

Propose LHAS Amendment

7/27/98

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Nothing in Public Law 93-318, as amended, shall be construed to prohibit the use of funds made available under this title for education reform projects that provide same gender schools or classrooms, as long as comparable educational opportunities are offered for students of both sexes.

-7-

Bruce/Mike/Ten -

EX1. A possible amendment
from Harkinian to Labor-H
could secure materials on
her single-sex amendment
to cover both
Elena

KAY BAILEY HUTCHISON
TEXASCOMMITTEES:
APPROPRIATIONS,
COMMERCE, SCIENCE,
AND TRANSPORTATION
RULES AND ADMINISTRATION

United States Senate

WASHINGTON, DC 20510-4304

April 20, 1998

Dear Colleague:

This week I will offer an amendment to the Coverdell A+ Accounts bill that will make certain federal education funds available to public schools for same-gender schools and classrooms, as long as comparable educational opportunities are offered for students of both sexes.

My amendment will make available to states and local schools funds under Title VI of the Elementary and Secondary Education Act. Arguably, this flexible education reform block grant (\$350 million in FY '98) could now be used for same-gender programs. However, due largely to concern that the Department of Education may view public, same-gender education as a violation of Title IX (of the 1972 Education Amendments), many schools have been reluctant to pursue this proven education option for fear of losing federal funding. This amendment will restore the intended purpose of Title IX: to prevent sex-based discrimination in education, not to prevent same-gender education.

The benefits of same-gender education are well documented. Studies have demonstrated that girls enrolled in same-gender programs tend to have more confidence to express themselves in the classroom; they pursue more courses and careers in math and science; and they are generally more able to focus on academics than they are in coed classrooms. Many boys find that they also thrive in an atmosphere in which learning, not socializing, is the central goal. Moreover, these positive attitudes translate into tangible academic benefits. One recent study found that girls in same-gender schools outscored girls in coed schools by a full grade level on science tests and by a half-grade on four other scholastic ability tests. Other studies demonstrate that boys enrolled in same-gender programs, particularly African-American and Hispanic boys, also outperform their coed peers in scholastic and extracurricular activities, and are more likely to attend and graduate from college.

While same-gender education is certainly not for everyone, I believe it should be available as an option for parents and their children, and not just those parents who can afford to send their children to private, same-gender schools. Public, same-gender education that addresses the needs of both boys and girls does not violate Title IX, nor does it violate the Constitution. It can, however, make the difference between success and failure for tens of thousands of our young people. I believe the federal government should no longer stand in the way of our public schools as they strive to give all students an equal chance at success.

Enclosed for your review are materials further explaining my amendment and the issue. If you have any questions, please call Quin Dodd of my staff, at 4-1894. Thank you.

Sincerely,


Kay Bailey HutchisonWeb=<http://www.senate.gov/~hutchison/>
Internet=sans10r@hutchison.senate.gov

Same-Gender Education Amendment to S. 1133, "A+ Accounts Bill"
Offered by Senator Kay Bailey Hutchison

Questions & Answers

Q: What does the Hutchison amendment seek to do?

A: The amendment would explicitly allow the use of federal Title VI education funds for "same gender schools and classrooms, as long as comparable educational opportunities are offered for students of both sexes." (Title VI of the Elementary and Secondary Education Act is a very flexible K-12 block grant program that can be used for a wide variety of education reform efforts, arguably including same-gender programs).

Q: What does the law now say about same-gender education?

A: Title IX (of the Education Amendments of 1972) prohibits sex-based discrimination by any school receiving federal funds. However, by explicit omission, Title IX does not apply to admissions at same-gender public schools¹. This is confirmed by Department of Education regulations that allow public, same-gender schools, as long as comparable courses and facilities are offered to both sexes.² Thus, the Hutchison amendment would not change federal law allowing same-gender public schools, but would authorize the use of existing federal funds for this purpose.

With regard to same-gender classrooms within co-ed public schools, the Department of Education requires that there be a sufficient showing that a single-sex class is necessary to overcome past discrimination against one sex.³ But this DoEd requirement is contrary to the language and intent of Title IX. Congress did not intend to allow same-gender schools but prohibit same-gender classrooms absent some burdensome and ambiguous showing of past discrimination.

