TPSD Pilot Program Proposal

## Single-Gender Classes

Terry Harbin, Ph. D.
Lawndale Elementary School


#### Abstract

This study hopes to raise the awareness that there is an achievement gap between males and females in education. The research supports the notion that male and female students have equal opportunities to participate in the classroom as well as receive equal attention from the teachers. However, what is noticeable is that many teachers use a generalized method when teaching male and female students. Research suggests that males and females do not think the same, learn the same, or behave in the same manner.

Recommendations are provided on how to close the achievement gap, spark the interest of boys in today's educational setting, and provide teachers with the necessary professional development needed to change the culture of the classroom.


## Introduction

## Statement of the Problem

After careful observation of discipline reports, grade distribution reports, and MCT2 practice data charts it was evident that there is not only an achievement gap between our male and female students, but also a discrepancy between the amount of office referrals between male and female students. Thus, our problem is two-fold: on the one hand we have a problem with the teaching strategies being utilized by the staff in relation to males and females, and we also have a problem with the process of how and to what extent males and females are being disciplined within the school.

## Goals

- Reduce the number of office referrals of males
- Close the achievement gap between male and female students
- Provide staff with the necessary professional development
- Increase the amount of project-based, movement-oriented learning within the school
- Increase awareness among females of the following fields: science, technology, engineering, and mathematics


## Significance of Research

The study is important in regards to the fact that we have an overwhelming gap in student achievement among our male and female students, and we also have an immense discrepancy in discipline referrals among male and female students. The findings from this study will give teachers the necessary strategies to support the learning styles of male
and female students, it will give administrators the insight as to what teaching style is most appropriate for male and female students, and it will provide access to educational and career fields to females that are predominately male-oriented.

## Literature Review

There has been a large increase in educators who are interested in single-gender public education. This surge of interest may partially be due to the recent changes in Title IX regulations by the U.S. Department of Education. Specifically, in October 2006, changes in Title IX regulations allow public schools to legally offer the option of same-sex instruction. Another possible reason for the increase interest is the noticeable gender gap in most American schools. Girls tend to lead academically in most subjects while boys tend to fall behind. This difference in academic achievement between boys and girls may be due to inherent gender differences. The National Institutes of Health (2007) found that different regions of the brain develop in a different sequence in girls and boys. Specifically, the study found that girls' brains mature six years earlier than boys in language and fine motor skills, while boys' brains are four years ahead in spatial memory. According to the National Association for Single Sex Public Education (NASSPE), separating genders into same-sex classrooms can have positive effects for both boys and girls.

Across the nation schools are reporting positive results from implementing single-gender education. A three year pilot study was conducted at Stetson University in Florida to compare fourth grade single-gender classrooms with fourth grade co-educational classrooms at Woodward Avenue Elementary School. The classes were matched in every
aspect except being either single gender or co-educational. Following the third year of the project, $75 \%$ of the girls in the single-gender classes scored proficient on the Florida Comprehensive Assessment Test (FACT) compared to 59\% of the girls in the coeducational classrooms. In addition, $86 \%$ of boys in single-gender classes scored proficient on the FACT, compared to only $37 \%$ of boys in co-educational classes (NASSPE).

Single-gender classrooms have been effective in not only improving test scores, but also in decreasing discipline problems. In 2000 Mr . Benjamin Wright, and elementary school principal, was concerned about the number of discipline referrals he was seeing in his office. At Thurgood Marshall Elementary School in Seattle, Washington, Mr. Wright was seeing about thirty office referrals a day for discipline issues. Additionally, $80 \%$ of the referrals were boys. Mr. Wright led his school in transforming from co-educational classrooms to single-gender classrooms. After the transformation discipline referrals dropped from about thirty per day to just one or two per day. Another result reported by Mr. Wright was improved achievement, especially for the boys, on the Washington Assessment of Student Learning. The boys went from a reading average of about $20 \%$ to $66 \%$ and out performed the state in writing.

The research below provides evidence of gains in achievement for males, a decrease in referrals for males, and strategies to utilize in single-gender classrooms.

Understand and Raising Boys (Dan Kindlon and Michael Thompson, 2000) http://www.pbs.org/parents/raisingboys/school.html

