevant data to drive our instruction. In the future, using ordinal test data would lead to an experimental or quasiexperimental approach in analyzing trend data over a period of time.

There was a limited amount of current and relevant research on the variables investigated in this study. However, student engagement and learning in any setting helps to promote success. Additional research on the impact of same-gender education is needed to determine the effectiveness of the program. It would also be helpful to review research on effective teachers and instruction as well as the proper use of formative assessments in classrooms.

Further studies might benefit from investigating the pros and cons of providing same-gender education in a rural school or in any school interested. This study should be replicated. Nonsignificant results and contradicting findings should be investigated with additional participation under similar situations to further confirm the study's results.

Limitations

Several limitations exist for this study. In regard to the student achievement part of the study, the biggest obstacle was the test data used in this study had ordinal rather than interval properties. One major assumption of inferential statistics is that the data have interval properties. Because the test data were ordinal in nature, I was not able to apply an experimental or quasiexperimental approach to analyze the trend data over a 3-year period. If this were the case, I could have selected a comparison group of students in mixed-gender classrooms who attended the school in third, fourth and fifth grade.

Therefore, the comparisons of the ratios and percentages need to be made cautiously. For this reason, I focused mostly on movement in proficiency levels for same-gender classroom students rather than a true comparison model.

The study was limited by the fact that I am currently serving as principal at the rural intermediate school. In addition, the teachers at the intermediate school self-selected to teach in the same-gender classroom and agreed to participate in the study. Even though the researcher and other stakeholders are directly involved at the intermediate school, no foreseeable risks are evident in this study because we are using the data to identify strengths and areas for improvement.

Conclusion

In this study, I set out to investigate the impact of student engagement and learning in same-gender classrooms at a rural intermediate school. The results of the study supported that the perceptions of same-gender education classes at the rural intermediate school were a success. Based on a sound methodology and quality instruments, the study provided useful findings; however, with any study that is not comprehensive in nature, issues of importance must still be addressed.

Although the findings from this study are very informative, a need still exists for a more in-depth investigation of the same-gender education program for a longer period of time. The recommendations for further research that were identified are not all inclusive; other important areas of research could be developed through the suggestions for further research. With this in mind, the same-gender education program is an area of vital interest to all school stakeholders. The program can only improve and evolve as

administrators, teachers, students, and parents understand what is considered effective teaching and learning.

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APPENDIXES

APPENDIX A

Permission Letters

Bay Minette Intermediate School

A. R. Hamilton, Principal
Arnold Cox, Asst. Principal
www.bayminetteintermediate.com

600 Blackburn Ave.
Bay Minette, Al. 36507
Fax (251) 937-0696
Phone (251) 580-0678

May 8, 2009

Dear Dr. Henson,

I am currently a doctoral student at the University of West Florida. I am writing requesting permission to conduct research on same gender education at a rural intermediate school in the Baldwin County Public School System as part of the requirement for my dissertation. My dissertation is *A Mixed Method Research Study of Student Engagement and Learning in Same Gender Classrooms at a Rural Intermediate School*

I would like to utilize data obtained from ARMT, Reading and Math Scores, surveys, a semi-structured interview, and a review of documentation to complete my study. All information will be protected and gathered in a confidential manner.

Should you have questions, please feel free to contact me. Your support is greatly appreciated.

Sincerely,

A. R. "Abby" Hamilton

BALDWIN COUNTY PUBLIC
SCHOOLS *Building Excellence*
Dr. Pamela T. Henson, Director Instructional Support

Central Office Satellite 1091 B Avenue
Loxley Al 36551

July 16, 2009

To Whom It May Concern:

This correspondence serves as permission for Mrs. Albertnetta Hamilton to conduct her research in our school system. I have met with Mrs. Hamilton and understand how she will collect and present her data. All information to be gathered will be done in a confidential and appropriate manner.

I look forward to working with Mrs. Hamilton on this project. If I can be of further assistance, please feel free to contact me at (251) 912-6862.

