

**Austin Independent School District
Single Gender Education:
A Review of Current Issues and Practices**

**Presentation to Board of Trustees
August 2011**

Section 1: Executive Summary

Section 2: Context and Need

What is Single-Gender Education?

The History and Current Status of Single-Gender Public Education in the U.S.

Issues Driving the Move Toward Single-Gender Education

- The National Picture
- The Situation in Austin

Perceived Benefits of Single-Gender Education

- General Benefits for Students and Teachers
- Benefits for Girls and Their Teachers
- Benefits for Boys and for Their Teachers

Section 3: Actual Benefits of Single-Gender Education – What the Research Says

Section 4: Differences in the Structure of Single-Gender Public Schools

Pedagogic Strategies

Individual Strategies

Organizational Strategies

- Single Gender Classes in Co-Educational Schools
- All-Boys or All-Girls Campuses
- Dual Academies
- Cross-Structure Strategies

Socio-Cultural Strategies

Section 5: A Sample of National Models

Urban Prep Academies in Chicago

Excellence Charter School in Brooklyn

William A. Lawson Academy in Houston

Section 6: Single-Gender Public Education in Austin, Texas

Current Experience: The Ann Richards Young Women's Leadership Academy

Planned Initiative: The AISD School for Young Men

- Potential Structure for the SYM
- Anticipated Outcomes for the SYM

Section 7: Conclusion

Attachment A: Research Citations

TABLE OF CONTENTS

Section 1: Executive Summary	1
Section 2: Context and Need	3
Section 3: Actual Benefits of Single-Gender Education – What the Research Says.....	11
Section 4: Differences in the Structure of Single-Gender Public Schools.....	14
Section 5: A Sample of National Models.....	18
Section 6: Single-Gender Public Education in Austin, Texas	21
Section 7: Conclusion.....	25
Attachment A: Research Citations.....	26

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 1: EXECUTIVE SUMMARY

This white paper outlines the issues surrounding single-gender education in the United States and in Austin, and provides a background and context in which to examine the recent efforts to study the feasibility of – and potentially implement – a single-gender school for boys in Austin Independent School District.

The term *single-gender education*, also known more broadly as *single-sex education*, refers to elementary, secondary, and postsecondary educational settings in which male and female students attend school exclusively with members of their own sex. Single-gender schools have begun to proliferate in the United States, reversing a decades-long national trend in which federal education laws prohibited segregation by sex. This proliferation was made possible by the 2001 reauthorization of the 1965 Elementary and Secondary Education Act. This reauthorization -- commonly known as “No Child Left Behind (NCLB)” – allowed the establishment of both single-gender schools and single-gender classes within coeducational schools. Further new regulations, passed in 2006, not only clarified the legal status of single-gender education but also provided incentives to encourage school districts to establish single-gender schools rather than simply offer girls-only or boys-only classrooms within coeducational schools. One clarification in these new regulations is that the Equal Educational Opportunities Act prohibits the involuntary assignment of students to separate-gender schools. Following the amendment changes in NCLB, the number of public schools offering single-gender education has skyrocketed.

Fifteen to 20 years ago, researchers pointed to concerns about equal opportunity in the classroom for girls. These concerns included teachers’ and peers’ sexist attitudes and behavior, which were seen to interfere with girls’ learning in coeducational environments, and the fact that research had shown that boys received the majority of teachers’ attention in co-ed classrooms, especially in the stereotypically “male” subjects of science, technology, engineering, and math. Recent research about gender differences in education, however, has raised alarms about the cognitive, academic, and social/emotional development and health of boys. Analyses by gender of scores on state tests show that, for example, girls perform roughly as well as boys do in math, but that in reading and writing, boys lag behind girls. Boys – particularly boys of color and boys from low-income families – are less likely than girls to receive top grades, graduate from high school, meet college readiness benchmarks, or go on to college.

The situation in Austin mirrors that of the nation as a whole, with girls outperforming boys, as measured by changes in the percentage of students meeting or exceeding standards on state assessments of math and reading between 1993 and 2010. Girls’ performance in reading now exceeds boys’ performance. As is true nationally, boys in AISD schools now lag behind girls in every significant indicator related to school and life success – from performance on state assessments, to disciplinary issues, to college readiness, graduation, and college enrollment rates.

Many educators, researchers, and other stakeholders have begun advocating single-gender education as a way to address these academic performance issues. Proponents of single-gender education point to a range of potential benefits including: increased academic achievement, particularly among “at-risk” students; greater staff sensitivity to and awareness of gender differences in learning and maturation; increased equity in curriculum and access to student opportunities; provision of positive same-gender role models; better peer interactions; greater leadership opportunities; and increased opportunities for

students to pursue academic, extracurricular, and career-oriented activities without regard to gender stereotypes.

To date, however, no research comparing single-gender and coeducational settings has been conducted using a systematic approach. The outcomes of existing research are mixed, and many of the research studies are flawed. Of existing studies of single-gender education, some have shown improved outcomes for students, others found no advantages, and still others reported mixed results. Some research suggests positive educational benefits of single-gender schooling for girls, for at-risk students, and for African-American and Hispanic students, regardless of gender. Proponents argue that both single-gender education and coeducational reform can proceed simultaneously, while benefiting all students.

Multiple single-gender educational strategies have been found to be effective. Some research has grouped these effective strategies into four primary domains: 1). Pedagogic strategies, which are classroom-based approaches centered on teaching and learning; 2). individual strategies, which are approaches that provide opportunities to identify and address the specific needs of individual students; 3). organizational strategies, which are ways of organizing learning at the whole school level; and 4). socio-cultural strategies, which include approaches that serve to create a safe, encouraging environment for learning.

A number of examples of successful single-gender schools now exists in the United States, including Urban Prep Academies, a nonprofit organization that operates a network of free, open-enrollment all-male college-preparatory charter high schools in Chicago; the Excellence network in New York City, which includes Excellence Boys Charter School of Bedford Stuyvesant, founded in August 2004, and Excellence Girls Charter School, founded in 2009; and the William A. Lawson Institute for Peace and Prosperity Preparatory Academy, an all-boy charter in Houston for students in grades 6 through 8.

In 2007, AISD opened the Ann Richards School for Young Women Leaders, which currently serves girls in grades 6 through 10, and which will be adding a grade each year, graduating its first 12th-grade class in 2013. Since opening the Ann Richards School for Young Women Leaders, AISD has been researching a range of options to respond to the urgent need to close the achievement and opportunity gaps for young men, and reverse the economically and socially devastating trends of high dropout rates, low high-school graduation rates, and low college enrollment and completion rates for economically-disadvantaged boys. During the spring and early summer of 2011, the district applied for and received significant support from the Moody Foundation to study the feasibility of establishing a self-contained single-gender school for boys in grades 6 through 12 that incorporates best-practice strategies from other successful schools across the United States.

The newly-funded School for Young Men (SYM) Project represents the district's next critical step in developing a self-contained school of excellence for boys that incorporates best-practice strategies from other successful schools across the U.S. The SYM Project is set to unfold in three phases, beginning in Spring 2011 and culminating with the opening of the school in August 2013. SYM will be modeled after other successful, urban single-gender schools for boys at risk to provide a high-quality and comprehensive educational experience that prepares boys and young men in Austin for success in college, work, and life. The school's primary goals are to ensure that all students reach grade-level performance benchmarks in reading, math, and science; graduate on time with college-ready skills; and enroll in a postsecondary academic program that puts them on the road to a successful vocational, technical, or professional career.

Although the evidence about single-gender education is mixed, enough compelling studies pointed to the efficacy of single-gender settings for boys – particularly for boys of color and those from low-income families – to support the district's establishment of the School for Young Men.

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 2: CONTEXT AND NEED

What is Single-Gender Education?

The term *single-gender education*, also known more broadly as *single-sex education* refers to elementary, secondary, or and postsecondary educational settings in which male and female students attend school exclusively with members of their own gender. Most educators and researchers extend this term to include “dual academies,” in which both male and female students attend school at a single campus, but take classes that are segregated by gender. In most instances, nonacademic activities at dual academies (e.g., meals, sports, and extracurricular programs) are also segregated. The term *single-gender education* typically is not used to refer to coeducational settings in which segregated classes are offered only in selected subjects.

The History and Current Status of Single-Gender Public Education in the U.S.

Single-gender schools have begun to proliferate in the United States, reversing a decades-long national trend in which federal education laws prohibited segregation by gender. At the time the nation was founded, only boys received formal schooling; therefore, all schools were by definition “single gender” schools. Girls were educated at home, if they received any education at all. By the early 1800s, cultural norms had started to shift and girls were allowed to attend school in all-girl classes, although, in the first schools at which girls were permitted, teachers provided instruction only before and after the standard school-day for boys. By the early 1900s, some communities began educating boys and girls together, both for economic reasons and because prevailing wisdom held that girls exerted a moderating influence on boys’ behavior (Bracey, 2006).¹ Coeducational settings soon became the norm in public education, although many private schools continued to educate boys and girls separately.

Since the early 20th century, boys-only and girls-only schools in the United States have been almost exclusively private schools, although no laws prohibited single-gender public schools or classes until the 1972 passage of Title IX legislation, which made such segregation illegal – albeit with some exceptions. Under Title IX, discrimination based on gender was outlawed in almost all aspects of school, including athletics, career counseling, medical services, financial aid, admission practices, and the treatment of students. Schools that violated Title IX were subject to loss of federal funds (Sadker & Sadker, 1994²). Title IX put the weight of law behind the cultural trend toward co-education, a state of affairs that lasted for almost 30 years and one that has had a significant national impact on girls’ education, including access to higher education, career education, education for pregnant and parenting students, employment, learning environment, math and science, sexual harassment, standardized testing, and technology (Winslow, 2009)³.

In the 1990s, federal legislators attempted -- unsuccessfully at first -- to pass laws circumventing Title IX provisions and permitting public school districts to establish single-gender schools and classrooms. Those efforts finally met with success in 2001 with the reauthorization of the 1965 Elementary and Secondary Education Act. This reauthorization -- commonly known as “No Child Left Behind (NCLB)” -- allowed the establishment of both single-gender schools and single-gender classes within coeducational schools. Several years later, in 2006, the United States Department of Education published new regulations governing single-gender education. Together, these two legislative acts represented “a drastic change in American public policy by allowing for sex segregation in public

schools—as long as it is voluntary, students are provided a substantially equal co-educational option, and the segregation substantially furthers an important governmental objective” (Brown, 2011).⁴ While the Equal Educational Opportunities Act prohibits involuntary assignment of students to separate-gender schools, the 2006 regulations allowed coeducational public schools to offer single-gender classrooms, as long as the schools:

- Provide a rationale for offering each single-gender class (e.g., identify the inequity the single-gender class will address).
- Provide a coeducational class in the same subject at a “geographically accessible” location, which does not have to be at the same school site as the single-gender class.
- Conduct a review every two years to determine whether each single-gender class is still necessary to remedy the originally-identified inequity.

