



WOMEN FOR SCHOOL CHOICE: A PROJECT OF THE INDEPENDENT WOMEN'S FORUM

Taking the Boy Crisis in Education Seriously: How School Choice Can Boost Achievement Among Boys and Girls

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Position Paper No. 604 ■ April 2007

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Executive Summary

For more than three decades Congress has answered, “How high?” to the feminist command to jump, and provided millions in funding for the Women’s Educational Equity Act. If legislation passed by the Senate Appropriations Committee in July 2006 was any sign, this year will be no exception despite the only inequity girls experience is being superior to boys on nearly every indicator of academic excellence.¹

The 33-year-old Women’s Educational Equity Act, reauthorized in the No Child Left Behind Act, claims that “teaching and learning practices in the United States are frequently inequitable as such practices relate to women and girls....”² Since its inception, Congress has appropriated as much as \$10 million annually for research, curricula development and teaching strategies to promote “gender equity.”³ However, what may have been appropriate decades ago is no longer the case. Boys, not girls, are being left behind by our nation’s schools.

Girls surpass boys in reading, writing, civics and the arts. Girls get better grades and more honors; they have higher aspirations, are more engaged in school and are more likely to graduate from high school and college. Boys, on the other hand, are more likely to be suspended or expelled, need special education, smoke, drink and do drugs, repeat a grade, commit suicide, become incarcerated, leave school without attaining literacy, drop out of school or be unemployed. Marginal advantages in math and science for boys pale compared to the sheer advantage girls enjoy throughout school.

Boys are in trouble. Yet despite glaring inequities, the tired myth of the shortchanged girl remains strong enough to seize another \$2.9 million from taxpayers last year for an outdated federal program. Even more unfortunate is how the myth of inequity is wielded to oppose real reforms that help boys and girls.

Although some may dismiss the facts as hype, the reality is that far too many boys, particularly among minorities, fall behind along the way toward adulthood and do not recover. This is no “manufactured” crisis or “backlash against the women’s movement,” as two feminist authors recently opined.⁴ Moreover, recognizing the problem and seeking solutions to the problems facing our boys in no way harms girls’ prospects. The object of formal education, after all, is to help boys and girls live up to their potential.

To achieve equality of opportunity for all young people, the nation must finally bury the myth of shortchanged girls and the special-interest programs that propagate female victimhood. Secondly, it must take seriously the plight of boys by embracing strategies and systems that allow boys and girls to excel—in particular, by encouraging a greater diversity of educational methods and innovation through school choice.

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A Sober Look at the Facts

Last year, a paper published by Education Sector, a new think tank, declared the “current boy crisis hype and the debate around it are based more on hopes and fears than on evidence.”⁵ However, the paper quoted statistics that painted a different picture than its conclusions:

The achievement gap in reading and writing—foundational skills in the information age—between boys and girls is alarming. Even more disturbing is the number of boys who fall behind in school, become involved in destructive behavior and drop out.

boys trail girls in most indicators of academic excellence including school engagement, achievement scores, and graduation rates at the secondary and postsecondary levels. The achievement gap in reading and writing—foundational skills in the information age—between boys and girls is alarming. Even more disturbing is the number of boys who fall behind in school, become involved in destructive behavior and drop out. Despite marginal leads in math and science, the overall picture of academic achievement shows boys, not girls, on the short side of “frequently inequitable.”

Academic Achievement in K-12

Engagement in School

In general, girls are more engaged and ambitious in school.⁶ They are more likely to get good grades.⁷ Girls are more likely to be in gifted and talented classes and to take Advanced Placement exams.⁸ They are more likely to do their homework.⁹ Girls have higher hopes and ambitions for school.¹⁰ Boys, on the other hand, are more likely to get Ds and Fs, and the gap has widened since 1996.¹¹ Boys are also more likely to repeat a grade.¹²

Engagement after School

A survey of high-school seniors found girls were more likely to participate in music and performing arts activities, academic clubs, student council or government, and join the newspaper or yearbook. Girls were also more likely to participate in community affairs or volunteer at least once or twice per month.¹³ The only extracurricular activity boys were more likely to participate in was athletics.¹⁴

Another survey of high-school sophomores found girls are more likely to perform community service, take a music, art or language class, read at least three hours a week of non-school reading, and talk on the phone. Boys are more likely to work on hobbies, drive or ride around, visit with friends, play sports, watch television, and play video games. About the same percentage of students of either sex spend time working on a personal computer.¹⁵ The percentage of students who spend three or more hours a day watching television is higher for boys.¹⁶ The largest gap between girls’ and boys’ television watching habits was for those who said they watched six or more hours of television daily; 22 percent were boys and 15 percent were girls.¹⁷