Sincerely,

Dr. Pamela T. Henson

Tel 251.972.6862
Fax 251.972.6868
Email phenson@bcbe.org

APPENDIX B

Student Cover Letter and Consent Forms

(Reproduced as used)

Bay Minette Intermediate School

A. R. Hamilton, Principal
Arnold Cox, Asst. Principal
www.bayminetteintermediate.com

600 Blackburn Ave.
Bay Minette, Al. 36507
Fax (251) 937-0696
Phone (251) 580-0678

Dear

I would like to thank you for agreeing to participate in my study entitled *AMixed Method Research Study of Student Engagement and Learning in Same Gender Classrooms at a Rural Intermediate School.* Your participation is greatly appreciated and will help provide insight and information regarding same gender education classes.

Enclosed you will find a consent of agreement by the University of West Florida's Institutional Review Board. Please read and return the Informed Consent Agreement Form at your earliest convenience so that I may include you in my data bank. There is a stamped self-addressed envelope enclosed to mail the document back to me.

Please feel free to contact me if you have any questions or concerns regarding your participation in this study. You may reach me by calling (251) 580-0678. I may also be reached via email at ahamilton@bcbe.org.

Once again, thank you for your willingness to share your experiences and ideas.

With gratitude,

A. R. "Abby" Hamilton

Student Assent
Student Survey Consent

University of West Florida

Informed Consent Document for Research Participants

A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School

Researchers from the University of West Florida Administrative Studies Department are trying to learn about the impact of gender specific classes in regard to the progress made during the learning process. You have been asked to participate because of your involvement in the same gender classes. If you decide to participate in this study, you will be asked to complete a Gender Specific Survey. You will be asked about your personal experiences within the same gender classroom. This study will take place in your child's school setting and should take about 15 minutes of your time.

The researcher hopes this study will help school administrators and staff plan and implement more effective strategies to meet student needs. This study can also be helpful in encouraging experimentation with innovative ideas and methodologies related to engaging student students in the learning process and helping them achieve at higher academic levels. There will be no compensation of any kind for your child.

You do not have to be in this study if you don't want to and you can quit the study at any time. If you don't like a question, you don't have to answer it and, if you ask, your answers will not be used in the study. No one will get mad at you if you decide you don't want to participate.

Other than the researchers, no one will know your answers, including other faculty and staff members at your child's school. If you have any questions, just ask Abby Hamilton.
This research study has been explained to me and I agree to be in this study.

_____ _____

Subject's Signature for Assent **Date**

Check which applies to be completed by person conducting assent discussion):

☐ The subject is capable of reading and understanding the assent form and has signed above as documentation of assent to take part in this study.

☐ The subject is not capable of reading the assent form, however, the information was explained verbally to the subject who signed above to acknowledge the verbal explanation and his/her assent to take part in this study.

_____

Name of Person Obtaining Assent Print

_____ _____

Signature of Person Obtaining Assent **Date**

Student Assent

Student Case Study Consent
University of West Florida
Informed Consent Document for Research Participants

A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School

Researchers from the University of West Florida Administrative Studies Department are trying to learn about the impact of gender specific classes in regard to the progress made during the learning process. You have been asked to participate because of your involvement in the same gender classes. If you decide to participate in this study, you may be asked to participate in a case study (semi-structured interview). You will be asked about your personal experiences within the same gender classroom. This study will take place in your child's school setting.

The researcher hopes this study will help school administrators and staff plan and implement more effective strategies to meet student needs. This study can also be helpful in encouraging experimentation with innovative ideas and methodologies related to engaging student students in the learning process and helping them achieve at higher academic levels. There will be no compensation of any kind for your child.

You do not have to be in this study if you don't want to and you can quit the study at any time. If you don't like a question, you don't have to answer it and, if you ask, your answers will not be used in the study. No one will get mad at you if you decide you don't want to participate.

Other than the researchers, no one will know your answers, including other faculty and staff members at your child's school. If you have any questions, just ask Abby Hamilton.

This research study has been explained to me and I agree to be in this study.