Neither does the 14th Amendment equal protection clause prohibit same-gender education. The most recent and prominent Supreme Court case this area, U.S. v. Virginia, held against the Virginia Military Institute because the state did not offer a comparable educational opportunity for women. The Hutchison amendment requires that there be comparable opportunities available for both sexes.

¹20 U.S.C §1681(a)(1).

²34 C.F.R. §106.35(b).

³34 C.F.R. §106.3

Q: If same-gender education is legal, why is the Hutchison amendment necessary?

A: Presently, there are less than a dozen same-gender public schools in the US (including California which is in the process of establishing up to 10 same-gender schools). Of the few that do exist, many have had lawsuits and DoEd complaints filed against them, and DoEd has taken enforcement action against several of these schools under Title IX. Clearly, schools are reluctant to initiate such efforts. This amendment is necessary to make clear that Congress did not intend Title IX to be a bar to the use of federal funds for same-gender schools or classrooms, and to allow states and local school districts to go forward and offer these beneficial programs to parents and their children as one available education option.

Q: Does same-gender education really benefit girls and boys in K-12 education?

A: Yes. Numerous studies have clearly demonstrated that students enrolled in same-gender programs have better attitudes about school, are more likely to participate in class, take more math and science classes, have higher attendance rates, and generally have a greater likelihood of educational success, including higher standardized test scores. Because there are so few same-gender public schools, there is somewhat less evidence about the academic results from these improved attitudes in the public school arena. However, a recent report by the American Association of University Women did not so much call into question the benefits of same-gender education as it argued that these benefits should be replicated in coed schools. This is not an argument against same-gender education.

Q: Would any state, school district, parent, or child be required to participate in a same-gender school or classroom under this amendment?

A: No. This amendment would simply allow states and school districts to use existing federal funds to offer these programs on a voluntary basis, much like voluntary charter and magnet schools are now offered. Presently, the vast majority of parents who want same-gender education for their children must have the means to pay for private or parochial school. This option should be available for all parents.

Q: Has the Senate ever voted on this issue before?

A: Yes. On August 1, 1994, the Senate voted 66 to 33 to approve an amendment to the Elementary and Secondary Education Act, offered by Senator Danforth of Missouri, to authorize the establishment of several same-gender public schools. (The Danforth amendment, which failed in conference, is attached, along with the Hutchison amendment and the relevant statute it amends.)

HUTCHISON AMENDMENT NO. 2021 (Senate - March 18, 1998)
(Ordered to lie on the table.)

Mrs. HUTCHISON submitted an amendment intended to be proposed by her to the bill, H.R. 2646, supra; as follows:
At the end, add the following:

TITLE __--EQUAL EDUCATIONAL OPPORTUNITY

SEC. __01. EQUAL EDUCATIONAL OPPORTUNITY.

(a) Short Title: This section may be cited as the 'Equal Educational Opportunity Act'.
(b) Amendments to ESEA: Subsection (b) of section 6301 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7351) is amended--

(1) in paragraph (7), by striking 'and' after the semicolon;

(2) in paragraph (8), by striking the period and inserting '; and'; and

(3) by adding at the end the following:

'(9) education reform projects that provide same gender schools and classrooms, as long as comparable educational opportunities are offered for students of both sexes.'

THE WHITE HOUSE

July 28, 1998

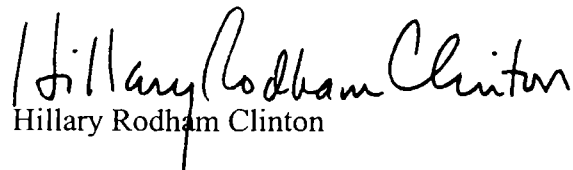
Prof. Rosemary C. Salomone
St. John's University School of Law
8000 Utopia Parkway
Jamaica, New York 11439

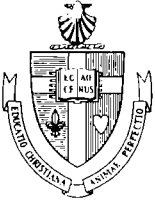
Dear Professor Salomone:

Thank you for your letter concerning single-sex education, and for the paper you presented to the Brookings Institution. I have forwarded your paper to Michael Cohen, who works on education issues on the Domestic Policy Council. As an alumna of Wellesley I am always optimistic about the potential of single-sex institutions to improve educational opportunities for women. I hope to visit the Young Women's Leadership School in East Harlem in the near future.