The new regulations not only clarified the legal status of single-gender education but also provided incentives to encourage school districts to establish single-gender schools, rather than simply offer girls-only or boys-only classrooms within coeducational schools: the regulations specifically exempt single-gender schools both from the requirement to provide a rationale for segregating students by gender and from the requirement to conduct periodic “necessity” reviews. Although the regulations require districts that operate single-gender schools to offer “substantially equal” courses, services, and facilities at other schools within the district, those other schools may be coeducational schools. Furthermore, the term *substantially equal* has never been defined. Charter schools are exempt from all three requirements.

Following the amendment changes to NCLB in 2002, the number of public schools offering single-gender education has skyrocketed: In 1999, only four public schools in the nation offered single-gender education; by 2009, 540 public single-gender schools were in operation. The legitimacy of these schools has been challenged, however, in court cases brought by the American Civil Liberties Union in Kentucky (2008⁵) and Louisiana (2010⁶) and in position papers and amicus briefs submitted by the American Association of University Women among other groups. District courts have rejected the ACLU’s attempts to stop two school districts from implementing single-gender classrooms on the basis that segregating students by gender means exposing them to a learning environment that is fundamentally unequal and in violation of the Fourteenth Amendment, Title IX, and the Equal Educational Opportunities Act. However, the ACLU is currently appealing court decisions in both cases.

Issues Driving the Move Toward Single-Gender Education

The National Picture

Over the past two decades, the debate about equal opportunity in the classroom has shifted dramatically. Fifteen to 20 years ago, researchers pointed to concerns about opportunities for girls (Acker, 1988⁷; Arnot & Weiner, 1987⁸; Mahony, 1985⁹; Stanworth, 1981¹⁰). These concerns included teachers’ and peers’ sexist attitudes and behavior, which were seen as interfering with girls’ learning in coeducational environments (Sadker & Sadker, 1994¹¹). Some research has shown that, in coeducational classrooms, boys received the majority of teachers’ attention, especially in the stereotypically “male” subjects of science, math, engineering, and technology (Lee, Marks, & Byrd, 1994¹²). Furthermore, because boys tend to more closely adhere to cultural gender stereotypes than do girls (Blakemore, Berenbaum, & Liben, 2009¹³), classrooms that do not include males are thought to be more supportive of girls’ academic achievement in counter-stereotypic domains such as math and science than are classrooms that include males (Shapka & Keating, 2003¹⁴).

These concerns, however, have recently been overshadowed by what Younger and Warrington¹⁵ have termed a “preoccupation with boys.” This recent research about gender differences in education has raised alarms about boys’ cognitive, academic, and social/emotional development and health. According to Dr. Leonard Sax, founder and executive director of the National Association for Single Sex Public Education (Sax, 2007¹⁶), “from kindergarten to college, (boys are) less resilient and less ambitious than they were a mere twenty years ago.”

Researchers point to data from the U.S. Department of Education indicating that the average 11th-grade American boy today writes at the same level as does the average 8th-grade girl (Sax, 2005¹⁷). Others express concern that male students are becoming involved in “self-sabotage” and that they are “resisting school through disengagement and disruptiveness (and) acting up in the classroom in order to display their masculinity and get respect” (Kleinfeld, 2005¹⁸). The “boy crisis” debate is not limited to the United States, either: similar concerns have been expressed about boys’ lower academic achievement in Belgium (Van Houtte, 2004¹⁹) and Germany (Sutherland, 1999²⁰) and about boys’ negative attitudes toward and dislocation from their schooling in the Scandinavian countries (Gordon, 1996²¹; Johanneson, 2004²²; Kruse, 1996²³; Ohn, 2001²⁴).

Analyses of performance by gender on state tests found “good news for girls but bad news for boys” (Center on Education Policy, 2010²⁵): In math, girls performed roughly as well as do boys, and the differences that did exist in some states were small and showed no clear national pattern favoring boys or girls. But in reading, boys lagged behind girls in all states with adequate data, and these gaps were greater than 10 percentage points in some states. Although strong reading and writing skills are critical to students’ ability to succeed in college and in most technical and professional careers, boys’ reading and writing abilities paled in comparison to girls’ abilities. By fourth grade, boys were already an average of 10 points behind girls in reading proficiency on national assessments. By 12th grade, they were 24 points behind in writing proficiency (The Boys Initiative²⁶).

According to research by Gurian & Stevens (2005²⁷), **boys are far less likely than girls** to:

- *Receive top grades.* On average, boys and young men are 1.5 years behind girls and young women in reading ability and 70% of Ds and Fs are given to boys. Research shows that the lowest-performing readers are most at risk of dropping out of high school. Those achieving in the lowest quartile are 3.5 times more likely to drop out than students in the next highest quarter of academic achievement, and 20 times more likely to drop out than top-performing students.²⁸
- *Graduate from high school.* Boys and young men make up the majority of high school dropouts – a figure as high as 80% in some cities. High school dropouts are more likely to be unemployed, earn lower wages, have higher rates of public assistance, are more likely to be single parents, and have children at a younger age.²⁹
- *Meet college-readiness benchmarks.* In addition, the majority of National Merit scholarships, as well as college academic scholarships, go to girls and young women.
- *Go to college.* Only 40% of current college students are young men. Research shows that students who graduate from high school but do not go on to college generally fare only slightly better than do high-school dropouts.³⁰

Boys also appear to be less emotionally connected to school than are girls: In addition to comprising the majority of permanent high-school dropouts, boys in high school are more likely to report disliking school, and are greatly outnumbered by girls in every extracurricular activity except sports, suggesting that many boys are fully engaged in their high school experience. Some researchers believe that the fact that the majority of primary- and secondary-school teachers are women, who often lack training about the special educational needs of boys, contributes significantly to boys’ disengagement (Gurian, 2001³¹).

Research also shows that boys struggle with behavioral and mental health issues that negatively affect their lives and the lives of those around them. According to the Centers for Disease Control and Prevention, boys are three times as likely as girls to be diagnosed with Attention Deficit/Hyperactivity Disorder (ADD/ADHD)³² are diagnosed with learning disabilities and behavioral disorders at a rate nearly twice that of girls and *are referred for possible ADHD/ADD diagnoses ten times as often* as girls. These extreme differences in referral and diagnosis rates had led some to speculate that normal boy behavior itself is sometimes misunderstood as disordered (Pollack, 1998³³). Boys are also medicated for hyperactivity, attention deficit, and other behavior issues at rates far higher than those of girls (Gurian, 2001³⁴); are more than twice as likely to be suspended and more than three times as likely to be expelled from school as are girls; and are eight times as likely as girls to be incarcerated.

These differences that are even more stark when viewed through the lens of race, ethnicity, and English proficiency: boys of color, particularly Black and Latino boys, have even lower rates of academic achievement than do their female peers. Black and Latino males are more likely to obtain low test scores and grades, less likely to enroll in college, and more likely to drop out, to be categorized as learning disabled, to be absent from honors and gifted programs, and to be over-represented among students who are suspended and expelled from school (Gregory, Skiba & Noguera 2010³⁵).

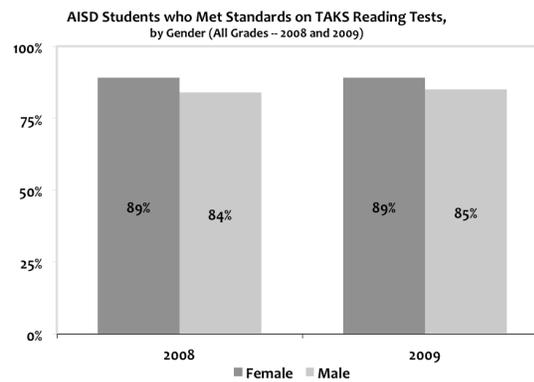
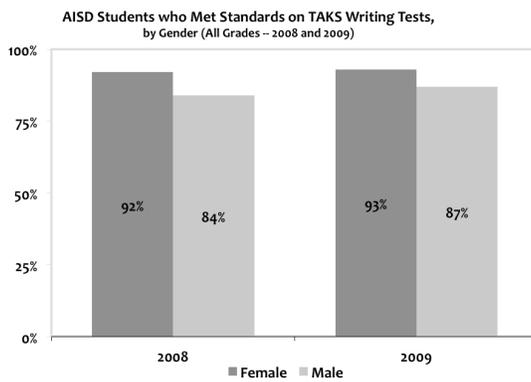
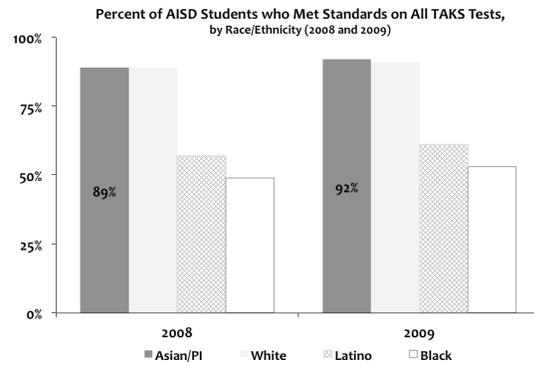
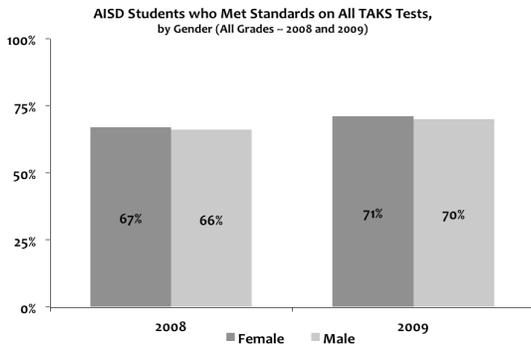
The Situation in Austin

The situation in Austin mirrors that of the nation as a whole, with girls outperforming boys, as measured by changes in the percentage of students meeting or exceeding standards on state assessments of both math and reading between 1993 and 2010. Girls' performance in reading now exceeds boys' performance.³⁶ As is true nationally, boys in AISD schools now lag behind girls in every significant indicator related to school and life success – from performance on state assessments, to disciplinary issues, to college readiness, graduation, and college enrollment rates.