Course Taking and Achievement

While there is some diversity in course-taking preferences, on balance, neither sex dominates in terms of taking rigorous classes. Contrary to the myth of the shortchanged girl, girls do not shy away from math, science or other challenging subjects. Girls receive on average slightly more Carnegie units in English, history, advanced math (algebra or higher), biology, and chemistry than boys, while boys took slightly more general science, physics, lower math (less than algebra), and computer classes. Girls are much more likely to take foreign language and art classes while boys take more technical courses.¹⁸

In terms of achievement, girls hold a significant advantage in reading and writing while boys hold a marginal advantage in math and science. While small contrasts between subgroups are inevitable annually, large disparities, particularly in the foundational skills of writing and reading, are reason for concern.

The National Assessment of Educational Progress (NAEP) testing program, conducted by the U.S. Department of Education and the National Assessment Governing Board, tracks

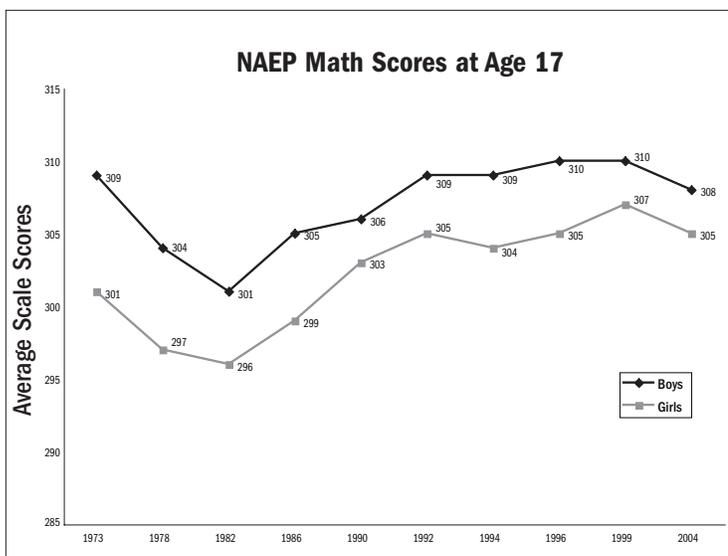
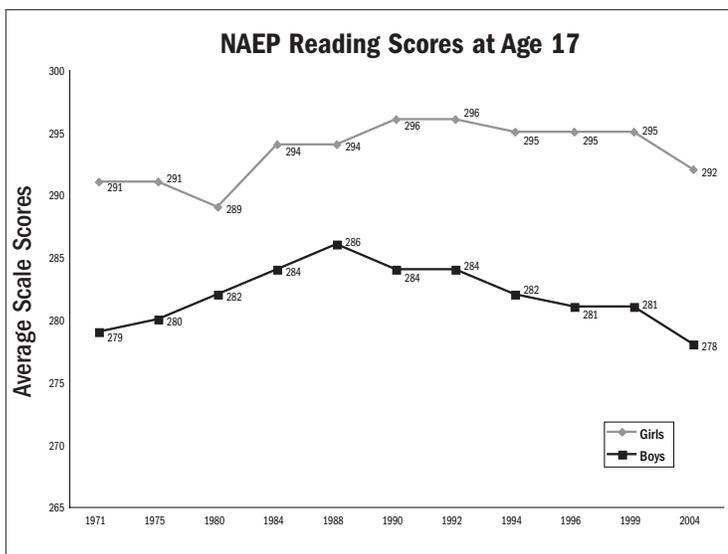
Differences in Average Scale Scores for Girls and Boys

FAVORING GIRLS		FAVORING BOYS	
Reading (2005)		Math (2005)	
4th Grade	+6	4th Grade	+2
8th Grade	+10	8th Grade	+2
12th Grade	+13	12th Grade	+2
Writing (2002)		Science (2005)	
4th Grade	+17	4th Grade	+4
8th Grade	+21	8th Grade	+3
12th Grade	+24	12th Grade	+4
Civics (1998)		U.S. History (2001)	
4th Grade	+2	4th Grade	0
8th Grade	+4	8th Grade	+3
12th Grade	+4	12th Grade	+2
Arts (1997)		Geography (2001)	
8th Grade		4th Grade	+5
Music Creating	+5	8th Grade	+4
Music Performing	+13	12th Grade	+5
Music Responding	+20		
Visual Arts Creating	+3		
Visual Arts Responding	+8		
Theater Creating	+6		
Theater Responding	+18		

Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress.



student achievement on a variety of academic subjects across the country and in every state. Test scores are sorted into student subgroups and reported as average scale scores and in terms of the percentages of students scoring at each level—advanced, proficient, basic and below basic. A proficient level score is considered roughly grade-level work.¹⁹



On NAEP tests, boys and girls as student subgroups score differently. Girls score significantly better on reading, writing, and arts tests and slightly better on civics tests at all three grade levels. Boys score slightly higher in math, science, geography and U.S. history. The most pronounced differences in scores, which favor female students, occur in reading, writing, and the arts in the 8th and 12th grades.²⁰

Analysis of the 2005 NAEP scores reveals a startling fact: A third of 12th grade boys scored below the basic level.²¹ *These boys cannot read a newspaper and understand what they are reading.*

Illiteracy is a problem even among sons of white, middle-class households according to research by Judith Kleinfeld, Ph.D., professor of psychology at the University of Alaska. She found that nearly a quarter of high-school seniors who are the sons of white, college-educated parents score below the basic level on NAEP, whereas only six percent of girls with the same background scored below basic.²² A similar disparity exists for Hispanic students: 34 percent of sons of college-educated parents scored below basic while 19 percent of daughters of college-educated parents scored as low.²³ In grades K-3, boys are just a tiny bit behind girls in reading but by high school the difference between male and female literacy is large and, for many, tragic.²⁴

NAEP has also tracked reading and math for students ages 9, 13 and 17 on its Long-Term Trend Test since the early 1970s. Unlike other NAEP testing instruments, the Long-Term Trend

Test has remained unchanged to better track academic trends over time.

Over three and a half decades, 9- and 13-year-old boys and girls have improved in math alternately passing each other by a few points depending on the year. On the high-school test, however, boys have lost ground while girls have improved. The average score in math for boys was a point lower on the most recent test, which was conducted in 2004, than it was in 1973 while girls made up over half of their eight-point score disparity over that time.



In reading, the trend is similar. Over the same period, 9-year-old boys halved their initial 13-point lag behind girls. However, boys only reduced the gap by one point in middle school. At the age of 17, boys' reading achievement was fourteen points lower than girls' and, in fact, it was lower than it was in 1971. Scores for the 12th grade, arguably the most important since these show the final outcomes for the K-12 system, reveal that in math, girls have improved while boys have slipped. In reading, girls have improved a little while boys have fallen behind even more.²⁵

High-School Graduation

Girls graduate from high school at higher rates than boys. The disparity is highest among minority students.²⁶

Graduation Rates by Sex and Race (2003)

GRADUATION RATES	FEMALE	MALE	DIFFERENCE
African American	59%	48%	11%
Asian	73%	70%	3%
Hispanic	58%	49%	9%
White	79%	74%	5%
Total	72%	65%	7%

Source: Jay P. Greene and Marcus A. Winters, *Leaving Boys Behind: Public High School Graduation Rates*, Manhattan Institute for Policy Research.

On college-entrance exams, the results reveal a more complex picture. On the 2006 ACT, male and female scores were nearly identical with girls scoring slightly better in English and reading, and boys slightly better in math and science. Nationally, girls were more likely than boys to take the exam (54 percent to 43 percent). In Colorado and Illinois, where 100 percent of students take the ACT exam (all college bound and non-college bound students) data are similar to those nationwide.²⁷

2006 ACT Scores for the Nation, Colorado and Illinois

ACT NATIONAL	ENGLISH	MATH	READING	SCIENCE	COMPOSITE
Male	20.1	21.5	21.1	21.4	21.2
Female	21	20.3	21.6	20.5	21
ACT COLORADO	ENGLISH	MATH	READING	SCIENCE	COMPOSITE
Male	19	20.2	20.3	20.6	20.2
Female	20.3	19.6	21.3	20.3	20.5
ACT ILLINOIS	ENGLISH	MATH	READING	SCIENCE	COMPOSITE
Male	19.8	20.7	20.3	20.8	20.5
Female	20.7	20	21	20	20.5

Source: ACT 2006 Scores



On the SAT Reasoning Test, males scored higher than females in math and reading while females scored higher in writing. Here, too, girls were more likely than boys to take the test.²⁸

National 2006 SAT Scores	Reading	Writing	Math
Male	505	491	536
Female	502	502	502

Source: The College Board, 2006 *College Bound Seniors*.