_____ _____
Subject's Signature for Assent **Date**

Check which applies to be completed by person conducting assent discussion):

☐ The subject is capable of reading and understanding the assent form and has signed above as documentation of assent to take part in this study.

☐ The subject is not capable of reading the assent form, however, the information was explained verbally to the subject who signed above to acknowledge the verbal explanation and his/her assent to take part in this study.

_____
Name of Person Obtaining Assent Print

_____ _____
Signature of Person Obtaining Assent **Date**

APPENDIX C

Student Survey and Interview Questions

(Reproduced as used)

Female Student Survey of Same Gender Classrooms

Please answer the questions below about your feelings of being in a same gender classroom. Circle only one number from 1 to 5 with 5 being the highest possible score. On questions 8 and 9, a written response is needed. Your responses are important and will remain confidential. So please do not put your name on this survey.

Scale:

5 – Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree

1. I am successful in my work at school. 1 2 3 4 5
2. I enjoy learning in my classroom. 1 2 3 4 5
3. I like to come to school. 1 2 3 4 5
4. I feel valued in my classroom at school. 1 2 3 4 5
5. I like being in a classroom with all females. 1 2 3 4 5
6. I believe that I have learned more since I have been in a classroom with all females. 1 2 3 4 5
7. I am glad I was put into a classroom with all females. 1 2 3 4 5
8. What do you like best about your same gender classroom?
9. What do you like least about your same gender classroom?

Male Student Survey of Same Gender Classrooms

Please answer the questions below about your feelings of being in a same gender classroom. Circle only one number from 1 to 5 with 5 being the highest possible score. On questions 8 and 9, a written response is needed. Your responses are important and will remain confidential. So please do not put your name on this survey.

Scale:

5 – Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree

1. I am successful on my work at school. 1 2 3 4 5
2. I enjoy learning in my classroom. 1 2 3 4 5
3. I like to come to school. 1 2 3 4 5
4. I feel valued in my classroom at school. 1 2 3 4 5
5. I like being in a classroom with all males. 1 2 3 4 5
6. I believe that I have learned more since I have been in a classroom with all males. 1 2 3 4 5
7. I am glad I was put into a classroom with all males. 1 2 3 4 5
8. What do you like best about your same gender classroom?
9. What do you like least about your same gender classroom?

Semi-structured Interview

Student Interview Protocol

First Interview

The purpose of this interview is to gather information related to same gender education.

1. Please tell me about yourself as a student.
2. How did you feel about being placed in a same gender classroom?
3. Do you feel successful in your work at school?
4. Why do you enjoy learning in your classroom?
5. Do you feel valued in your classroom?
6. How do you feel about being in a classroom with all males/females?
7. Do you believe you have learned more since being in the all-girls/all-boys class?
8. What do you like best about being in a same gender classroom?
9. What do you like least about being in a same gender classroom?
10. Would you like to share any other comments?

APPENDIX D

Teacher Cover Letter, Consent Forms, Survey, and Interview Questions

(Reproduced as used)

Bay Minette Intermediate School

A. R. Hamilton, Principal
Arnold Cox, Asst. Principal
www.bayminetteintermediate.com

600 Blackburn Ave.
Bay Minette, Al. 36507
Fax (251) 937-0696
Phone (251) 580-0678

Dear Fellow Colleagues,

As Principal of Bay Minette Intermediate School in Baldwin County and a doctoral student at the University of West Florida, I am seeking your assistance in acquiring information to complete the research for my doctoral dissertation. My study is *A Mixed Method Research Study of Student Engagement and Learning in Same Gender Classrooms at a Rural Intermediate School*. With the information gained from this study, I hope to determine the effectiveness of the same gender classrooms on teaching and learning.

You were selected because of your involvement with the same gender classes. This process should not take more than 30 minutes to complete and is strictly voluntary. Upon completion of the survey, please return them to me in the addressed envelope. Your responses to these forms will not be shared with anyone and your name will not be associated with your responses. There is minimal risk to you for participating in this study.