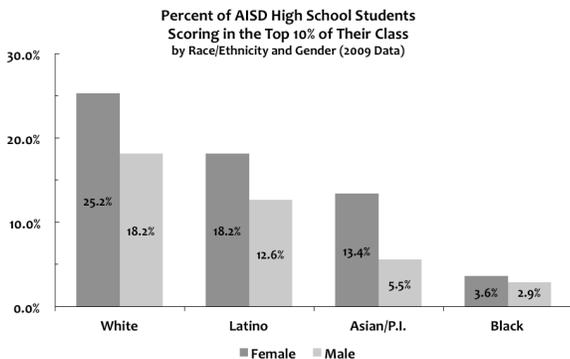
According to 2009 AISD school data, only 30% of boys scored above average (i.e., achieved commended performance) on state assessments of reading, compared with 36% of girls, and only 25% of boys scored above average in writing, compared with 30% of girls. Only 73% of AISD boys graduate from high school in four years, compared with 78% of girls. Only 42% of the students in the top 10% of the most recent graduating class were boys, while 58% were girls. This discrepancy is particularly crucial in Texas, because students who graduate in the top 10% of their high school class are guaranteed admission to a public college. These trends have major implications both for the students, who, as a result, will have limited opportunities to find meaningful, well-paying work, and for society, which has to bear the societal costs that result from these boys' lack of success, including the costs for increased public assistance and incarcerations, and loss of the tax revenue these young men would otherwise contribute.

Moreover, not only are achievement gaps in AISD evident between girls and boys district wide, they are evident both *between* racial/ethnic groups and between boys and girls *within* racial/ethnic groups. In general, Black and Latino students have lower academic performance than do white and Asian students, are more likely to drop out of school, and even if they stay in school, are less likely to graduate on time or graduate at the top of their class. The same gaps exist between low-income students and their middle- and upper-income counterparts.

The following charts highlight the achievement gaps in AISD for boys and girls and for different groups of students. These charts show the percentage of students who met standards on state achievement tests, both for all Texas Assessment of Knowledge and Skills (TAKS) tests and for the TAKS reading and writing subtests, by gender, and by race/ethnicity.

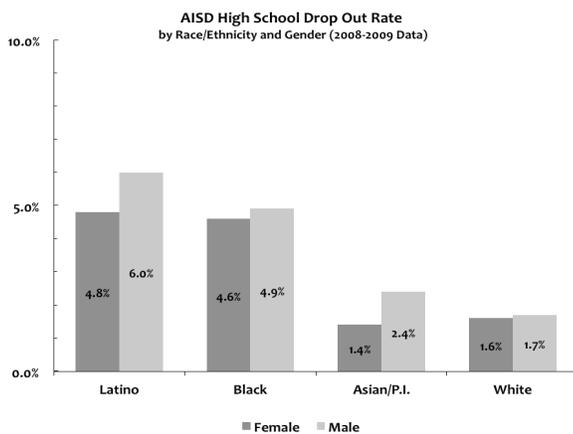
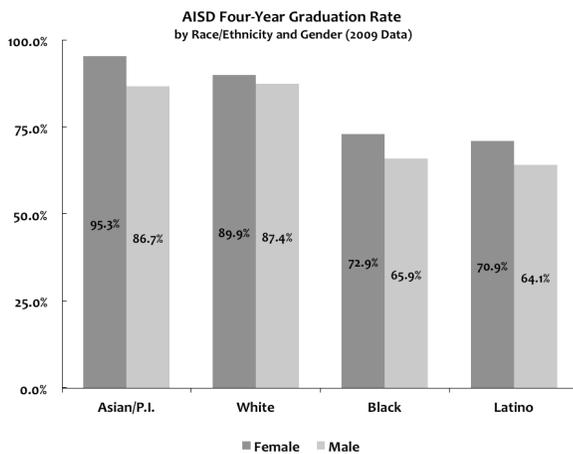


The next chart illustrates the discrepancies in student performance both between boys and girls and between racial and ethnic groups, and shows both that more White students score in the top 10% of their class than do students from other groups, and that across groups, a higher number of girls score in the top 10%. The implications for boys – particularly boys of color – are disturbing, because, clearly, these students are being left behind on the road to life success.



The two charts below show the difference in the rates at which different groups of students graduate from or drop out of school. As the charts show, boys in all groups graduate at lower rates than girls, and African American and Latino students graduate at lower rates than students in other racial/ethnic groups.

More boys than girls from each student group drop out of school and far more African American and Latino students drop out of school than do students from other groups. Again, the implications for boys – particularly boys of color – are disturbing.



When students drop out of high school or do not go on to college, negative effects are felt not only by the students themselves but also by the community as a whole. High school dropouts are much more likely than high school graduates to be unemployed. They also earn lower wages and pay far less in tax revenues, have higher rates of public assistance, are more likely to be single parents, and have children at a younger age.³⁷ High school dropouts are also far more likely to be incarcerated than are graduates. Black males who drop out having the highest rates of incarceration of all groups. Some have called dropping out of high school “an apprenticeship for prison” (Sum, Khatiwada, & McLaughlin, 2009³⁸) for the nation’s young men – particularly young men of color. A lackluster labor market means that ex-offenders without a high-school degree, who are mostly male and mostly from communities of color, are likely to commit other offenses, leading to large societal costs from repeated incarceration, probation, and parole.

The economic crisis in the country, coupled with the demands of growing global competition, have made it imperative that districts such as AISD address the “boy crisis” immediately and effectively. For a majority of these boys, higher education will provide the sole pathway to career success. If boys do not stay in school, succeed in school, and graduate from college, they are unlikely to be productive citizens or contribute to their families or society. Students in the class of 2012 who drop out of school – the majority of whom will be boys – are projected to cost the state and its economy \$6 billion to \$10.7

billion over their lifetimes, according to a study from the Texas A&M Bush School of Government and Public Service.

Perceived Benefits of Single-Gender Education

Educators, researchers, and other stakeholders have multiple, sometimes conflicting, rationales for advocating single-gender education.

General Benefits for Students and Teachers

Some research has shown that schools using best practices for gender-specific teaching are more successful at teaching to boys' and girls' differing strengths (Sax, 2005³⁹) than are schools that do not employ these best-practice strategies. Proponents of single-gender education have pointed to a range of other potential benefits, both for students and their teachers (Bracey, 2006⁴⁰), including:

- Increased academic achievement, particularly among “at-risk” students;
- Greater staff sensitivity to and awareness of gender differences in learning and maturation;
- Teaching that more readily incorporates research on differences in brain development for girls and boys;
- Increased equity in curriculum and access to student opportunities;
- Diminished strength of youth-culture values;
- Provision of positive same-gender role models;
- Better peer interactions;
- Greater leadership opportunities;
- Increased opportunities for students to pursue academic, extracurricular, and career-oriented activities without regard to gender stereotypes.
- More same-gender bonding and community.

Some advocates for single-gender schools base their support on the belief that substantial, significant, and biologically-based differences exist in the way girls and boys learn, and that educational instruction is more effective when it is tailored to these differences (see Gurian, Henley, & Trueman, 2001⁴¹) than when it is not. In other words, these proponents believe that single-gender education is more effective than coeducation *when instruction is takes gender-specific learning styles and tendencies into account*. For example, gender differences in hearing can be accommodated when teachers talk more loudly in all-male classrooms than in all-female ones (Sax, 2005⁴²).

In addition to benefits for students and teachers in general, single-gender education proponents point to specific benefits for both boys and girls, and for the teachers and other staff members who instruct and interact with them.

Benefits for Girls and Their Teachers

Some educators believe that all-female classrooms are more supportive of girls' academic achievement, particularly in the STEM subjects, than are classrooms that include boys (Shapka & Keating, 2003⁴³).

Advocates also have noted that girls tend to “drop their shyness and begin to take risks in a single-sex setting. They become more competitive. They embrace sports like field hockey and soccer with gusto without worrying about appearing like tom boys.” (Kennedy, 2010⁴⁴). Others note benefits including reduction of gender bias in teacher-student interactions, less sexual harassment from boys, increased

enrollment of girls in courses they often avoid in coeducational settings, and improved self-concept and self-esteem (Riordan, 2002⁴⁵).

Benefits for Boys and for Their Teachers

According to research from the International Boys School Coalition,⁴⁶ boys-only schools can provide a stimulating and safe learning environment that encourages full participation by boys in all activities; promotes self-expression and a respect for the diverse paths to manhood; and provides an atmosphere in which to explore sensitive gender and sex-related issues. Educational programs tailored to meet the developmental needs of boys offer many benefits:

- Boys can gain confidence in their ability to learn when they are not compared with girls, who mature more quickly than do boys and who tend to enjoy more success in school.
- Books and curricular materials that excite boys can be integrated into all aspects of the school's program.
- Boys have opportunities to be taught and coached by faculty (including a significant number of males) who have been hired because they want to work with boys.
- Boys can grow at their own pace and can "be boys" for as long as they need, protected from society's pressure to get involved with girls before they are ready.
- Boys can develop strong bonds of friendship and camaraderie with peers and teachers so that the impact of positive male role models can have its fullest effect.

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 3: ACTUAL BENEFITS OF SINGLE-GENDER EDUCATION – WHAT THE RESEARCH SAYS

Educators and researchers on both sides of the single-gender education debate cite numerous theoretical advantages to coeducational or single-gender schools, depending upon their own positions. Previous studies – which have analyzed the academic achievement at single-gender private schools in the United States and both public and private schools in other countries -- are hotly debated by both proponents and critics. The result of such debate has been varying policy recommendations based on the same evidence. To date, however, no reviews of research comparing single-gender and coeducational setting have been conducted using a systematic approach. The outcomes of existing research are mixed, and many of the research studies are flawed. Much of the research has not included public school settings in the United States, because the proliferation of single-gender public schools is a recent phenomenon in this country.

One of the challenges of evaluating the efficacy of single-gender schooling is detecting and accounting for possible selection biases. Two types of selection effects can affect the academic achievement in single-gender schools: student-driven selection bias and school-driven selection bias. In student-driven bias, the students – and their families – who elect to attend single-gender schools may differ systematically from those students who do not elect to attend single-gender schools. Students who select single-gender schools may be more academically accomplished, identified, and motivated than their peers at coeducational institutions (Riordan, 1998⁴⁷; Riordan, 2002⁴⁸). The families of students in both groups may differ as well.