College Attendance

In high school, young women are more likely to aspire to go to college.²⁹ They are also more likely to enroll in post-secondary education right after high school and to complete their post-secondary education.³⁰ All together, women attain 58 percent of college degrees and outnumber men in the number of associate's, bachelor's and master's degrees.³¹ Only among doctorate degree earners do men slightly outnumber women.

Degree Attainment

Type of Degree	Female	Male
Associate's Degree	60%	40%
Bachelor's Degree	57.5%	42.5%
Master's Degree	58.8%	41.2%
Doctorate's Degree	47.1%	52.9%

Source: U.S. Department of Education

That the division of degrees is not split evenly between the sexes is not the problem. Yearly fluctuations in the percentage of degree earners by sex would be natural. Assuming that neither sex is smarter as a group than the other, college aptitude should be similar. The growing imbalance suggests there are college-capable men who are not going to college or, if they are, they are dropping out before graduation. Given the different prospects of those who obtain a college degree and those who do not, concern for these young men failing to graduate college should replace the regular hand-wringing over the fact that fewer women choose to major in engineering and math while in college.

Interest in engineering and math among girls has increased substantially over the past few years. Nearly half of the 2006 International Intel Science and Engineering Fair finalists were women. In fact, Shannon Lisa Babb was the winner of last year's prestigious Intel Science Talent Search. The contests, where winners receive recognition and scholarships, draw thousands of high-schools students.³²

In college, women are awarded half of the bachelor's degrees in math, 60 percent of biological/life sciences degrees, a fifth of engineering degrees, and more than a quarter of



computer science degrees. While some, including the proponents of WEEA, think these percentages should be higher, little attention is paid that women are awarded 77 percent of the degrees in education, 61 percent of the degrees in accounting, 78 percent of the degrees in psychology and 84 percent of the degrees in the health professions.³³ Where is the dismay over the inequitable distribution of men in these fields?

The desire to increase female representation in male-dominated fields is presumably based on the erroneous and insulting notion that these careers are of greater worth than others. The assumption that a degree or career in math or physics is of greater value than a degree or career in teaching is arbitrary and only devalues the chosen profession of millions of women. Judgments over the value of one degree or career over another is for the individual to make according to the individual's interests and talents. Women clearly have the opportunity to excel in any subject. They can and do enter math and science fields when they so choose. The emphasis in WEEA and other programs to increase the number of women in math and science is a misplaced priority based on arbitrary assumptions.

Academic Struggles and Risk Behavior

More boys than girls struggle academically and experience behavioral problems:

- Boys account for roughly two-thirds of the students receiving special education services.³⁴
- Boys are more likely to do drugs, drink alcohol and smoke cigarettes.³⁵
- Boys are three times as likely as girls to be suspended or expelled.³⁶
- Boys aged 16 to 24 are more likely to be unemployed.³⁷
- Boys are more likely to be incarcerated.³⁸
- Boys are more likely to commit suicide or to be homicide victims.³⁹
- Boys are more likely to drop out of high school.⁴⁰

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Reasons for the Differences in Male and Female Academic Outcomes

The solution to the boy crisis begins by recognizing the facts. In doing so, the nation must finally bury the myth of the shortchanged girl and with it the Women's Educational Equity Act.

Research suggests that differences in educational outcomes may be the result of innate differences and that these differences can be overcome. Scientists have discovered subtle differences in men's and women's brains. Average intelligence is the same for both sexes and there is far more variability in cognitive ability between individuals than between sexes. In general, however, men enjoy a small advantage in spatial-rotational cognition while women enjoy an advantage in verbal ability.⁴¹ Professor Kleinfeld has found that these small differences can generate disparities in achievement among high performing students, allowing more women than men to excel at writing and reading, and more men than women to excel in math and science. Professor Kleinfeld has also found that variability in intelligence quotients across each population appears to be different. While men and women have roughly the same average intelligence quotient, there are more men at the low and high extremes.⁴² Plotted on a bell curve, female variability is a high spike in the middle whereas the men's curve is more rounded with more individuals at either extreme.⁴³ This could account for such things as high male scores on the SAT math tests and their high rates of special education identification.

Scientists have also found that male and female brains differ physically. Female brains, for example, have more gray matter. For male brains, testosterone affects verbal and spatial ability.⁴⁴

Physiology alone does not explain the disparity in academic achievement. For example, Professor Kleinfeld has found that there is no literacy gap among home-schooled students. Professor Kleinfeld says that home-schooling parents engage sons by assigning them reading materials that interest them and play upon their strengths.⁴⁵ How students are taught and the degree of student engagement matters.