With best wishes, I am

Sincerely yours,


Hillary Rodham Clinton



FOUNDED 1870

ST. JOHN'S UNIVERSITY

SCHOOL OF LAW

June 17, 1998

Mrs. Hillary Rodham Clinton
White House
Washington, D.C. 20502

Dear Mrs. Clinton:

Diane Ravitch has asked me to send to you a copy of the enclosed paper on "Single-Sex Schooling" that I recently prepared for the Brookings Institution. I understand that you are primarily interested in the legal issues so I call your attention to pages fifteen through thirty-five of the paper. I am firmly convinced that neither Title IX, nor the *VMI* decision, nor the "separate but unequal" principle of *Brown v. Board of Education* present legal impediments to the establishment of voluntary public single-sex schools or classes particularly for girls and minority students.

I appreciate your interest in helping to resolve the legal uncertainties now surrounding the issue. Those of us who attended single-sex institutions understand first-hand the unique qualities of these schools that cannot be transferred to a coeducational setting. If your schedule should permit, you may want to visit the Young Women's Leadership School in East Harlem. The staff, students, and educational program are truly inspiring.

Thank you for taking the time to read this paper.

Sincerely,

Rosemary C. Salomone
Professor of Law

DRAFT

**SINGLE-SEX SCHOOLING:
LAW, POLICY, AND RESEARCH**

**Conference on the State of Urban Education in America
Brookings Institution
Washington, D.C.**

**Rosemary C. Salomone
Professor of Law
St. John's University School of Law
8000 Utopia Parkway
Jamaica, N.Y.
Tel: (718) 990-6622
Fax: (718) 591-1855
e-mail: rsalomon@sjulawfac.stjohns.edu**

May 1998

INTRODUCTION

A heated debate is now raging within educational circles concerning the merits of single-sex schools and classes. From New York to California, school systems are defying the canon of coeducation in the name of gender equality for girls and equal opportunity for minority students both male and female. From the Young Women's Leadership School in East Harlem to dual academies in San Francisco, single-sex education has become as hotly contested as bilingual education in legal and academic circles.

Fueling the fires of the debate is a 1998 report from the American Association of University Women that dismisses as non-conclusive the research findings supporting single sex education and calls for more focused attention to eradicating gender inequities that persist throughout the coeducational system. Lurking in the background are civil rights groups, emboldened by the Supreme Court's 1996 decision declaring unconstitutional the all-male admissions policies of the Virginia Military Institute. For the American Civil Liberties Union and the National Organization for Women, single-sex public schools are not only unconstitutional, but they run counter to the letter and spirit of Title IX, the 1972 federal statute that prohibits sex discrimination in federally funded educational programs. Hovering over the controversy engendered by recent single-sex initiatives is the Office for Civil Rights of the U.S. Department of Education which is empowered by law to withdraw federal funds from school districts found in violation of the Title IX statute or its implementing regulations.

The single-sex education issue evokes visceral responses from educators, policy-

makers, and scholars on both sides of the controversy. Supporters call for establishing experimental programs to remedy a wide range of educational and social problems. Among those problems they emphasize low self-esteem and comparatively low interest levels in math and science among adolescent girls; peer sexual harassment in the schools; gender inequities in the classroom; high rates of teenage pregnancy among minority girls; school violence; and high dropout, drug abuse and crime rates among young black men in urban areas. They suggest that within coeducation lies a "hidden curriculum" of male dominance and differential teacher expectations and attitudes that merely serve to prepare students for gender-specific roles in society while the adolescent subculture of coeducational schools may prove detrimental to academic development. They further argue that single-sex schooling on a limited basis provides educational options to parents and children who lack the economic means to purchase them in the private school market.

Opponents, on the other hand, maintain that such programs smack of benevolent sexism; deny young women and men the interpersonal skills to relate to each other in the real world; and fail to promote tolerance, multiculturalism, or sex equity. They fear the return to a pre-Title IX world where gender-segregated public schools and classes shortchanged girls on educational resources and tracked them into a finite set of low-paying careers. Opponents view single-sex education, at best, as a short-term political fix to more pervasive gender inequities in the schools and, at worst, as a dangerous mechanism for reinforcing persistent gender and racial stereotypes. On a broader scale, they see the programmatic diversity inherent in the concept as a wedge in the door of school choice on a grander scale and a potential threat to public schooling as it now exists.