In school-driven bias, the students who are selected by the administrators to attend single-gender schools may differ systematically from those applicants who are not selected. Many single-gender public schools have arisen as forms of charter and magnet schools and thus, like private schools, often – although not always -- have competitive admissions processes. Much of the research has focused on these competitive-admissions schools, and has not adequately controlled for selection bias (Hayes, Pahlke, & Bigler, 2010).⁴⁹ Most research has also failed to control for other important variables such as socioeconomic status; religious values; prior learning; or race, ethnicity, or English language proficiency (Bracey, 2006⁵⁰; Mael, 1998⁵¹).

Of existing studies of single-gender education, some have shown improved outcomes for students (Lee & Bryk, 1986⁵² and 1989⁵³; Riordan, 1994⁵⁴ and 2002⁵⁵; Streitmatter, 1999), others found no advantages (Le Pore & Warren 1997⁵⁶; Shmurak 1998⁵⁷; Wood & Brown 1997⁵⁸), and still others reported mixed results (American Association of University Women 1998⁵⁹; Mael 1998⁶⁰; Singh et al. 1998⁶¹; U.S. Department of Education 2005). Some research suggests positive educational benefits of single-gender schooling for girls, for at-risk students, and for African-American and Hispanic students, regardless of gender. This research indicates that White males either benefit slightly or, at worst, realize a neutral outcome.⁶² Thus, scholars in the field have called for research examining whether the efficacy of single-gender schooling varies significantly as a function of student characteristics such as gender, age, race, and socioeconomic status (Mael, 1998⁶³; Salomone, 2006⁶⁴).

Still, both supporters and detractors both find sufficient evidence to support their points of view. Proponents point to research that shows that girls' needs are not being adequately met in co-educational classrooms, and that girls in coeducational schools fare particularly poorly on measures of self-esteem and self-efficacy (Sax, 2005⁶⁵.)

A study commissioned by the American Association of University Women (AAUW)⁶⁶ synthesized earlier research and concluded that the average school is biased against girls in a number of ways: girls do not receive as much attention from teachers as do boys, and boys are called upon to answer more abstract and complex questions than are girls. The research concluded that female high school students in coeducational settings tend to focus on their bodies and rather than on their minds.

Some researchers posit that early differences in the treatment of girls and boys can result in enduring learning patterns. Because children spend more time with their teachers than with any other adult other than their parents, teachers' expectations and actions have a profound effect on student achievement and self-esteem (Skolnick, 1982⁶⁷). The things teachers say and do not say in the classroom, how they use body language, how they act and whom they call upon “form a hidden curriculum that is more powerful than any textbook lesson (Owens, Smothers, & Love, 2003⁶⁸). Girls receive less attention, less help, and fewer challenges from teachers; over time, this “reinforcement for passivity” results in a decline in girls' independence and self-esteem. Sadker (2000⁶⁹) has asserted that teacher education programs do not adequately prepare teachers to “...‘see’ the subtle, unintentional, but damaging gender bias that characterizes classrooms.”

Proponents for boys' schools point to research from Stetson University in Florida showing that boys make significant educational advances in all-boys classrooms – advances that were even greater than the advances made by girls in all-girls classrooms (National Association for Single-Sex Public Education⁷⁰). The three-year pilot project compared single-gender classrooms with coeducational classrooms at a central Florida elementary school, where students were assigned either to single-gender or coeducational classrooms. The study matched research parameters (e.g., class size, curriculum, student demographics, and teacher training). Results from the study showed that on Florida Comprehensive Assessment Tests:

- 37% of boys in coeducational classes scored proficient compared with 86% of boys in single-gender classes; and
- 59% of girls in coeducational classes scored proficient compared with 75% of girls in single-gender classes.

In addition, many of the boys who scored proficient in the all-boys classes had previously been labeled ADHD or special needs in coeducational classes.

Proponents also point to a 2003 University of Virginia study that found that boys who attended single-gender schools were more than twice as likely as boys of comparable ability in coeducational settings to pursue subjects such as art, music, drama, and foreign languages, countering gender stereotypes⁷¹.

Detractors point to other research that calls into question fears of the “boys' crisis” in education. Despite the fact that some research conducted by the American Association of University Women (AAUW) has been used by proponents to justify single-gender schools, the AAUW in fact supports reforming coeducation to better support girls, rather than segregating them from boys.⁷²

An 2008 AAUW report⁷³ measured educational indicators from 4th grade to college and demonstrated that, while girls have made significant gains in academic achievement over the past two decades, those gains have not come at boys' expense. According to the report, “Educational outcomes for both girls and boys have generally improved or stayed the same. Girls have made especially rapid gains in many areas, but boys are also gaining ground on most indicators of educational achievement.” The achievement gap does not fall along gender lines, but along racial, ethnic, and economic ones: Large discrepancies in academic achievement are evident between White students and students of color (particularly Black and Latino students) and between students from middle- and upper-income families and their low-income peers. “These long-standing inequalities could be considered a ‘crisis’ in the sense that action is needed

urgently. But the crisis is not specific to boys; rather, it is a crisis for African American, Hispanic, and low-income children.”

Other researchers point to the conflicting data that pits the “boy crisis” against the idea that girls are “short-changed” in the American public school system, stating that no single method of teaching or educational setting is best for children. “For some children, single-sex classrooms will yield the best results, while a different environment will be most suitable for others. Parents are best positioned to know what’s best for their child and policymakers should focus on making it easier for parents to choose a school for their child(ren)” (Kafer, 2007⁷⁴). This group argues that the answer to gender differences in educational attainment and aspiration is to reform coed schools, using strategies that have been proven successful in single-gender settings (including smaller classes; more individual attention; and teacher training in gender differences, diversity, and gender equity), and that this approach can be just as effective in coeducational settings. In the view of these educators, “Separating the sexes should not be viewed as a simple solution to complex problems and that program goals, content, and desired outcomes must be carefully scrutinized (Government Accounting Office, 1996).⁷⁵”

Some posit that these arguments present “a false dichotomy,” and that both single-gender education and coeducational reform can proceed simultaneously, “to the benefit of all affected boys and girls” (Foundation for Education Reform & Accountability, 2006⁷⁶).

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 4: DIFFERENCES IN THE STRUCTURE OF SINGLE-GENDER PUBLIC SCHOOLS

Although most research studies on single-gender education do not identify a "most effective structure," multiple educational strategies have been found to be effective. Some research (Younger & Warrington, 2005⁷⁷) grouped strategies into four primary domains: pedagogic strategies, individual strategies, organizational strategies, and socio-cultural strategies.

Pedagogic Strategies

Pedagogic strategies are classroom-based approaches centered on teaching and learning. Younger and Warrington describe a successful effort to improve reading and writing among boys in England. This effort focused less on the actual teaching of reading and more on encouraging boys to become successful and satisfied readers. The approach involved making a wide range of texts available to stimulate and sustain boys' interest and to build confidence through paired reading. A critical aspect of the approach was the decision by teachers to give boys time to talk about and reflect on what they read, to share their ideas about the text, and to identify what specific things they enjoyed in the text. "When this happened and teachers had the confidence to develop an integrated approach to literacy, the standards of reading of many boys improved markedly, sometimes by twice that expected within national test parameters" (Younger & Warrington, 2005).⁷⁸ The pedagogic strategies cited by Younger & Warrington included:

- Subject-specific, culturally-relevant curricula and instructional practices that take into account how boys learn best and focus on subject matter that is of high interest to boys (Gurian, 2001⁷⁹).
- The use of materials that are of high interest to boys (Neu & Weinfeld 2007⁸⁰).
- Instructional practices that are activity-based and highly engaging (Noble & Bradford, 2000⁸¹), and that provide an emphasis on deductive reasoning and problem-solving.
- Learning through team competition, which has been shown to be engaging for boys, who are often motivated by the will to win (Sax, 2007⁸²).
- Movement in the classroom, team-teaching, project-based learning, and service learning (Gurian, 2001⁸³) have all also been shown to meet boys' needs better than traditional, lecture-driven methods (Gurian, 2003⁸⁴).
- Technology-driven instruction and access to computers to help engage boys and enable them to complete school academic requirements (Diaz, & Bontenbal, 2000⁸⁵).

Individual Strategies

Individual strategies are approaches that provide opportunities to identify and address the specific needs of individual students. These strategies include:

- Individual goal setting and identifying opportunities for individual academic and extracurricular learning (including service-learning, internship, and similar opportunities);
- An advisory program that connects boys to caring adults on a one-on-one basis (Simmons & Klarich, 1989⁸⁶; Simpson & Boriak, 1994⁸⁷; Ziegler & Mulhall, 1994⁸⁸).
- Strong, male role models that promote student-teacher relationships (Eccles, Lord, & Midgley, 1991⁸⁹) and address boys' self-esteem, competence, and social skills development in relationship to their academic concerns.

According to Younger and Warrington (2005⁹⁰), goal-setting and mentoring are successful when students and staff share a mutual understanding of and commitment to all aspects of the goal-setting process. They believe that “crucial pre-conditions” must exist if goal-setting and mentoring are to have a significant effect on student achievement. These pre-conditions are:

- Target-setting needs to be both realistic and challenging;
- Teachers within subjects area must have time – on a regular and frequent basis -- to set help set targets for individuals students and to engage in professional dialogue about the learning strengths and needs of each individual student.
- Mentors must be able to mediate and negotiate with teachers on behalf of ‘their’ students, and subsequently challenge ‘their’ student to achieve more.
- Mentors must have credibility with students and be able both to offer students strategies, advice, and encouragement and to assertively demand engagement and participation from students, thereby providing disengaged students a way to “save face” by citing mentor pressure as an excuse for their own involvement in academic work.

When these pre-conditions are in place, goal-setting and mentoring have the potential to change the aspirations and engagement of even disenchanted and disengaged students.

Organizational Strategies

Organizational strategies are ways of organizing learning at the whole-school level. These strategies include:

- Single-gender classes in co-educational schools,
- All-boys or all-girls campuses, and
- Dual academies, in which boys and girls attend school on the same campus, but all classes and extracurricular activities are segregated by gender.