Harvard Medical School psychologist William Pollack, director of the Center for Men and Young Men at McLean Hospital in Belmont, Mass., suggests that most schools in America are "boy-uncentered." Most boys unable to do well in class suffer from low self-esteem, academic and emotional problems.⁴⁶ This can be changed. Michael Gurian and Kathy Stevens, authors of *The Minds of Boys: Saving Our Sons From Falling Behind in School and Life*, contend that teaching boys differently can improve their performance. They formed the Gurian Institute in Colorado to train teachers, administrators and parents about different learning styles.⁴⁷

Dr. Leonard Sax, physician, research psychologist and author of *Why Gender Matters: What Parents and Teachers Need to Know About the Emerging Science of Sex Differences*, examines the sex differences in mental development and learning. He chairs the governing board of the National Association for Single Sex Public Education.⁴⁸ According to his organ-



ization, there are more than 250 public schools nationwide that use single-sex classrooms, 51 of which are single-sex schools. While the first single-sex public school opened in 1844, most have been established in the past decade.⁴⁹

Successful single-sex classrooms and single-sex schools can have a positive effect on student achievement for boys and girls. Such environments can break down stereotypes and help girls attain high achievement in math and science and boys attain high achievement in reading and writing. Dr. Sax believes parents should have a choice between single sex and co-educational schools.⁵⁰ While the research on single-sex schooling is not conclusive, it is clear that such environments are the key for some boys and girls to reach their potential.



Solutions to the Boy Crisis

The solution to the boy crisis begins by recognizing the facts. In doing so, the nation must finally bury the myth of the shortchanged girl and with it the Women's Educational Equity Act. Although the once proclaimed and now debunked *How Schools Shortchange Girls* maintains a postmortem life on the Web, it can no longer conceal the facts about girls' achievements and boys' struggles: that girls equal or surpass boys on nearly every indicator of academic excellence, and too many boys are falling behind and not catching up.⁵¹ Even *Newsweek* and other mainstream media outlets have broken the news. While feminists and politicians continue to cling to old myths, the nation must face these facts for the sake of its future.

The public-education system must respond with innovative strategies and environments that help boys and girls. In particular, policymakers must give parents more power to choose their children's schools. Greater school choice is the best way to encourage greater innovation and diversity of educational options, and to ensure each school is committed to meeting each individual child's needs.

No one school can serve every student equally well. School choice allows parents to find the right school for their children, and encourages greater innovation within the educational sector.

Schools of choice take several forms—independent public charter schools, district-run public schools of choice such as magnet schools, and private schools. In 40 states and the District of Columbia, state laws allow education innovators, teachers and parents to establish independent public schools.⁵² Such schools are authorized by the district, the state, a higher education institution, or other entity through a charter agreement. Under its contract, a charter school has the freedom to make many of its own decisions regarding curricula, educational programs and teaching staff. Like traditional public schools, the quality of the over 3,900 charter schools in the country varies depending on the program and leadership. The freedom to succeed has allowed many exemplary schools to open. These include single-sex schools and co-educational schools that employ single-sex classrooms and other novel practices that help boys and girls to achieve.

However, ten states do not have a charter-school law. Still others have such weak laws that few schools may open or those that do open have little flexibility to innovate.⁵³ The establishment of charter-school legislation in non-charter school states and the strengthening of existing weak laws would encourage the opening of new schools and the replication of successful schools that can help struggling students.

Innovation and excellence in the private sector has existed since before the founding of the United States. Unlike public schools that are funded through taxation, private schools must charge tuition. Although scholarships are available to some economically disadvantaged children, in general, only families who can afford tuition can send their children to private schools. In the past two decades, states have increased access to private schools for low- and middle-



income parents. In Illinois, Iowa and Minnesota, parents may take a tax credit or deduction for private-school expenses.⁵⁴ In Arizona, Florida, Pennsylvania and Rhode Island, individuals or corporations may contribute to private scholarship funds.⁵⁵ Arizona, Florida and Utah allow disabled students to attend private schools of their choice.⁵⁶ In Maine and Vermont, rural districts without public schools pay tuition for students to attend secular private schools. In the District of Columbia, Milwaukee, Wisconsin and Ohio, low-income students may attend private schools of their choice on a state scholarship.⁵⁷ Vouchers are available in Ohio for students with autism and in Arizona for students in the foster-care system.⁵⁸ On February 12, 2007, Utah initiated a scholarship program that will provide \$500 to \$3,000 (amount is determined by income) to parents who choose private schools. Students not currently attending private school and low-income students who attend public or private schools are eligible.⁵⁹ While these programs have been successful, their reach is limited. The enactment of new scholarship programs will permit more students to attend private schools with strong programs.