For the American public, the media has reduced the debate to sound bites and attention-grabbing headlines which dramatically oversimplify the matter. The issues surrounding single-sex versus coeducation are complex and multi-layered, raising questions within questions. The discussion that follows attempts to cut through that complexity, drawing a significant but often overlooked distinction between first and second generation single-sex schools, between pre-Title IX separate education as a tool of oppression and recent initiatives for girls and minorities as tools of emancipation. Intent and ultimate goals are at the heart of that distinction.

The purpose here is to sort through the following underlying questions, systematically examining the debate from the inside out, from the core of legality to the outer margins of resource allocation and the various empirical and causal layers in between.

- Do single-sex public schools comply with constitutional norms and federal statutory law?
- Are there measurable effects that flow from single-sex schools and classes?
- Is there empirical evidence to support the proposition that single-sex as compared with coeducation benefits girls and/or boys whether white, black or Hispanic or, in the alternative, is there evidence that it harms members of any of these groups?
- What are the desired outcomes of the approach -- higher achievement scores in math and science, more positive attitudes toward these subjects, increased self-esteem, more positive identity?
- Is either increased parent and student satisfaction with the single-sex learning environment or educational diversity in itself a sufficiently persuasive justification to support

single-sex schools and classes as a matter of law and/or policy?

- If comparable benefits between single-sex and coeducational approaches are found, are they sufficiently strong to justify broadscale experimentation with single-sex schooling for certain populations? Or should school systems merely offer the approach on a limited basis as an option to parents and children?

- If the reported effects are mixed or only mildly positive, do these inconclusive findings alone justify dismissing single-sex schooling outright without countervailing evidence supporting coeducation on any of these indices?

These are key questions that must be addressed in order to move the discussion toward more informed policy choices for school officials, parents, and students.

DEFINING THE POLICY DEBATE

Judging from the controversy now swirling around single-sex schools, one would think the concept to be a recent phenomenon. In fact, single-sex education has a long history and tradition in this country. All-boy and all-girl private academies dominated the education of the upper classes from the early days of the republic until recent decades. Admittedly, single-sex schooling was not a matter of choice. Separate institutions for female students grew out of the exclusionary admissions policies of all-male institutions. On the other hand, coeducation has been the method of choice in the public sector since the beginning of mass schooling more than a century ago. But coeducation has not always translated into equal

education for women. The uncertain and somewhat deceptive connection between these two concepts has contributed to the reluctance among some gender equity advocates to embrace single-sex education.

Coeducation Becomes the Norm

During the first half of the nineteenth century, Emma Willard, Catharine Beecher, and Mary Lyon created female seminaries as models of women's education, stressing intellectual achievement and moral character. Their writings and speeches significantly influenced the subsequent expansion of public and private schooling for girls¹ and their seminaries pioneered the training of teachers long before the establishment of the early public normal schools.² Despite the zeal of these early proponents of women's education, however, the education they offered prepared women for a limited destiny.

A letter written by Lyon to Beecher exemplifies the narrow bounds of their perspective. Here Lyon professed her hope that the redemption of America through female common-school teachers lay, "in young ladies scarcely out of their teens, whose souls are burning for some channel into which they can pour out their benevolence, and who will teach two, three, or four years and then marry and become firm pillars to hold up their successors."³ In the late nineteenth and early twentieth centuries Catholic religious orders adopted this model primarily on the secondary level to educate a massive infusion of immigrants in the inner cities.

Yet while single-sex schools were until recent decades the norm in the private sector, coeducation typified public schooling even prior to the common school movement of the mid-

1800s. Coeducation was initially a pragmatic cost-effective means of educating children in sparsely populated rural areas in the late eighteenth and early nineteenth centuries. Large cities such as New York, Boston, Chicago, and Philadelphia, in contrast, resisted coeducation for some time. School officials feared losing to the private academies the children of the upper classes who vehemently opposed the intermingling of their children, and their daughters in particular, with lower class boys.⁴ Despite this slow start, coeducation gradually became the norm in densely populated urban centers. By the turn of the century, 98 percent of the public high schools across the country were coeducational with only 12 cities out of 628 reporting that they operated any single sex high schools.⁵