Single Gender Classes in Co-Educational Schools

Many of the arguments in favor of single-gender classes cite the impact of such classes on academic achievement. Some research has suggested that single-gender classes can create environments in which boys are able to share feelings without embarrassment (Sukhnandan et al., 2000⁹¹), be less distracted by girls (Swan, 1998⁹²) and participate more in lessons and without fear of compromising their “laddish (macho)” image in front of girls (Warrington & Younger, 2003⁹³). In some schools, teachers have modified instructional strategies and materials to target boys’ perceived needs and interests (Younger & Warrington, 2002⁹⁴). Others have said they spend less time on behavior management and more on instruction, providing a protected environment for learning that is “insulated from the distractions and off-task behaviour of the other sex, where there is less harassment . . . and confidence can be built up” (Warrington & Younger, 2001⁹⁵).

Single-gender classes can also benefit girls as much as or more than they benefit boys (Herr & Arms, 2004⁹⁶), allowing teachers to challenge stereotypical views about girls’ performance in mathematics and science, for example (Sukhnandan et al., 2000⁹⁷). Warrington and Younger (2003⁹⁸) have posited that “in single-sex classes, girls gain a space to be safe from ridicule, encouragement to speak up, [and] safety from harassment and violence.”

However, issues have been raised about the negative impact single-gender education may have on girls. Some researchers have indicated that less is expected of girls in some single-gender classes; these researchers emphasize the danger that “single-sex classes for girls may also act as a nurturing emotional

refuge within which less is expected and from which they are not prepared or required to venture” (Kenway & Willis, 1998⁹⁹).

Some coeducational campuses are also experimenting with gender-segregation of communal time (e.g., lunch or recess) and extracurricular activities as well academic subjects. Many of these coeducational schools already segregate physical education and team sports.

All-Boys or All-Girls Campuses

Bracey (2006) conducted a broad review of the research on single-gender education, in which he identified problems with both the quality of the findings and the generalizability of the findings to other settings. According to Bracey, it is “extraordinarily difficult to conduct scientifically acceptable research on single sex schools since the mere fact that such schools are schools of choice means that, from the outset, no random assignment is possible.” Another factor significantly limiting the quality of the research is the short amount of time that the single-gender programs studied have been operating.

Most discussion about all-boys or all-girls campuses has centered on the impact single-gender education has on boys, despite the fact that any effect on the academic achievement of boys, has itself been debated. According to Younger and Warrington (2006),¹⁰⁰ some proponents have downplayed concerns that single-gender campuses can lead to:

- An intensification of “macho” behavior in boys, including challenges to teachers’ authority and teaching ability (Barton, 2000¹⁰¹; Jackson, 1999¹⁰²);
- The reinforcement both of sex-role stereotypes based on male bonding and of dominant forms of masculinity (Kenway & Willis, 1998¹⁰³);
- The temptation for male teachers to “become one of the boys” and to tolerate sexist language and behavior with regard to girls (Kenway & Willis, 1998¹⁰⁴; Solomon & Harrison, 1991¹⁰⁵); and
- The devaluing and bullying of boys who do not conform to “macho” values (Frank, Kehler, Lovell, & Davison, 2003¹⁰⁶; Frosh et al., 2002¹⁰⁷; Martino & Pallotta-Chiarolli, 2003¹⁰⁸).

Dual Academies

A dual academy is a coeducational campus in which most or all classes are either all-female or all-male. In some cases, schools that have begun as dual academies have subsequently separated into two different all-girl and all-boys campuses. Little research has been conducted specifically on dual academies, separate from the research on all-boys or all-girls schools or single-gender classrooms in co-educational settings, and no specific research has pointed to the benefit – or detriment – of dual-academy learning, compared with either single-gender schools or single-gender classrooms within co-educational schools.

Cross-Structure Strategies

Again Younger and Warrington (2005)¹⁰⁹ have identified a number of organizational pre-conditions necessary for successful implementation of single-gender education in any structure, including:

- Proactive and assertive approaches in the classroom that avoid negative or confrontational interactions, convey high expectations and a sense of challenge, and use praise regularly and consistently.
- A team ethic to help establish class identity in ways that help teachers identify students’ interests and enthusiasms, without reinforcing stereotypes.
- Educational leaders who give high-profile, active support to single-gender classes, and see single-gender education as central to school achievement, rather than as an “experiment.”

- The active promotion of single-gender strategies to stakeholders, including administrators, parents, and staff.

According to Younger and Warrington, “Where these pedagogic and organisational pre-conditions have been in place, in selective but carefully targeted subjects for specific students, there has been a positive effect on achievement, particularly in relation to boys’ performances in modern languages and English and girls’ performances in sciences and mathematics.”

Other cross-structure strategies that have been found to be effective in raising academic achievement include:

- Smaller classes, which offer more opportunity for individualized instruction and support better behavior management, helping to close the achievement gap (Nye, Hedges & Konstantopoulos, 2004;¹¹⁰ Molnar et al, 1999¹¹¹);
- Year-round schooling and/or an extended day, which most research has shown is a significant contributing factor in student success (Miller, 2001¹¹²), particularly for “at risk” students;
- A better balance of male teachers and other staff members who can serve as strong male role models, and who are seen by many boys as more approachable, and who inspire boys to work harder (guardian.co.uk¹¹³).
- Using Response to Intervention as a way to assess and target individual student needs (Fuchs & Fuchs, 2006¹¹⁴; Fuchs & Fuchs, 2001¹¹⁵; Ardoin, et al, 2005¹¹⁶; Hosp, 2008¹¹⁷).

Socio-Cultural Strategies

Socio-cultural strategies include approaches that serve to create a safe, encouraging environment for learning. Such strategies include:

- Setting clear behavioral expectations and discipline policies, which promote positive social and emotional development and create a strong school climate (Luiselli, Putnam, & Sunderland, 2005¹¹⁸; Horner, Sugai, Todd, & Lewis-Palmer, 2005¹¹⁹; Horner & Sugai, 2002¹²⁰);
- Requiring students to wear uniforms, which research has shown creates an environment more conducive to learning, reduces the prevalence of violence, and reduces the tendency to form cliques or gangs (Chatterjee, 1999¹²¹).
- Providing specific family involvement activities as a key element of the students’ success (Epstein, 2000¹²²; Abdul-Adil & Farmer, 2006¹²³; Henderson & Mapp, 2002¹²⁴; Constantino, 2003¹²⁵);
- Using small daily support groups, led by a teacher, to provide peer mentoring (similar to Urban Prep Academy “Prides”).
- Creating opportunities for peer support by pairing older and younger students for academic activities, particularly reading (Sharp, Sellars & Cowie, 1994¹²⁶);
- Pairing “key leaders” and “key befrienders” with disengaged students, to encourage positive responses to school initiatives (Younger & Warrington, 2005¹²⁷).

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 5: A SAMPLE OF NATIONAL MODELS

Urban Prep Academies in Chicago, Illinois

Urban Prep Academies is a nonprofit organization that operates a network of free open-enrollment all-male college-preparatory charter high schools in Chicago, including the nation's first all-male public charter high school -- Urban Prep Charter Academy for Young Men, Englewood Campus -- which opened in 2006. A second campus opened in 2009 and a third in 2010. Urban Prep's schools are the only all-boys public schools in the state of Illinois.

Key Features

The Urban Prep approach to education is to provide an extended school day and year and encircle the student with four connecting arcs that provide a comprehensive educational experience.

- The Academic Arc promotes a rigorous college-prep curriculum that focuses on reading, writing, and public speaking.
- The Service Arc deepens students' sense of responsibility by identifying community needs and creating volunteer programs to address those needs.
- The Activity Arc requires students to participate in two school-sponsored activities per year (e.g., sports teams and clubs) to more fully develop their confidence, interpersonal skills, leadership qualities and respect for others.
- The Professional/College Arc provides opportunities for students to spend time in a professional setting or on a college campus to increase their understanding of the wider world, reinforce character and leadership development, and serve as a means for students to gain valuable experience.

Results

In 2011, the organization announced that, for the second consecutive year, 100% of the schools' seniors (104 students) – most of whom came to Urban Prep performing below grade level in reading and other core academic areas – had been admitted to a four-year college or university.

Excellence Charter School in Brooklyn, New York

The Excellence network includes Excellence Boys Charter School of Bedford Stuyvesant, founded in August 2004, and Excellence Girls Charter School, founded in 2009. Both Excellence Boys School and Excellence Girls School are committed to improving academic achievement by providing a single-gender learning environment. At full capacity, the Excellence network will serve more than 1,500 students.

Key Features

The schools' key features include:

- A college preparatory mission;
- High standards for academics and character;

- A shared focus on accountability and data-driven instruction;
- Rigorous standards-based curriculum;
- Highly-structured learning environments;
- Longer school years and longer school days; and
- A faculty of committed and talented teachers.

Results

Excellence Charter Schools have achieved the following successes:

Math Highlights

- Excellence Charter Schools low-income students and students of color outperformed the state's White and non-low-income students by wide margins.
- The schools ranked in the top 10% of all NYS school districts and charter management organizations in 3rd – 8th grade.
- Among all predominantly low-income New York State school districts and charter management organizations with more than 1,000 test-takers, Excellence Charter Schools ranked number one in math in 3rd, 4th, 6th, 7th, and 8th grades.

English Language Arts (ELA) Highlights

- Excellence Charter School students outperformed the state average in ELA.
- The schools ranked in the top 4% of all NYS school districts and charter management organizations in 8th-grade ELA.
- Among all predominantly low-income New York State school districts and charter management organizations with more than 1,000 test-takers, Excellence Charter Schools ranked number one in ELA in 3rd, 7th, and 8th grades.

Despite these successes, however, the schools failed to close the achievement gap in ELA in New York.

William A. Lawson Academy in Houston, Texas

William A. Lawson Institute for Peace and Prosperity Preparatory (WALIPP) Academy is an all-boy charter for middle school students in grades 6 through 8. The school was established to increase student achievement and provide at-risk youth and inner city students throughout the greater Houston area an enhanced academic experience. The tuition-free school is located on the campus of Texas Southern University. WALIPP is opening a similar all-girl academy in Fall 2011.

Key Features

Each WALIPP Academy departments uses Grant Wiggin's Understanding by Design framework to implement its curriculum. Departments also work across the curriculum in order to develop well-rounded scholars.

- Mathematical application: WALIPP's math philosophy is architectural at its core to address the needs of students to develop strong math skills.
- Social justice: Students are taught cultural relevance, history beyond slavery, and how society affects them. Social justice, equality, and activism are fostered.