No one school can serve every student equally well. School choice allows parents to find the right school for their children, and encourages greater innovation within the educational sector. With school choice, schools must compete to attract students. Schools must offer innovative, effective educational programs or risk losing students. Where competition exists, schools have embraced different curricula and philosophies designed to appeal to the families' needs and desires.

Good schools that help boys and girls to reach their potential exist in the public and private sector. The existence of some of these schools, however, is not sufficient. Policymakers must embrace school-choice laws and programs that make it easier for parents to choose alternatives to the traditional government-run public schools.



INNOVATION IN THE EDUCATION MARKETPLACE

Instructional strategies that help boys and girls reach their potential have been implemented at public, public charter, private and home schools across the country. No environment is right for every child, which is why parental choice is so important. The following are examples of schools that have applied various strategies to help students succeed.

The Thurgood Marshall Elementary School, Seattle, Wash.

The Thurgood Marshall Elementary School is a public school with a population that is 97 percent minority and 85 percent low income.⁶¹ In 2000, then-Principal Benjamin Wright separated the school into all boy and all girl classes. Before the transformation, only 10 percent of boys met state standards in reading. Afterward, 66 percent achieved this milestone. Girls' performance also improved. Wright also found that single-sex classrooms improved camaraderie and discipline.⁶²

The Brighter Choice Charter School for Girls and the Brighter Choice Charter School for Boys, Albany, N.Y.

Brighter Choice Charter Schools educate boys and girls in separate classrooms under one roof. These were the first charter schools in the nation to adopt single-sex classrooms. Each school serves a population that is roughly 97 percent minority and 89 percent low income. Nevertheless, the schools have achieved Adequate Yearly Progress in math and reading and the schools are "in good standing" with the N.Y. Department of Education.⁶³ Both boys and girls make higher than average gains in reading and math.⁶⁴

Douglass Elementary School, Boulder, Colo.

This public school scores higher in reading, writing and math than its school district.⁶⁵ Two years ago, the faculty discovered an achievement gap in writing between girls and boys. To improve boys' writing skills, the faculty implemented the instructional techniques recommended by Michael Gurian and Kathy Stevens. Mr. Gurian, the author of *Boys and Girls Learn Differently*, and his associates founded the Gurian Institute to train schools in methods that engage boys and girls and increase their achievement.⁶⁶ Analyzing their achievement data a year into implementation, the faculty noted strong gains in boys' writing scores.

The Regis School, Houston, Tex.

Faculty at this small Catholic school received training from the Gurian Institute in 2003 and 2004. The school head found that the new teaching strategies improved discipline, academics and motivation.

Carolina Day School Asheville, N.C.

The Carolina Day School, a non-sectarian private school, implemented Gurian Institute training in 2004 for faculty and parents. A year later, they implemented single-sex classes in core subjects in their middle school. The middle-school principal saw increased engagement and achievement for both boys and girls. Boys feel that they are not compared to girls and are more engaged in writing.⁶⁷



Conclusion

In America, boys are struggling academically, yet politicians and special interests have it the other way around. Convinced that schools shortchange girls, they intend to siphon another \$2.9 million from the budget to fix a phony equity problem. Still others know that girls are succeeding but dismiss the plight of boys. In a 2006 report, Education Sector dismissed as “hype” the evidence, claiming that, “The real story is not bad news about boys doing worse; it’s good news about girls doing better.”⁶⁰ If it were merely a few points’ difference in civics or science, perhaps, but no definition of the word “hype” applies when a third of 12th grade boys score below basic in reading and a third fail to graduate. When a disproportional number of boys are lost to drug addiction, incarceration and suicide, it is cause for distress.

It is time to face the facts: boys, not girls, are falling behind. However, this recognition is only the first step. The public-education system must embrace innovation and encourage the replication of strategies that help boys and girls reach their potential. The most effective way to encourage innovative practices and meet the special needs of individuals is to support choice in education. By allowing families to choose schools, students can enroll in the environment where they can flourish. In some instances, a single-sex school or a co-educational school with single-sex classrooms will be appropriate. Since different strategies work for different students, parents should decide. By enacting charter-school laws, tax incentives, and scholarship programs, each state can spur innovative practices while giving every girl or boy the chance to succeed.