Your participation in this study would be a tremendous benefit to our school. Your insight would reveal some valuable information on the impact of same gender education in regards to student achievement and retention as well as teacher, student, and parent perceptions.

If possible, I would like to have the completed survey back within 5 days from the time you receive them. If you have any questions concerning your participation in the study, you may contact me at (251) 580-0678 or (251) 937-6965.

With gratitude,

A. R. Hamilton
Principal Bay Minette Intermediate School

Informed Consent Form
Teacher's Consent for Survey/Case Study
University of West Florida
Informed Consent Document for Research Participants

Title of Research: A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School

I. Federal and University of West Florida regulations require researchers to obtain consent for participation in research involving human participants. After reading the attached letter and statements in sections II through V, please indicate your consent by signing and dating this form.

II. **Statement of Procedure:** Thank you for your interest in this research project being conducted by Albertnetta R. Hamilton, a doctoral student at the University of West Florida. Hopefully, this introductory letter, enclosed with this consent form, explains the research project. This stage of the research project involves your completion of the Teacher Gender Specific Classrooms Survey. The survey will take approximately 15 minutes to complete. You may also be asked to participate in semi-structured interview. You will find a summary of the major aspects of the study being described below, including the risks and benefits of participating. Carefully read the information provided below. If you wish to participate in this study, sign your name and write the date. Any information you provide to us will be kept in strict confidence. If you have any questions or concerns regarding this project, please contact Albertnetta Hamilton at (251) 580-0678 or by email at ahamilton@bcbe.org.

I understand that:

1) I will complete a researcher developed survey designed for the purpose of gathering information related to my teacher's perception of same gender classes.

2) The researcher will share study results with me if I wish.

3) After the data are gathered, my name will be replaced with an identifying code known only by the researcher. At no time will my name be referred in the study results and/or reports.

4) I may discontinue participation in this study at any time without penalty.

III, **Potential Risks of the Study:**

1) There are no foreseeable risks involved with this study.

IV, **Potential Benefits of the Study:**

1) Information obtained from this study may provide more appreciation of the same gender educational experience.

2) Data from this study may provide valuable information on same gender education.

3) Data from this study will assist districts in the development of an effective same gender education program.

V. Statement of Consent: I certify that I have read and fully understand the Statement of Procedure given above and agree to participate in the research project described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I will be provided a copy of this consent form.

_____ _____

Participant's Name (please print) Date

_____

Participant's Signature

Teacher Survey of Same Gender Classrooms

Please respond to all statements by circling one number to the right of the statement. Respond from your own experience with the same gender education program using the following scale: 1 to 5 with 5 being the most favorable experience. Please note that questions 8 and 9 will require a written response. Your responses are important and will remain confidential. Therefore do not place your name on this survey.

Scale:

5 – Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree

1. Students in my classroom are successful at school. 1 2 3 4 5
2. Students in my classroom enjoy learning. 1 2 3 4 5
3. Students in my classroom like coming to school. 1 2 3 4 5
4. Students in my classroom feel valued. 1 2 3 4 5
5. Students in my classroom like being in a same
6. gender classroom. 1 2 3 4 5
7. Students in my classroom have learned more since being in a same gender classroom. 1 2 3 4 5
8. I am glad I chose to teach in a same gender classroom. 1 2 3 4 5
9. What do you like best about your classroom?
10. What do you like least about your classroom?

Semi-structured Interview

Teacher Interview Protocol

First Interview

The purpose of this interview is to gather information related to same gender education.

1. Please tell me about yourself as a teacher.
2. Why did you choose to teach in a same gender classroom?
3. Do you believe your students in your class enjoy learning?
4. Why do you feel your students like coming to school?
5. Do you believe your students feel valued in your class?
6. Do you believe students have learned more since being in the same gender classroom?
7. Are you glad you chose to teach in a same gender classroom?
8. What do you like best about your classroom?
9. What do you like least about your classroom?
10. Would you like to share any other comments?