These figures would show a slight increase in the early decades of this century in the name of vocational education. Progressive reformers, believing that the children of recent immigrants were not academically inclined or fit, established vocational classes on an elective basis within the coeducational high school. These programs were highly sex-segregated. School officials tracked males into classes such as drafting, wood-working and auto-mechanics, preparing them for higher paying jobs than those opened to young women who were offered separate classes in home-economics, dressmaking, and secretarial skills. Some of these classes were separated by school policy while others were a matter of choice constrained, of course, by socialization. Large urban school districts, in particular, adopted a similar sex-segregated stratification at the school level. Vocational or technical schools, along with schools for pregnant girls formed two notable exceptions to coeducation. A third exception were a small number of select college preparatory schools such as the Boston Latin School for Boys, Philadelphia's Central High School for Boys, and Hunter College High

School for Girls in New York. One by one each of these schools became coeducational through the 1970s and 1980s in the wake of Title IX.

Outside these few exceptions, public coeducation has remained the rule throughout the past century. Yet, despite this orientation, prior to recent decades public coeducation was not intended to equalize opportunities between males and females. Similar to the early female academies, public schooling was to prepare women for marriage and motherhood with perhaps a brief detour into a limited set of gender-appropriate occupations, such as teaching, before their real life's work would begin.

With few digressions, the question of single-sex versus coeducation within the common school model was of marginal concern to early school reformers who were more interested in assimilating masses of immigrants into American society. It was not until the women's movement of the 1960s and '70s that the distinction between the two approaches became of critical moment. Women's advocates of this period focused on the institutional sexism and hidden curriculum of coeducational schools and the flagrant gender inequities perpetuated by the vocational curriculum. At the same time, they fought to tear down the admissions barriers to women in the limited number of academically selective public secondary schools and more numerous elite private schools and colleges. Proponents of women's equality believed that single-sex schooling reinforced stereotypical notions of women's abilities and interests, that women could and should develop the same aspirations and career goals as men, that they should be mainstreamed into the social and economic life of the country, and that coeducation was the most effective approach for achieving these goals.

Civil rights groups, primarily the American Civil Liberties Union and the NOW Legal Defense and Education Fund, initially tried to build on the *separate but equal* doctrine rejected in *Brown v. Board of Education*⁶ to challenge all-male exclusionary policies in academically elite state-supported institutions, including the University of Virginia⁷ and Central High School in Philadelphia. At the same time, women's rights advocates also pressed for statutory reform in the adoption of Title IX and its implementing regulations. The statute was enacted in 1972 to promote equal educational opportunity for women. Regulations adopted in 1975 by what was then the Department of Health, Education and Welfare covered admissions, counseling, employment and curriculum.⁸ While Title IX does not expressly prohibit all single-sex public schools, school systems around the country gradually transformed most of the existing single-sex schools, both vocational and academically selective, into co-educational institutions for fear of violating the law. Regardless of congressional intent, Title IX became the major impetus for promoting equality for women through coeducation.⁹

By the early 1980s, it appeared that single-sex education in this country was dying a slow but certain death. By 1981, among 6,000 school districts included in a nationwide study conducted by the Office for Civil Rights, there were only 86 all-male and 106 all-female schools. The majority of the boys' schools were vocational-technical while many of the girls' schools were for pregnant students.¹⁰ Through the 1970s, many single-sex private schools and particularly boys' schools, although exempt from the admissions provisions of Title IX, had also converted to coeducation in unprecedented numbers largely in response to waning interest in single-sex education and a declining school-age population. Between the mid-1960s

and mid-1970s, the independent school balance shifted from 62 percent single-sex to 66 percent coeducational with more gradual change in the following decades.¹¹

Some of this activity was in the form of mergers between formerly all-male and all-female institutions. The chief exceptions to the pattern of coeducation were a small number of independent schools and colleges and secondary schools run by Catholic religious orders, all resolutely clinging to their mission of educating women. At about the same time, a confluence of intellectual and social forces drew national attention to the education of girls in coeducational schools. This set the stage for a 1990s re-examination of single-sex schooling and a resurgence of interest among young women to opt out of coeducation.