- More boys have problems with attention and focus than girls.
- Boys have a higher activity level and are more likely to get into trouble than girls.
- Boys are not given enough opportunities to move around.
- Boys need to be doing things, making things, and building things.
- Boys are thirty percent more likely than girls to fail or drop out of school.
- Girls outperform boys in grades and homework.
- Boys are five times more likely to be diagnosed as ADHD.
- Boys make up $66 \%$ of students in special education.
"Gender in the Classroom" (Willona Sloan, 2010) ASCD
http://www.ascd.org/ascd_express/vol5/512_sloan.aspx
- There is gender bias in the classroom.
- The argument that it robs children of necessary social interaction is out of date.
- Boys are failing because the world has gotten more verbal, but they haven't.
"Closing the STEM Gender Gap" (Ellen Ullman, 2010) ASCD
- Females are underrepresented in science, technology, engineering, and math career fields.
- There are not any differences in achievement or performance in math and science for girls and boys.
- Kids have an unconscious bias that links boys, more than girls, with math and science.
- It is essential that teachers expose girls to science, technology, engineering, and math.
- Professional development has to be available to teachers to teach them the strategies necessary for males and females.
- Hang posters that show women in math and science career fields.
- Assign reading materials about science, technology, engineering, and math.
- Bring in women from STEM career fields to speak with female classes.
- Discuss misperceptions and stereotypes with both male and female students regarding STEM career fields.
"Teaching to the Minds of Boys" (Kelly King \& Michael Gurian, 2006) ASCD
- There is a literacy gap between males and females.
- Males have lower grades, more discipline problems, more learning disabilities, and more behavior disorders than females.
- Teachers need to introduce more boy-friendly teaching strategies.
- Many classrooms cater to verbal-emotive, sit-still, take-notes, listen-carefully, multitasking females.
- Males bring impulsivity and single-task focus to the classroom.
- Teachers should allow males to choose topics that appeal to them.
- Males prefer scenarios, competition, action, and superheroes.
- There are more than 100 structural differences between male and female brains.
"Boy Trouble" (Peg Tyre, 2008) Instructor
- There is a 60:40 female to male ratio at many colleges.
- This is not an attempt to roll back support and enthusiasm for high-performing girls.
- Zero-tolerance policies alienate young male students.
- Males prefer fantasy, action, aggression, and violence.
- Males tend to display action, aggression, and violence to elicit courage, valor, and loyalty.
- Males prefer non-fiction books.
- Teachers need to encourage extra-curricular leadership among females.
- More male parents need to show up for PTA meetings and parent conferences.
- It is imperative to that districts hire more good male teachers.


## Project Narrative

## Methods

A. Subjects/Participants - Two sets of classes from each grade level will have single-gender classes. One set of female students and one set of male students from each grade level will participate in the 2010-2011 school year. For example, third grade will have one male class and one female class and the rest of the classes will be co-educational.
B. Materials - The Tupelo Public School District Learning Continuum and the Mississippi Curriculum Framework will be used in the male classes, female classes, and co-educational classes. Also, professional development materials such as books and research articles will be utilized to develop teaching strategies relevant to each gender.

## Procedures

1. Surveys will be distributed to parents, students, and teachers. The survey to the parents will determine whether or not they would like their child in a singlegender classroom. The survey to students will also determine if they would perform better with a male or female teacher on in a single-gender or coeducational class.
2. The teacher questionnaire will be utilized to match teaching styles with the corresponding learning style of students.
3. Teachers will be provided professional development by an in-house presenter to apply teaching strategies appropriate for single-gender and co-educational classes.
4. Upon completion of surveys and placement of students, the principal and the counselors will analyze the classroom balance based on race, ability levels, etc.

## Objectives

- The number of office referrals for males will decrease by $50 \%$.
- The achievement gap between males and females will close to within $5 \%$.
- Weekly staff development meetings will involve book studies, research findings, and reflection of teaching strategies and their effects on singlegender and co-educational classrooms.
- All lesson plans will contain activities involving project-based learning and movement within the classroom.
- Female students will discover the career fields of science, technology, engineering, and math through guest speakers, literature within the classroom and in the media center about these career fields, and interest inventories that involve characteristics associated with these career fields.


## Outcomes (Expected)

- Decrease in the number of office referrals for males (especially black males)
- Close the achievement gap in language and math
- Teacher preparation and knowledge will increase through weekly staff development meetings pertaining to teaching strategies to be utilized between male and female students
- Increase in the amount of hands-on, project-based learning in the classrooms
- Increased awareness among females about career fields usually dominated by males


## Evaluation

The program will be evaluated in a variety of ways: benchmark assessments, MCT2 test data, end-of-year evaluative survey, discipline reports, and interviews (parents, students, and teachers) to determine effectiveness of the program

## Dissemination

Results will be disseminated to stakeholders in quarterly reports. The reports will be sent home to parents, posted on the school's website, discussed at weekly professional development meetings, analyzed at monthly administrative council meetings, and reported at monthly school meetings.

## Personnel

This pilot program will not require additional staff. The questionnaires will be used to determine placement of teachers in a single-gender or co-educational classroom. There will be one male-gender class and one-female gender class in the third grade, fourth grade, and fifth grade. The teachers needed for these classes will come from within the school.

## Budget and Budget Justification

Book Studies:
Why Gender Matters 30 @ \$10.17 each =
\$305.10
A Gendered Choice $30 @ \$ 28.75$ each $=$
\$862.50
Teaching the Male Brain $30 @ \$ 31.31$ each $=$
$\$ 939.30$

Teaching the Female Brain 30 @ \$33.95 each =
\$1,018.50
Total
\$3,125.40

We will be seeking grants to offset the cost of the books. The book studies will enable us to lead our own professional development, offsetting the cost of hiring someone to come in and lead the staff development.