APPENDIX E

Parent Consent Forms, Survey, and Interview Questions

(Reproduced as used)

Informed Consent Form

Parental Assent for Survey

University of West Florida
Informed Consent Document for Research Participants

Title of Research: **A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School**

I. Federal and university regulations require us to obtain signed consent for participation in research involving human participants. After reading the attached letter and statements in section II through IV below, please indicate your consent by signing and dating this form.

II. Statement of Procedure: Thank you for your interest in this research project being conducted by Albertnetta Hamilton, a doctoral student at the University of West Florida. Hopefully, the introductory letter, enclosed with this consent form, explained the research project. This stage of the research project involves my administering the *Gender Specific Classroom Survey* to your child. This will be done in a group setting in your child's rural intermediate school. The major aspects of the study are described in the statements below, including the risks and benefits of having your child participate. Your child's information will be kept in strict confidence with only you, your child and the researcher having access to the results of the survey.

I understand that:

(1) My child will complete a researcher developed survey designed for the purpose of gathering information related to my child's perceptions of same gender classroom experiences.

(2) The researcher will share study results, pertaining to my child, with me if I wish. I will indicate my request for a conference with the researcher by checking the appropriate space at the end of this consent form.

(3) After the data are gathered, my child's name will be replaced with an identifying code known only by the researcher. At no time will my child's name be referenced in the study results and/or reports.

(4) I may discontinue my child's participation in this study at any time without penalties or repercussions.

III. Potential Risks of the Study:

(1) There are no foreseeable risks involved with the study.

IV. Potential Benefits of the Study:

(1) Information obtained from this study may provide parents with an appreciation of their child's same gender educational experiences.

(2) Data obtained from this study may provide valuable information on same gender classroom education.

(3) Data from this study will assist districts in the development of an effective same gender education program.

V. **Statement of Consent:** I certify that I have read and fully understand the Statement of procedure given above and agree to have my child participate in the research described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time. I will be provided a signed copy of this consent form.

Please schedule a time for me to review my child's assessment results.
_____yes _____no

If you have any questions or concerns please call Albertnetta Hamilton, the researcher, at (251) 937-6965 or (251 580-0678

_____ _____
Participant's Name (Please Print) Date

_____ _____
Parent's Signature Phone

Informed Consent Form

Parental Assent for Case Study

University of West Florida
Informed Consent Document for Research Participants

Title of Research: A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School

I. Federal and university regulations require us to obtain signed consent for participation in research involving human participants. After reading the attached letter and statements in section II through IV below, please indicate your consent by signing and dating this form.

II. Statement of Procedure: Thank you for your interest in this research project being conducted by Albertnetta Hamilton, a doctoral student at the University of West Florida. Hopefully, the introductory letter, enclosed with this consent form, explained the research project. This stage of the research project involves asking your child to participate in a case study (semi-structured interview). This will be done in a group setting in your child's rural intermediate school. The major aspects of the study are described in the statements below, including the risks and benefits of having your child participate. Your child's information will be kept in strict confidence with only you, your child and the researcher having access to the results of the survey.

I understand that:

(1) My child will complete a researcher developed interview with the researcher designed for the purpose of gathering information related to my child's perceptions of same gender classroom experiences.

(2) The researcher will share study results, pertaining to my child, with me if I wish. I will indicate my request for a conference with the researcher by checking the appropriate space at the end of this consent form.

(3) After the data are gathered, my child's name will be replaced with an identifying code known only by the researcher. At no time will my child's name be referenced in the study results and/or reports.

(4) I may discontinue my child's participation in this study at any time without penalties or repercussions.

III. Potential Risks of the Study:

(1) There are no foreseeable risks involved with the study.

IV. Potential Benefits of the Study:

(1) Information obtained from this study may provide parents with an appreciation of their child's same gender educational experiences.

(2) Data obtained from this study may provide valuable information on same gender classroom education.

(3) Data from this study will assist districts in the development of an effective same gender education program.

V. **Statement of Consent:** I certify that I have read and fully understand the Statement of procedure given above and agree to have my child participate in the research described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time. I will be provided a signed copy of this consent form.