Girls, Adolescence, and Schooling

In the early 1980s, Carol Gilligan's book, *In a Different Voice*, challenged classic psychological theory attaching a positive value to certain characteristics that are culturally defined as "masculine" such as separation, detachment, subordination of relationships, and abstract thinking while negating other characteristics that are culturally defined as "feminine" such as attachment, caring, and interdependence. Gilligan made clear that the distinctions she found between the two modes of thought were not based on inherent differences between the sexes but on factors of social status and power combined with reproductive biology to shape the different life experiences of men and women.¹²

In her subsequent research on students at the Emma Willard School, Gilligan underscored adolescence as a critical period in the lives of women, calling it a "watershed in female development, a time when girls are in danger of drowning or disappearing."¹³ She

found that, between the ages of twelve and fifteen (the age she noted where dropping out of school becomes more common in the inner city) girls' knowledge seems to become buried.¹⁴ She saw young women caught in a struggle to balance their own values of caring and relationships against values of autonomy and self-sufficiency in the larger culture. She observed how girls are more likely to manifest psychological problems during this period, how they respond more negatively to stressful challenges in early adolescence, and how they reveal more disturbances in self-image.¹⁵

Gilligan's purpose was to chart the course of female psychological and moral development and to refute prior assumptions based in a mistaken belief in male development as the norm. She did not intend for her research to promote the educational separation of the sexes, a clarification she made a decade and a half later in a friend-of-the-court brief submitted to the Supreme Court in the *Virginia Military Institute* case.¹⁶ Nevertheless, her work supported the general proposition that men and women are not necessarily the same, whether innately or through social conditioning, and that their distinct ways of perceiving reality should be afforded equal value. Her findings and conclusions on difference would lend theoretical credence to the empirical findings of educational researchers examining gender equity over the next decade. Her research on the unique issues faced by young adolescent women struggling to develop a strong sense of self would lend theoretical force to the debate over the education of girls particularly in the middle school years.

During the 1980s, a number of scholars both here and abroad generated findings on single-sex education primarily in private independent and Catholic schools. The discussion of this body of research was confined largely to the academic community. It was the

observational studies conducted by Myra and David Sadker over the course of two decades, culminating in their 1994 book *Failing at Fairness*, that sparked the debate over the education of girls in coeducational schools.¹⁷ Through observations of more than one hundred classrooms, they found that boys dominated discussion and were more likely to be praised, corrected, helped, and criticized by teachers -- all reactions that foster student achievement according to the Sadkers.

Following on the heels of the Sadkers' research were a series of reports published by the American Association of University Women. These reports gave new currency to the debate over single-sex education. The first, released in 1991, presented the results of a survey of 3,000 girls and boys ages 9 to 15 of varied ethnic and racial backgrounds. The study documented a disproportionate loss of self-esteem and interest in math and science among girls as they approach adolescence.¹⁸ Only 29 percent of girls and 46 percent of boys retained the high self-esteem in high school that they had exhibited in elementary school. The loss was most pronounced among Hispanic girls. The percent of girls indicating that they "like math" dropped from 81 percent to 61 percent during those years as compared with a drop from 84 percent to 72 percent among boys. Interest in science showed a similar drop from 75 percent to 63 percent among girls and 82 percent to 75 percent among boys of the same age range.

The following year, a second report prepared for the AAUW by the Center for Research on Women at Wellesley College drew on data from a compilation of 1,331 studies to confirm the earlier findings of the Sadkers: that women were underrepresented in the school curriculum, that teacher behavior and tests tended to favor boys, and that girls lagged seriously behind boys in math and science.¹⁹ A third AAUW report, published in 1993, found

that 85 percent of girls and 76 percent of boys had reported being sexually harassed in school.²⁰

At the same time, the Center for Research on Women at Wellesley College conducted a sexual harassment survey through a questionnaire published in the September 1992 issue of *Seventeen* magazine. Forty-two hundred of the magazine's 1.9 million subscribers returned the questionnaire, a 0.2 percent response. According to the report, which was published with the co-sponsorship of the NOW Legal Defense and Education Fund, 39 percent of the girls responding reported being sexually harassed at school on a daily basis during the previous year, with most harassers being male.²¹ A later AAUW report published in 1996 drew on qualitative research including participant observation, interviews, and document analysis to examine the social and institutional challenges facing young adolescent girls as they form identities and negotiate the middle school environment.²²

The first three AAUW reports, in particular, touched off a heated debate in the popular press and academic journals. The merits of the sexual harassment report were debated on national television. The second report alone generated more than fourteen hundred stories by journalists and newscasters. The *San Francisco Chronicle* reported the "Dreadful Waste of Female Talent"²³ while the *New York Times* warned that "Bias Against Girls is Found Rife in Schools, With Lasting Damage."²⁴

Critics challenged all three reports, the first for its methodology which relied on self-reporting, the second for its overstatement of the "gender gap" and its reliance on a small body of research, and the third for its overbroad definition of sexual harassment.²⁵

Nevertheless, the AAUW had grabbed the attention of the educational establishment and

unintentionally planted the seeds for a renewed interest in single-sex schools for girls as a safe-haven from the reported "harms" of coeducation. The unintended use of these reports would come to haunt the AAUW in years to come as the Association's 1998 report would reject single-sex education outright.