Endnotes

- 1 On July 20, 2006, the Senate Committee on Appropriations passed the Labor, Health and Human Services, and Education, Appropriations Act (S. 3708), which contains \$2,926,000 for programs under the Women's Educational Equity Act. Neither the President's budget nor the House version (H.R. 5647) contained funding for this program.
- 2 No Child Left Behind Act of 2001. P.L. 107-110.
- 3 General Accounting Office, *Women's Educational Equity Act A Review of Program Goals and Strategies Needed*, GAO/PEMD-95-6, December 27, 1994, and U.S. Department of Education, *Women's Educational Equity Act Funding Status*, www.ed.gov/programs/equity/funding.html.
- 4 Caryl Rivers and Rosalind Chait Barnett, "The Myth of 'The Boy Crisis,'" *Washington Post*, April 9, 2006, B01. They are the authors of the 2004 book *Same Difference: How Gender Myths Are Hurting Our Relationships, Our Children, and Our Jobs* (Basic Books; New Ed ed., 2005).
- 5 Sara Mead, "The Truth About Boys and Girls," Education Sector, June 27, 2006, 3.
- 6 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 9, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 7 Judith Kleinfeld, Ph.D., *The Myth That Schools Shortchange Girls: Social Science in the Service of Deception*, prepared for The Women's Freedom Network, 1998, www.uaf.edu/northern/schools/_download.html, 1, and *Digest 2005*, Table 131, http://nces.ed.gov/programs/_digest/d05/tables/_dt05_131.asp.
- 8 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 53, at http://nces.ed.gov/programs/digest/d05/tables/_dt05_053.asp, and *Trends in Educational Equity*, 4.
- 9 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 139, http://nces.ed.gov/programs/digest/d05/tables/dt05_139.asp.
- 10 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 15, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 11 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 131, http://nces.ed.gov/programs/_digest/d05/tables/_dt05_131.asp.
- 12 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 2, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 13 U.S. Department of Education, National Center for Education Statistics, *Youth Indicators, 2005 Trends in the Well-being of American Youth*, Table 36, http://nces.ed.gov/programs/youthindicators/_Indicators.asp?PubPageNumber=36.
- 14 U.S. Department of Education, National Center for Education Statistics, *Youth Indicators, 2005 Trends in the Well-being of American Youth*, Table 34, http://nces.ed.gov/programs/youthindicators/_Indicators.asp?PubPageNumber=34.
- 15 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 137, http://nces.ed.gov/programs/_digest/d05/tables/_dt05_137.asp.
- 16 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 139, http://nces.ed.gov/programs/_digest/d05/tables/_dt05_139.asp.



- 17 *Ibid.*
- 18 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 132, http://nces.ed.gov/programs/?digest/d05/tables?/dt05_139.asp. A Carnegie unit is a measure of the time a student has spent studying a subject. For example, 120 hours of math equals one Carnegie unit of math. See the Carnegie Foundation at http://www.carnegiefoundation.org/_about/sub.asp?key=17&subkey=1874.
- 19 See U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, <http://nces.ed.gov/naep3/>.
- 20 *Ibid.*
- 21 *Ibid.*
- 22 Robert Roy Britt, “Why Johnny Can’t Read: Schools Favor Girls,” *LiveScience*, www.livescience.com/_/othernews_/060718_illiterate_boys.html.
- 23 Christina Hoff Sommers, “Where the Boys Aren’t,” *Wall Street Journal*, July 3, 2006, A10.
- 24 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 22, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 25 *Ibid.*
- 26 Jay P. Greene and Marcus A. Winters, *Leaving Boys Behind: Public High School Graduation Rates*, Manhattan Institute for Policy Research Civic Report No. 48, April 2006, www.manhattan-institute.org/html/cr_48.htm.
- 27 See *2006 ACT Scores by State* at www.act.org/news/data/06/states.html.
- 28 See The College Board, *2006 College Bound Seniors*, www.collegeboard.com/prod_downloads/about/_news_info/cbsenior/yr2006/national-report.pdf.
- 29 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 9, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 30 *Ibid.*; U.S. Department of Education, National Center for Education Statistics, *The Condition of Education*, Table 29.2, <http://nces.ed.gov/programs/coe/2006/section3/table.asp?tableID=488>.
- 31 U.S. Department of Education, National Center for Education Statistics, *Postsecondary Institutions in the United States: Fall 2003 and Degrees and Other Awards Conferred: 2002-03* (NCES 2005-154), 13.
- 32 Intel News Release, “Top Teen Scientists Compete for \$4 Million in Prizes at Intel International Science and Engineering Fair,” May 8, 2006, www.intel.com/pressroom/archive/releases/20060508edu.htm, and “Meet the 2006 Intel STS Winners,” www.intel.com/education/sts/winners.htm.
- 33 U.S. Department of Education, National Center for Education Statistics, *Trends in Educational Equity of Girls and Women*, NCES 2005-016, November 2004, 13, <http://nces.ed.gov/pubs2005/2005016.pdf>.
- 34 Jennifer Tschantz and Joy Markowitz, *Gender and Special Education: Current State Data Collection January 2003*, National Association of Directors of Special Education Incorporated, www.nasdse.org/_publications/gender.pdf#search=%22special%20education%20gender%22.
- 35 U.S. Department of Education, National Center for Education Statistics, *Youth Indicators, 2005 Trends in the Well-being of American Youth*, Table 48.1, http://nces.ed.gov/programs/youthindicators/_Indicators.asp?PubPageNumber=48.1.
- 36 U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2005*, Table 143, http://nces.ed.gov/programs/_digest/d05/tables_/dt05_143.asp.
- 37 U.S. Department of Education, National Center for Education Statistics, *Youth Indicators, 2005*