- Literacy, writing, and speaking excellence: Great writing, speaking, and reading abilities are the foundations of a successful adulthood. WALIPP fosters in learners the value of literacy skills in a holistic framework.
- Scientific exploration: Questioning and thought-provoking scientific labs drive our science department. Students are allowed to research, investigate and engage in scientific inquiry. Students are also exposed to the vast array of occupational opportunities in the field of science.
- Athletics, arts, activism: The school offers an athletically- and academically-competitive environment and facilitates well-roundedness through appreciation for the arts and activism.
- Exposure: WALIPP uses resources to expose scholars to a variety of learning experiences through trips, assemblies, college visits, tours, museums visits, academic competitions, and other opportunities.

Results

Student results at WALIPP have been mixed: in 6th grade, for example, WALIPP students underperformed in reading and math compared with students statewide. In 8th grade, however, WALIPP students outperformed students statewide in reading and social studies; performed on par with students statewide in science; but had lower performance in math than did students statewide.

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 6: SINGLE-GENDER PUBLIC EDUCATION IN AUSTIN, TEXAS

Current Experience: The Ann Richards Young Women's Leadership Academy

In 2007, AISD opened the Ann Richards School for Young Women Leaders, a unique all-girls public school founded to educate young women from grades 6 through 12 and give them the confidence and skills necessary to succeed in college, in their careers, and in their communities. The Ann Richards School currently serves girls in grade 6 through 10 and will be adding a grade each year, graduating its first 12th-grade class in 2013.

The Ann Richards School is modeled after schools in or affiliated with the Young Women's Leadership Network, including the Young Women's Leadership School (TYWLS) in East Harlem and the Irma Rangel Young Women's Leadership School in Dallas, both of which educate girls from economically disadvantaged families. Research has shown that almost all TYWLS students graduate on time. At Irma Rangel, which graduated its first class of 12th-grade students in 2009, 100% of graduates applied to and were accepted at post-secondary institutions. The Ann Richards School uses the Young Women's Leadership Network model, and augments AISD's standards-based curriculum with teaching strategies, relational models, and additional school resources proven to be successful in the academic and leadership development of young women.

Pursuing college education is a cornerstone of the culture of the Ann Richards School. Key to the college preparatory program is a rigorous academic program. With an emphasis on science, technology, engineering, and math (STEM), students are challenged to succeed in areas and careers in which girls are underrepresented, in part because of gender stereotypes that often cause girls not to think of themselves as math and science qualified and lead them to avoid STEM-related courses, especially the more rigorous courses that prepare them for college. The majority of STEM subject teachers at Ann Richard School are women.

Planned Initiative: The AISD School for Young Men

Since opening the Ann Richards School for Young Women Leaders, AISD has been researching a range of options to respond to the urgent need to close the achievement and opportunity gaps for young men, and reverse the economically and socially devastating trends of high dropout rates, low high-school graduation rates, and low college enrollment and completion rates for economically-disadvantaged boys. The same year that the Ann Richard School opened, AISD began to investigate the feasibility of opening a single-gender school for boys, similar to single-gender schools for boys that are achieving promising results in several school districts across the country, such as Urban Prep Academy, Excellence Charter Schools, and William A. Lawson Academy.

As part of its recent district-wide Facility Master Plan process, AISD brought together hundreds of families and community members from across the city to get input about a range of topics, including the community's desire for a single-gender school for boys. The response from all quarters was nearly unanimous: families in the district have a strong desire to have a single-gender academic option for their sons and members of the broader community believe a school for boys would be a significant boost for the city as a whole. Although not required by NCLB legislation, a school for boys would enable AISD to

provide a "substantially equal" male-focused academic alternative to the Ann Richards Young Women's Leadership Academy.

Even though budgetary constraints forced the district to temporarily suspend its plans for a self-contained boys' school, the combination of urgent student need and growing community demand led AISD to keep plans for a boys' school as a top district priority and the district has actively pursued funding to help develop such a school. During the spring and early summer of 2011, the district applied for and received significant support from the Moody Foundation to study the feasibility of establishing a self-contained single-gender school for boys in grades 6 through 12 that incorporates best-practice strategies from other successful schools across the country.

The newly-funded School for Young Men (SYM) Project represents the district's next critical step in developing a self-contained school of excellence for boys that incorporates best-practice strategies from other successful schools across the U.S. The SYM Project is set to unfold in three phases, beginning in Spring 2011 and culminating with the opening of the school in August 2013:

- Phase One encompasses a year-long feasibility study to research the effectiveness of a range of single-gender school models and select the one that most closely aligns with both district goals and the specific needs of district students. At the end of this phase, AISD will have a fully-developed plan for Phase Two.
- Phase Two focuses on SYM implementation planning to get the school ready for opening day. A preliminary Phase Two plan outlined during the development of the Moody Foundation grant proposal will be adjusted based on the result of Phase One learning. At the end of this phase, AISD will have a fully-developed plan for Phase Three.
- In Phase Three, the SYM will open to serve boys in grades 6 and 7 (August 2013). Following this phase, AISD plans to expand the school by one grade level in each of the subsequent five years until the schools serves boys through grade 12. Enrollment is projected at 115 for each grade level, or a total of 805 students, when SYM implementation is complete.

The SYM design team is working with AISD's Department of Program Evaluation to ensure the school's structure best supports students' needs and helps students to reach grade-level performance benchmarks in reading, writing, math, and science; to graduate on time with college-ready skills; and to enroll in a postsecondary academic program that puts them on the road to a successful vocational, technical, or professional career.

Potential Structure for the SYM

AISD's proposed School for Young Men will be modeled after other successful, urban single-gender schools for at-risk boys to provide a high-quality and comprehensive educational experience that prepares boys and young men in Austin for success in college, work, and life. The school will incorporate a range of elements that studies of other similar schools have shown to be successful for engaging boys in learning. These features will include elements such as rigorous curricula, diverse extracurricular programs, devoted teachers, positive school culture, and a comprehensive approach to education to ensure that every SYM graduate succeeds in college. The specific ways in which these elements will be integrated into the school will be determined during the project feasibility and planning phase.

AISD personnel are working to identify specific structural elements and educational strategies that have the potential to make a difference in boys' learning, motivation, and engagement with their schooling, and, therefore, to raise levels of academic achievement – particularly for Black and Latino boys.

Some of the best-practice strategies identified to date include creating an academic environment that emphasizes:

- High expectations, both academically and behaviorally;
- Preparation for on-time graduation, college acceptance, and earning a college degree;
- Responsible interpersonal relationships and decision-making;
- Leadership skills; and
- Accountability and outcomes for school leaders, teachers, and students.

Based on an initial review of research and the work of current successful boys' schools in other cities, AISD anticipates that the SYM may be structured along the lines of Urban Prep Academy in Chicago. Although additional research into that model – and other similar models – is being conducted as part of the feasibility and planning phase, certain overarching themes will likely be incorporated into the SYM design. These themes include college and career readiness, character development and service learning, athletics and other activities, and college and career exploration.

Studies from a range of researchers have found a number of strategies (outlined earlier) that schools can implement to “teach to boys’ strengths” and reverse the trend of negative outcomes for boys. AISD will incorporate the best aspects of these efforts, and meld them into a coherent, overarching vision for the SYM.

Anticipated Outcomes for the SYM

The SYM mission is to fully prepare young men at risk of academic failure for success in school, work, and life. The school’s primary goals are to ensure that all students reach grade-level performance benchmarks in reading, math, and science; graduate on time with college-ready skills; and enroll in a post-secondary academic program that puts them on the road to a successful vocational, technical, or professional career.

School-level outcome measures will include disaggregated data on school-wide student performance on state assessments or reading and math; daily attendance rates and chronic absenteeism; graduation and dropout rates; student enrollment and success in Advanced Placement (AP), International Baccalaureate (IB), and Honors classes; student enrollment in postsecondary education opportunities; and student behavior measures (disciplinary referrals, suspensions, and expulsions).

Teacher-level outcome measures will include improved student academic performance as measured by state assessments of reading and math and student classroom test scores and grades; increase in knowledge and improved instructional practices as measured by classroom observations and pre- and post- program assessments of professional development activities; and improved student behavior, as measured by disciplinary referrals, suspensions, and expulsions.

AISD projects that the following outcomes for SYM students, compared with their peers in the schools the students would otherwise have attended:

- Academic achievement for SYM students will increase (both performance on state assessments of reading and math and classroom grades).
- The percentage of SYM students taking advanced academic classes will increase.
- The number of SYM students receiving disciplinary referrals, suspensions, and expulsions will decrease.

- The percentage of SYM students meeting district daily attendance goals will increase and the percentage of SYM students who are chronically absent will decrease.
- The percentage of students referred for special education because of behavioral concerns will decrease.
- The percentage of SYM students graduating from high school in four years will increase.
- The percentage of SYM students dropping out of school will decrease.
- The percentage of SYM students enrolling in post-secondary schools will increase.

In addition, compared with data from the schools the SYM students otherwise would have attended:

- The percentage of SYM parents who say they have the knowledge and skills to support their children's academic success will increase.
- The number of partnerships with businesses and community organizations for afterschool programming, job internships, and other opportunities will increase.
- School climate will improve (e.g., students' feelings of attachment to school and feelings of safety and teachers' feelings of respect and satisfaction will increase).

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

SECTION 7: CONCLUSION

The achievement gap is a real and persistent threat to the well-being of some groups of district students and it is clear that these students need additional support to achieve success in school and in life.

Although the evidence regarding single-gender education has been mixed, enough compelling studies have pointed to the efficacy of single-gender settings for boys – particularly for boys of color and those from low-income families – to support the district’s establishment of the School for Young Men. On the national level, the trend toward single-gender education has had a slow start following the original legislative changes in 2001 but has quickly gained momentum since 2006. Locally, parents and community members have voiced strong support for single-gender schools, in addition to, but not in place of, coeducational opportunities. Changes in federal legislation, although contested by some, have made it possible for the option of single-gender education to become one of many tools in the district’s educational toolbox.

**Single Gender Education:
A Review of Current Issues and Practices
Presentation to Board of Trustees
August 2011**

ATTACHMENT A: RESEARCH CITATIONS

¹ Bracey, G.W. (2006). *Separate but superior? A review of issues and data bearing on single-sex education*. The Great Lakes Center for Education Research & Practice, East Lansing, MI.