Gilligan, the Sadkers, the AAUW, and the Wellesely Center for Research on Women together had painted a painful portrait of growing up female in America. The combination of Gilligan's theoretical perspective on adolescent development, the Sadkers' classroom observations, and the compelling data presented in the reports regardless of arguable flaws in the underlying methodology, touched off a national discussion among educators, psychologists, and feminists concerning gender equity, gender differences, and the lack of self-esteem and self-confidence among adolescent girls.²⁶ The impact of this discussion soon began to reach the admissions offices of all-girls schools. According to the National Coalition of Girls Schools, applications to member schools have increased by 21 percent since the Coalition's founding in 1991.²⁷ The National Association of Independent Schools reports similar enrollment increases in member schools. For the first time in a number of years, enrollment in girls' schools increased significantly by almost 2,000 from 33,826 to 35,662 students between the 1995 and 1996 school years, down from 40,178 in 1986-87. Enrollments in coeducational schools increased more steadily during that same period from 274,955 in 1986-87 to 376,568 in 1996-97.²⁸ The data also generated a flurry of activity in school districts around the country with single-sex math and science classes suddenly gaining favor.

Minority Boys and the Afro-Centric Academy Controversy

While educators and researchers were battling over the validity of the "gender gap" findings, inner city school districts were experiencing a simultaneous movement that would propel the single-sex debate into another dimension. Urban school districts were exploring the concept of gender separation as a mechanism for broadening the educational opportunities of minority students, particularly black and Hispanic males, caught in the maelstrom of poverty. Proponents of all-male Afro-centric academies pointed to the failure of the civil rights agenda to improve the lives of poor inner city residents. Neither compensatory programs nor court-ordered racial integration had proven successful in raising the achievement of low-income minority students. Low-income black men in particular were becoming reduced to a glaring statistic. As black men became increasingly swallowed up in substance abuse and crime, black boys suffered from the absence of positive male role models in their personal lives. The rationale underlying Afro-centric school programs borrowed many of the gender-based principles advanced by proponents of single-sex schooling for girls, including same sex (and race) role models and mentors, enhanced self-esteem, greater leadership opportunities, and higher academic standards and expectations. Added on to these principles was an African-centered curriculum to enhance self-esteem and develop a positive identity.

Proposals for all-male immersion programs raised concerns within and outside the black community for the compelling needs of black females for whom teenage pregnancy, single motherhood and academic failure have led to a lifetime of government dependency. Critics of the all-male immersion concept argued that while black men have been described as an "endangered species," black and Hispanic low-income women bear the triple burden of

being poor, female and minority. The data on both males and females, taken together, presented a vivid and troubling picture of a social and economic underclass wracked by institutional failure and family disintegration.

According to the Children's Defense Fund, drop-out rates among 16 to 24 year olds from low-income families in 1994 reached 39.5 percent for Hispanics and 23 percent for blacks as compared with 14.3 percent for whites. Only 43 percent of blacks and 35 percent of Hispanics were enrolled in a college preparatory course sequence during that year as compared with 50 percent of whites.²⁹ While birth rates for teenagers in all racial/ethnic groups has declined in recent years with the sharpest drop among blacks, the numbers are still troubling. In 1996 more that 10 percent of Hispanic and 9 percent of black females between the ages of 15 and 19 gave birth.³⁰ Nearly one in four black American men in their 20s is in jail, on probation, or on parole while only one in five in the same age group attends college. Among black males 18 to 34 years of age, homicide is the leading cause of death.³¹

Local politicians, school board members, and educators began to draw on these compelling figures to press for gender and racial separation as a desperate measure to address desperate circumstances, all the while pushing the legal envelope on racial segregation and gender discrimination. From all-boys Afro-centric academies for at-risk students in Detroit and Milwaukee, to an all-boys kindergarten class in Dade County, to an all-girls academically rigorous program in New York City, single-sex education for black and Hispanic inner city students became a lightning rod for a growing backlash against single-sex education. The mounting legal opposition would split the civil rights community apart and force school districts across the country to either re-think their plans or risk the political and financial

costs of litigation.