Please schedule a time for me to review my child's assessment results.
_____yes _____no

If you have any questions or concerns please call Albertnetta Hamilton, the researcher, at (251) 937-6965 or (251 580-0678

_____ _____
Participant's Name (Please Print) Date

_____ _____
Parent's Signature Phone

Informed Consent Form
Parent Case Study Consent
University of West Florida
Informed Consent Document for Research Participants

Title of Research: **A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School**

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I understand that:

5) I will complete a researcher developed survey designed for the purpose of gathering information related to my parental perception of same gender classes.

6) The researcher will share study results with me if I wish.

7) After the data are gathered, my name will be replaced with an identifying code known only by the researcher. At no time will my name be referred in the study results and/or reports.

8) I may discontinue participation in this study at any time without penalty.

III, **Potential Risks of the Study:**

1) There are no foreseeable risks involved with this study.

IV, **Potential Benefits of the Study:**

1) Information obtained from this study may provide more appreciation of the same gender educational experience.

2) Data from this study may provide valuable information on same gender education.

3) Data from this study will assist districts in the development of an effective same gender education program.

V. Statement of Consent: I certify that I have read and fully understand the Statement of Procedure given above and agree to participate in the research project described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I will be provided a copy of this consent form.

_____ _____

Participant's Name (please print) Date

_____

Participant's Signature

Informed Consent Form
Parent Case Study Consent
University of West Florida
Informed Consent Document for Research Participants

Title of Research: **A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School**

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I understand that:

9) I will complete a researcher developed survey designed for the purpose of gathering information related to my parental perception of same gender classes.

10) The researcher will share study results with me if I wish.

11) After the data are gathered, my name will be replaced with an identifying code known only by the researcher. At no time will my name be referred in the study results and/or reports.

12) I may discontinue participation in this study at any time without penalty.

III, **Potential Risks of the Study:**

1) There are no foreseeable risks involved with this study.

IV, **Potential Benefits of the Study:**

1) Information obtained from this study may provide more appreciation of the same gender educational experience.

2) Data from this study may provide valuable information on same gender education.

3) Data from this study will assist districts in the development of an effective same gender education program.

V. Statement of Consent: I certify that I have read and fully understand the Statement of Procedure given above and agree to participate in the research project described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I will be provided a copy of this consent form.

_____ _____

Participant's Name (please print) Date

_____

Participant's Signature

Informed Consent Form
Parent Survey Consent
University of West Florida
Informed Consent Document for Research Participants

Title of Research: **A Mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School**

I. Federal and University of West Florida regulations require researchers to obtain consent for participation in research involving human participants. After reading the attached letter and statements in sections II through V, please indicate your consent by signing and dating this form.

II. **Statement of Procedure:** Thank you for your interest in this research project being conducted by Albertnetta R. Hamilton, a doctoral student at the University of West Florida. Hopefully, this introductory letter, enclosed with this consent form, explains the research project. This stage of the research project involves your completion of the *Parent Gender Specific Classrooms Survey*. The survey will take approximately 15 minutes to complete. You will find a summary of the major aspects of the study being described below, including the risks and benefits of participating. If you wish to participate in this study, sign your name and write the date. Carefully read the information provided below. If you wish to participate in this study, sign your name and write the date. Any information you provide to us will be kept in strict confidence. If you have any questions or concerns regarding this project, please contact Albertnetta Hamilton at (251) 580-0678 or by email at ahamilton@bcbe.org.

I understand that:

13) I will complete a researcher developed survey designed for the purpose of gathering information related to my parental perception of same gender classes.

14) The researcher will share study results with me if I wish.

15) After the data are gathered, my name will be replaced with an identifying code known only by the researcher. At no time will my name be referred in the study results and/or reports.

16) I may discontinue participation in this study at any time without penalty.

III, **Potential Risks of the Study:**

1) There are no foreseeable risks involved with this study.

IV, **Potential Benefits of the Study:**

1) Information obtained from this study may provide more appreciation of the same gender educational experience.