² Sadker, M., & Sadker, D. (1994). *Failing at fairness: How America's schools cheat girls*. New York: Simon & Schuster.

³ Winslow, B. (2009). *The historian's perspective: the impact of Title IX*. The Gilder Lehrman Institute of American History. Retrieved at http://www.gilderlehrman.org/historynow/03_2010/historian6.php.

⁴ Brown, C.S. (2011). Legal issues surrounding single-sex schools in the U.S.: trends, court cases, and conflicting laws. *Sex Roles: A Journal of Research*. Springer Science+Business Media.

⁵ American Civil Liberties Union (2008). *ACLU represents students in challenge to sex segregation in Kentucky public school*: American Civil Liberties Press Release, May 19, 2008. Retrieved from <http://www.aclu.org/womens-rights/aclu-represents-students-challenge-sex-segregation-kentucky-public-school>.

⁶ American Civil Liberties Union (2010). *ACLU challenges Louisiana school sex-segregation program before Federal Appeals Court*: American Civil Liberties Press Release, October 5, 2010. Accessed at <http://www.aclu.org/womens-rights/aclu-challenges-louisiana-school-sex-segregation-program-federal-appeals-court>.

⁷ Acker, S. (1988). Teachers, gender and resistance. *British Journal of Sociology of Education*, 9, 307–322.

⁸ Arnot, M. & Weiner, G. (1987). *Gender and the Politics of Schooling*, Hutchinson, London, 1987. 395 pp.

⁹ Mahony, P. (1985). *Schools for the boys? Co-education reassessed*. London, UK: Hutchinson.

¹⁰ Stanworth, M. (1981). *Gender and schooling*. London, UK: Century Hutchinson.

¹¹ Sadker, M., & Sadker, D. (1994). *Failing at fairness: How America's schools cheat girls*. New York, NY: Simon & Schuster.

¹² Lee, V., Marks, H. & Byrd, T. (1994). Sexism in single-sex and coeducational independent secondary school classrooms. *Sociology of Education*, 67: 92-120.

¹³ Blakemore, J. E. O., Berenbaum, S. A. & Liben, L. S. (2009). *Gender development*. New York, NY: Taylor & Francis.

¹⁴ Shapka, Jennifer D., Keating, Daniel P. (2003). Effects of a girls-only curriculum during adolescents: Performance, persistence, and engagement in mathematics and science. *American Educational Research Journal* 40 (4), 929-960.

¹⁵ Younger, M. & Warrington, M. (2006). Would Harry and Hermione have done better in single-sex classes? A review of single-sex teaching in coeducational secondary schools in the United Kingdom. *American Educational Research Journal*. 43 (4), 579–620,

¹⁶ Sax, L. (2007). *Boys adrift: The five factors driving the growing epidemic of unmotivated boys and underachieving young men*. New York, NY: Basic Books.

¹⁷ Sax, L. (2005). *Why gender matters*. New York, NY: Doubleday.

¹⁸ Kleinfeld, J. (2005, May 20). *Culture fuels boys' learning problems*. Alaska Daily News, p. B6.

¹⁹ Van Houtte, M. (2004). Why boys achieve less at school than girls: The difference between boys' and girls' academic culture. *Educational Studies*, 30, 159–173.

²⁰ Sutherland, M. (1999). Gender equity in success at school. *International Review of Education*, 45, 431–443.

²¹ Gordon, T. (1996). Citizenship, difference and marginality in schools: Spatial and embodied aspects of gender construction. In P. Murphy & C. Gipps (Eds.), *Equity in the classroom: Towards effective pedagogy for girls and boys* (pp. 34–45). London, UK: Falmer Press.

²² Johannesson, I. A. (2004). To teach boys and girls: A pro-feminist perspective on the boys' debate in Iceland. *Educational Review*, 56, 33–42.

-
- ²³ Kruse, A.-M. (1996). Single-sex settings: Pedagogies for girls and boys in Danish schools. In P. Murphy & C. Gipps (Eds.), *Equity in the classroom: Towards effective pedagogy for girls and boys* (pp. 173–191). London, UK: Falmer Press.
- ²⁴ Ohrn, E. (2001). Marginalization of democratic values: A gendered practice of schooling? *International Journal of Inclusive Education*, 5, 319–328.
- ²⁵ Center on Education Policy (2010). *State test score trends through 2007-08, part 5: Are there differences in achievement between boys and girls?*
- ²⁶ *Risky habits*. (n.d.). Boys Initiative website. Retrieved from <http://www.theboysinitiative.org/Literacy.html>.
- ²⁷ Gurian, M. & Stevens, K. (2005). *The minds of boys: Saving our sons from falling behind in school and life*. Jossey-Bass Inc.
- ²⁸ Alliance for Excellent Education. (n.d.). *The crisis in American high schools*. Washington, DC: Author. Retrieved April 20, 2007, from http://www.all4ed.org/whats_at_stake/CrisisInHighSchools.pdf.
- ²⁹ Swanson, C. (2004, December 9). *Setting the stage for a national dialogue: Graduation rates and NCLB*. Presented at the Alliance for Excellent Education Graduate Rate Symposium, The National Press Club, Washington, DC.
- ³⁰ Alliance for Excellent Education. (n.d.). *The crisis in American high schools*. Washington: Author. Retrieved April 20, 2007, from http://www.all4ed.org/whats_at_stake/CrisisInHighSchools.pdf.
- ³¹ Gurian, M., Henley, P., & Trueman, T. (2001). *Boys and girls learn differently!: A guide for teachers and parents*. San Francisco, CA: Jossey-Bass.
- ³² Centers for Disease Control and Prevention. (2010). Increasing prevalence of parent-reported attention-deficit/hyperactivity disorder among children: United States, 2003 and 2007. *Morbidity and Mortality Weekly Report*. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5944a3.htm?s_cid=mm5944a3_w.
- ³³ Pollack, W. (1998). *Real boys: Rescuing our sons from the myths of boyhood*. New York, NY: Random House.
- ³⁴ Gurian, M., Henley, P., & Trueman, T. (2001). Op. cit.
- ³⁵ Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The Achievement Gap and the Discipline Gap: Two Sides of the Same Coin? *Educational Researcher*, 39, 59-68.
- ³⁶ Texas Education Agency. (n.d.) Academic Excellence Indicator System.
- ³⁷ Swanson, C. (2004, December 9). *Setting the stage for a national dialogue: Graduation rates and NCLB*. Presented at the Alliance for Excellent Education Graduate Rate Symposium, The National Press Club, Washington, DC.
- ³⁸ Sum, A., Khatiwada, I., & McLaughlin, J. (2009). *The consequences of dropping out of high school: Joblessness and jailing for high school dropouts and the high cost for taxpayers*. Boston, MA: Center for Labor Market Studies, Northeastern University.
- ³⁹ Sax, L. (2005). Op. cit.
- ⁴⁰ Bracey, G.W. (2006). Op. cit.
- ⁴¹ Gurian, M., Henley, P., & Trueman, T. (2001). Op. cit.
- ⁴² Sax, L. (2005). Op. cit.
- ⁴³ Shapka, J.D. & Keating, D.P. (2003). Effects of a girls-only curriculum during adolescence: Performance, persistence, and engagement in mathematics and science. *American Educational Research Journal*, 40 (4), 929-960.
- ⁴⁴ Kennedy, R. (2010). *What are the advantages of single sex education? The pendulum has swung*. Retrieved from <http://privateschool.about.com/cs/choosingaschool/a/singlesex.htm?terms=single+gender+classrooms>.
- ⁴⁵ Riordan, C. (2002). What do we know about the effects of single-sex schools in the private sector?: Implications for public schools. In Datnow, A., & Hubbard L. (Eds.), *Gender in policy and practice: Perspectives on single-sex and coeducational schooling* (pp. 10-30). New York, NY: Routledge Falmer.
- ⁴⁶ *Risky habits*. (n.d.). Op. cit.

-
- ⁴⁷ Riordan, C. (1998). The future of single-sex schools. In S. Morse (Ed.), *Separated by sex: a critical look at single-sex education for girls* (pp. 63-74). Washington, DC: AAUW Educational Foundation.
- ⁴⁸ Riordan, C. (2002). Op. cit.
- ⁴⁹ Hayes, A. R., Pahlke, E., & Bigler, R. S. (2010). The efficacy of single-sex education: Testing for selection and peer quality effects. *Sex Roles: A Journal of Research*.
- ⁵⁰ Bracey, G. W. (2006). *Separate but superior? A review of issues and data bearing on single-sex education*. East Lansing, MI: The Great Lakes Center for Education Research & Practice.
- ⁵¹ Mael, F. A. (1998). Single-sex and coeducational schooling: Relationships to socioemotional and academic development. *Review of Educational Research*, 68(2).
- ⁵² Lee, V. E., & Bryk, A. S. (1986). Effects of single-sex secondary schools on student achievement and attitudes. *Journal of Educational Psychology*, 78, 381-395.
- ⁵³ Lee, V. E., & Bryk, A. S. (1989). Effects of single-sex schools: Reply to Marsh. *Journal of Educational Psychology*, 81, 647-650.
- ⁵⁴ Riordan, C. (1994). Single-gender schools: Outcomes for African and Hispanic Americans. *Research in Sociology of Education and Socialization*, 10, 177-205.
- ⁵⁵ Riordan, C. (2002). Op. cit.
- ⁵⁶ LePore, P. C. & Warren, J.R. (1997). The effectiveness of single-sex catholic secondary schooling: Evidence from the national educational longitudinal survey of 1988. *American Educational Research Journal*, 34.
- ⁵⁷ Shmurak, C. B. (1998). *Adolescent girls at single-sex and coeducational schools*. New York, NY: Peter Lang.
- ⁵⁸ Wood, B. S., & Brown, L. A. (1997). Participation in an all-female algebra I class: effects on high school math and science course selection. *Journal of Women and Minorities in Science and Engineering*, 3, 265-277.
- ⁵⁹ American Association of University Women (1998). *Gender gap: Where schools still fail our children*. New York, NY: Marlowe & Company.
- ⁶⁰ Mael, F. A. (1998). Op. cit.
- ⁶¹ Singh, K., Vaught, C., & Mitchell, E. W. (1998). Single-sex classes and academic achievement in two inner-city schools. *Journal of Negro Education*, 67.
- ⁶² Foundation for Education Reform & Accountability. (2006). *A summary of research on the benefits of single sex education*. Clifton Park, NY: Author.
- ⁶³ Mael, F. A. (1998). Op. cit.
- ⁶⁴ Salomone, R. C. (2006). Single-sex programs: Resolving the research conundrum. *Teachers College Record*, 108.
- ⁶⁵ Sax, L. (2005). Op. cit.
- ⁶⁶ *Shortchanging girls, shortchanging America*. (1994). Washington, DC: American Association of University Women.
- ⁶⁷ Skolnick, J. (1982). *How to encourage girls in math and science: Strategies for parents and educators*. Englewood Cliffs, NJ. Prentice-Hall.
- ⁶⁸ Owens, S.L., Smothers, B.C., & Love, F.E. (2003). Are girls victims of gender bias in our nation's schools? *Journal of Instructional Psychology*.
- ⁶⁹ Sadker, D. (2000). Gender equity: Still knocking on the classroom door. *Equity & Excellence in Education*, 33(1), 80-83.
- ⁷⁰ National Association for Single Sex Public Education (NASSPE). *Single-sex vs. coed: The evidence*. Retrieved from <http://www.singlesexschools.org/research-singlesexvscoed.htm>.
- ⁷¹ James, A.N. & Richards, H. (2003). Escaping stereotypes: Educational attitudes of male alumni of single-sex and coed schools, *Psychology of Men and Masculinity*, 4:136-148, 2003.