- Trends in the Well-being of American Youth*, Table 28, http://nces.ed.gov/programs/youthindicators_/Indicators.asp?PubPageNumber=28.
- 38 United States Census Bureau, *Census 2000 Population in Group Quarters by Type, Sex and Age, for the United States: 1990 and 2000*, Table 1, <http://www.census.gov/population/www/cen2000/phc-t26.html>.
- 39 Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2005*, Tables 45–46, http://www.cdc.gov/nchs/data/_hus/hus05.pdf.
- 40 U.S. Department of Education, National Center for Education Statistics, *Fast Facts*, <http://nces.ed.gov/fastfacts/display.asp?id=16>.
- 41 Hara Estroff Marano, “The New Sex Scorecard: Men and women’s minds really do work differently—but not on everything,” *Psychology Today Magazine*, July/August 2003.
- 42 Judith S. Kleinfeld, *The Myth That Schools Shortchange Girls: Social science in the service of deception* (Women’s Freedom Network, 1998).
- 43 *Ibid.*
- 44 Hara Estroff Marano, “The New Sex Scorecard: Men and women’s minds really do work differently—but not on everything,” *Psychology Today Magazine*, July/August 2003.
- 45 Robert Roy Britt, “Why Johnny Can’t Read: Schools Favor Girls,” *LiveScience*, http://www.livescience.com/othernews/060718_illiterate_boys.html.
- 46 Joyce Howard Price, “Academic Underachievers,” *The Washington Times*, January 22, 2006.
- 47 *Ibid.*
- 48 *Ibid.*; National Association for Single Sex Public Schools, <http://www.singlesexschools.org/home-introduction.htm>.
- 49 *Ibid.*
- 50 Leonard Sax, “The Promise and Peril of Single-Sex Public Education,” *Education Week*, March 2, 2005, 48.
- 51 American Association of University Women. *How schools shortchange girls: A study of major findings on girls and education* (Washington, D.C., AAUW Educational Foundation, The Wellesley College Center for Research on Women, 1992).
- 52 See the Center for Education Reform at www.edreform.com/index.cfm?fuseAction=stateStats&pSectionID=14&cSectionID=44.
- 53 *Ibid.*
- 54 See Alliance for School Choice, “School Choice Around the Nation,” http://www.allianceforschoolchoice.org/school_choice_states.aspx, and The Heritage Foundation, “Choices in Education,” <http://www.heritage.org/Research/Education/SchoolChoice/schoolchoice.cfm>.
- 55 *Ibid.*
- 56 *Ibid.*
- 57 *Ibid.* Students in failing schools are eligible.
- 58 *Ibid.*
- 59 *Ibid.*
- 60 Sara Mead, “The Truth About Boys and Girls,” Education Sector, June 27, 2006, 3.
- 61 See the Washington Office of Superintendent of Public Instruction, <http://www.k12.wa.us>.
- 62 See the National Association for Single Sex Public Education, <http://www.singlesexschools.org>.
- 63 See N.Y. State Education Department, <http://www.nysed.gov>.



- 64 See Brighter Choice Charter Schools, “Gains in Student Performance,” <http://www.brighter-choice.org/TestScores.pdf>.
- 65 See Colorado Department of Education, <http://www.cde.state.co.us/>.
- 66 See the Gurian Institute, <http://www.gurianinstitute.com>.
- 67 *Ibid.*



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