2) Data from this study may provide valuable information on same gender education.

3) Data from this study will assist districts in the development of an effective same gender education program.

V. Statement of Consent: I certify that I have read and fully understand the Statement of Procedure given above and agree to participate in the research project described therein. Permission is given voluntarily and without coercion or undue influence. It is understood that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I will be provided a copy of this consent form.

_____ _____

Participant's Name (please print) Date

_____

Participant's Signature

Parent Survey of Same Gender Classrooms

Please respond to all statements by circling one number to the right of the statement. Respond from your own experience with the same gender education program using the following scale: 1 to 5 with 5 being the most favorable experience. Please note that questions 8 and 9 will require a written response. Your responses are important and will remain confidential. Therefore do not place your name on this survey.

Scale:

5 – Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree

1. My child is successful at school. 1 2 3 4 5
2. My child enjoys learning in my classroom. 1 2 3 4 5
3. My child likes to go to school. 1 2 3 4 5
4. My child feels valued in his/her classroom at school. 1 2 3 4 5
5. My child likes being in a same gender classroom. 1 2 3 4 5
6. My child has learned more since being in a same gender classroom. 1 2 3 4 5
7. I am glad I chose to place my child in a same gender classroom. 1 2 3 4 5
8. What do you like best about your child's same gender classroom?
9. What do you like least about your child's same gender classroom?

Semi-structured Interview

Parent Interview Protocol

First Interview

The purpose of this interview is to gather information related to same gender education.

- Please tell about yourself as a parent.
- Why did you choose to place your child in a same gender classroom?
- Do you feel your child is successful at school?
- Does your child like going to school?
- Does your child feel valued in his/her classroom?
- Do you believe your child has learned more since being in the same gender classroom?
- Are you glad you chose to place your child in a same gender classroom?
- What do you like best about your child's same gender classroom?
- What do you like least about your child's same gender classroom?
- Would you like to share any other comment?

APPENDIX F

Institutional Review Board Approval

University of West Florida

Research and Sponsored Programs
11000 University Parkway, Bldg. 11
Pensacola, FL 32514-5750

Ms. Albertnetta Hamilton
1301 Mixon Ave.
Bay Minette, AL 36507

May 22, 2009

The Institutional Review Board (IRB) for Human Research Participants Protection has completed its review of your proposal titled "A mixed Method Research Study of Student Engagement and Learning in the Same Gender Classrooms at a Rural Intermediate School," as it relates to the protection of human participants used in research, and granted approval for you to proceed with your study on 06-01-2009. As a research investigator, please be aware of the following:

* You will immediately report to the IRB any injuries or other unanticipated problems involving risks to human participants.
* You acknowledge and accept your responsibility for protecting the rights and welfare of human research participants and for complying with all parts of 45 CFR Part 46, the UWF IRB Policy and Procedures, and the decisions of the IRB. You may view these documents on the Research and Sponsored Programs web page at http://www.research.uwf.edu. You acknowledge completion of the IRB ethical training requirements for researchers as attested in the IRB application.
* You will ensure that legally effective informed consent is obtained and documented. If written consent is required, the consent form must be signed by the participant or the participant's legally authorized representative. A copy is to be given to the person signing the form and a copy kept for your file.
* You will promptly report any proposed changes in previously approved human participant research activities to Research and Sponsored Programs. The proposed changes will not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the participants.
* You are responsible for reporting progress of approved research to Research and Sponsored Programs at the end of the project period 09-30-2009. If the data phase of your project continues beyond the approved end date, you must receive an extension approval from the IRB.

Good luck in your research endeavors. If you have any questions or need assistance, please contact Research and Sponsored Programs at 850-857-6378 or irb@uwf.edu.

Sincerely,

Dr. Richard S. Podemski, Associate
Vice President for Research and
Dean of Graduate Studies

Dr. Terry Prewitt, Chair
IRB for the Protection of Human
Research Participants

CC: Janet Pilcher , Thomas Kramer

850.474.2824 fax 850.474.2802
research.uwf.edu