-
- ⁷² Corbett, C., Hill, C., & St. Rose, A. (2008). *Where the girls are: The facts about gender equity in education*. Washington, DC: American Association of University Women.
- ⁷³ Corbett, C., Hill, C., & St. Rose, A. (2008). Op. cit.
- ⁷⁴ Kafer, K. (2007). *Taking the boy crisis in education seriously: how school choice can boost achievement among boys and girls*. Independent Women's Forum, Position Paper 604. Retrieved from <http://www.iwf.org/news/printer/19701.html>.
- ⁷⁵ General Accounting Office. (1996). *Public education: Issues involving single-gender schools and programs*. Washington, DC: Author
- ⁷⁶ Foundation for Education Reform & Accountability. (2006). *A summary of research on the benefits of single sex education*. Clifton Park, NY: Author.
- ⁷⁷ Younger, M. and Warrington, M. (2005) *Raising boys' achievement*. London Department for Education and Skills, Research Report 636.
- ⁷⁸ Younger, M. and Warrington, M. (2005). Op. Cit.
- ⁷⁹ Gurian, M. (2001). Op. cit.
- ⁸⁰ Neu, T. and Weinfeld, R (2007). Encouraging boys' interest in reading. In *Helping boys succeed in school*, Prufrock Press.
- ⁸¹ Noble, C. & Bradford, W. (2000). *Getting it right for boys... and girls*. London, UK: Routledge
- ⁸² Sax, L. (2007). Op. cit.
- ⁸³ Gurian, M., Henley, P., & Trueman, T. (2001). Op. cit.
- ⁸⁴ Gurian, M., Henley, P., & Trueman, T. (2001). Op. cit.
- ⁸⁵ Diaz, D. P. & Bontenbal, K. F. (2000). Pedagogy-based technology training. In P. Hoffman & D. Lemke (eds.), *Teaching and learning in a network world*, pp. 50-54. Amsterdam, Netherlands: 105 Press.
- ⁸⁶ Simmons, L., & Klarich, J. (1989). *The advisory curriculum: Why and how*. NELMS Journal, 2(2), 12-13.
- ⁸⁷ Simpson, G., & Boriack, C. (1994). Chronic absenteeism: A simple success story. *The Journal of the Texas Middle School Association*, 2(2), 10-14.
- ⁸⁸ Ziegler, S. & Mulhall, L. (1994). Establishing and evaluating a successful advisory program in a middle school. *Middle School Journal*, 25(4), 42-46.
- ⁸⁹ Eccles, J. S., Lord, S., & Midgley, C. (1991). What are we doing to early adolescents? The impact of educational contexts on early adolescents. *American Journal of Education*, 99(4), 521-542.
- ⁹⁰ Younger, M. and Warrington, M. (2005). Op. Cit.
- ⁹¹ Sukhmandan, L., Lee, B., & Kelleher, S. (2000). An investigation into gender differences and achievement: Phase 2. *School and classroom strategies*. Slough, England: National Foundation for Educational Research.
- ⁹² Swan, B. (1998). Teaching boys and girls in separate classes at Shenfield High School, Brentwood. In K. Bleach (Ed.), *Raising boys' achievement in schools* (pp. 157-172). Stoke-on-Trent, UK: Trentham Books.
- ⁹³ Warrington, M., & Younger, M. (2003). 'We decided to give it a twirl': Single-sex teaching in English comprehensive schools. *Gender and Education*, 15, 339-350.
- ⁹⁴ Younger, M., Warrington, M., & McLellan, R. (2002). The 'problem' of 'under-achieving boys': Some responses from English secondary schools. *School Leadership and Management*, 22, 389-405.
- ⁹⁵ Warrington, M., & Younger, M. (2001). Single-sex classes and equal opportunities for girls and boys: Perspectives through time from a mixed comprehensive school in England. *Oxford Review of Education*, 27, 339-356.
- ⁹⁶ Herr, K., & Arms, E. (2004). Accountability and single-sex schooling: A collision of reform agendas. *American Educational Research Journal*, 41, 527-555.
- ⁹⁷ Sukhmandan, L., Lee, B., & Kelleher, S. (2000). Op. cit.

-
- ⁹⁸ Warrington, M., & Younger, M. (2003). Op. cit.
- ⁹⁹ Kenway, J., & Willis, S., with Blackmore, J., & Rennie, L. (1998). *Answering back: Girls, boys and feminism in school*. London, UK: Routledge.
- ¹⁰⁰ Younger, M. & Warrington, M. (2006). Op. Cit.
- ¹⁰¹ Barton, A. (2000, September). *Raising boys' achievement in modern foreign languages through single-sex grouping*. Paper presented at the annual conference of the British Educational Research Association, Cardiff, Wales.
- ¹⁰² Jackson, C. (1999). Underachieving boys? Some points for consideration. *Curriculum*, 20, 80–85.
- ¹⁰³ Kenway, J., & Willis, S. (1998). Op cit.
- ¹⁰⁴ Kenway, J., & Willis, S. (1998). Op cit.
- ¹⁰⁵ Solomon, J., & Harrison, K. (1991). Talking about science based issues: Do boys and girls differ? *British Educational Research Journal*, 17, 283–294.
- ¹⁰⁶ Frank, B., Kehler, M., Lovell, T., & Davison, K. (2003). A tangle of trouble: Boys, masculinity and schooling—Future directions. *Educational Review*, 55, 119–133.
- ¹⁰⁷ Frosh, S., Phoenix, A., & Pattman, R. (2002). *Young masculinities*. Basingstoke, UK: Palgrave.
- ¹⁰⁸ Martino, W., & Pallotta-Chiarolli, M. (2003). *So what's a boy? Addressing issues of masculinity and schooling*. Buckingham, UK: Open University Press.
- ¹⁰⁹ Younger, M. and Warrington, M. (2005). Op. Cit.
- ¹¹⁰ Nye, B., Hedges, L. V., & Konstantopoulos, S. (2004). Do minorities experience larger lasting benefits from small classes? *Journal of Educational Research*, 98, 94-100.
- ¹¹¹ Molnar, A., Smith, P., Zahorik, J., Palmer, A., Halbach, A., & Ehrle, K. (1999). Evaluating the SAGE program: A pilot program in targeted pupil-teacher reduction in Wisconsin. *Educational Evaluation and Policy Analysis*, 21(2), 167-177.
- ¹¹² Miller, B. (2001). *The promise of after-school programs*, Association for Supervision and Curriculum Development.
- ¹¹³ *Male teachers are crucial role models for boys, suggests research*. Retrieved from <http://www.guardian.co.uk/education/2008/sep/30/primaryschools.malerolemodels>
- ¹¹⁴ Fuchs, D., & Fuchs, L. S. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41, 93–99.
- ¹¹⁵ Fuchs, D. & Fuchs, L. (2001). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children*.
- ¹¹⁶ Ardoin, S. P., Witt, J. C., Connell, J. E., & Koenig, J. L. (2005). Application of a three-tiered response to intervention model for instructional planning, decision making, and the identification of children in need of services. *Journal of Psychoeducational Assessment*, 23, 362–380.
- ¹¹⁷ Hosp, J.L. (2008). *Response to Intervention and the disproportionate representation of culturally and linguistically diverse students in special education*. Retrieved from www.rtinetwork.org/Learn/Diversity/ar/DisproportionateRepresentation.
- ¹¹⁸ Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg A. B. (2005). Whole-school positive behaviour support: Effects on student discipline problems and academic performance. *Educational Psychology*, 25(2-3), 183-198.
- ¹¹⁹ Horner, R. H., Sugai, G., Todd, A. W., & Lewis-Palmer, T. (2005) School-wide positive behavior support: An alternative approach to discipline in schools. In L. M. Bambara & L. Kern (Eds.), *Individualized supports for students with problem behaviors*. (pp. 359-390). New York, NY: Guilford Press.
- ¹²⁰ Horner, R.H. & Sugai, G. (2002, April). *Overview of positive behavior support*. Paper presented at the 2002 Convention of the Council for Exceptional Children, New York.
- ¹²¹ Chatterjee, C. (1999). Uniform improvements. *Psychology Today*.

-
- ¹²² Epstein, J.L. (2000). *Framework of six types of involvement*. Baltimore, MD: Partnership Center for the Social Organization of Schools.
- ¹²³ Abdul-Adil, J. & Farmer, A.D., Jr. (2006). Inner-city African-American parental involvement in elementary schools: Getting beyond urban legends of apathy. *School Psychology Quarterly*, 21(1).
- ¹²⁴ Henderson, A. T. & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on students achievement*. Austin, TX: National Center of Family & Community Connections with Schools: Southwest Educational Development Laboratory.
- ¹²⁵ Constantino, S., 2003. *Engaging all families: Creating a positive school culture by putting research into practice*. Lanham, Maryland: Scarecrow Education.
- ¹²⁶ Sharp, S., Sellars, S. and Cowie, H. (1994) Time to Listen: Setting up a peer-counseling service to help tackle the problem of bullying. *Pastoral Care*.
- ¹²⁷ Younger, M. and Warrington, M. (2005). Op. Cit.