THE MANY FACES OF THE LAW

The most basic question concerning single-sex education is whether the concept, in its various forms, violates the law. Obviously an affirmative answer renders the educational policy arguments moot. But ironically, according to constitutional and administrative standards, the legal question ultimately turns on the strength of the policy arguments. Over the past decade, as school districts have experimented with single-sex schools or classes, civil rights groups have used the federal Constitution and statutory law in an attempt to stop the movement dead in its tracks. Leading the charge are the American Civil Liberties Union and the National Organization for Women who maintain with unshakable resolve that single-sex programs violate the equal protection clause of the Fourteenth Amendment and Title IX of the Education Amendments of 1972. The equal protection clause states that, "No state shall ... deny to any person within its jurisdiction the equal protection of the laws" while Title IX of the Education Amendments of 1972³² and its implementing regulations³³ prohibit educational programs receiving federal funds from treating students unequally on the basis of sex. In the past decade, court orders and agency rulings have set school districts around the country on a roller-coaster ride of legality with still no clear end in sight.

The Philadelphia Case: Who Wins? Who Loses?

Two decades ago, civil rights groups used similar arguments to open the doors of prestigious all-male public institutions to women. The Philadelphia case is particularly interesting from both a legal and policy perspective. Central High School for boys was a selective all-boys magnet school founded in 1837 by an act of the Pennsylvania legislature. The city based the exclusion of women on a separate school for girls which, ironically, is one of the few remaining all-girls public schools in the country today, in practice if not in theory. The case went through two rounds of litigation, first in federal and then in state court.

In 1977, in *Vorchheimer v. School District of Philadelphia*,³⁴ an equally divided Supreme Court (thereby having no precedential value beyond the Third Circuit) affirmed without opinion an appeals court ruling upholding the constitutionality of Central High School. The appeals court had concluded that Central and Girls High Schools were of equal quality. The court expressed concern that parents and students should be allowed to exercise their freedom of choice in the absence of convincing evidence as to the psychological or academic harms of single-sex education. The court's rationale, placing the burden on the challengers to prove the harms of the approach, stands in stark contrast to the current debate which places the burden on supporters to prove its benefits. Nevertheless, the court implicitly recognized the value of educational choice.

After *Vorchheimer* it appeared that the *separate but equal* doctrine rejected two decades previously as to race was constitutionally permissible as to gender. Several years later, however, female students again sought and were denied admission to Central High School and brought suit in state court, this time claiming violations not only of the federal Constitution but of the Pennsylvania State Constitution. The court found that *Vorchheimer* did

not bar the federal claim even though the facts and the law were identical. In the court's view, the plaintiffs' counsel in *Vorchheimer* had failed to provide the court with relevant evidence comparing the quality of the education provided at the two schools.

In *Newburg v. Board of Education*,³⁵ the state court compared the two schools on a number of indices of educational quality, including the size of the campus as compared to the size of the student body, the number of books in the school library, the number of faculty members holding Ph.D. degrees, the course offerings in mathematics, the extracurricular programs offered, student scores on achievement tests, and average acceptance rates to colleges. Having found the girls' high school deficient, the court concluded that the two schools were not "equal" in the legal sense and therefore violated both the Fourteenth Amendment and the Equal Rights Amendment to the Pennsylvania State Constitution. The court ordered Central High School to admit boys while permitting Girls High to remain single-sex.

The school district did not appeal the ruling which was met understandably with strong opposition at Central High. But it was also met with less than enthusiasm by the students and staff of Girls' High who feared the impact of the decision on their school's already dwindling enrollments. Several students and graduates of the school made an unsuccessful attempt to intervene but the court held it was too late; they had not been parties to the trial court proceeding.³⁶ The students, alumnae, and staff of Girls' High remained unimpressed with Central's stately library, thought to be the largest public school library in the country, or the school's one million dollar private endowment and scholarship fund, or its impressive alumni roster.

Despite the well-intentioned efforts of the ACLU, NOW, and the Women's Law Project in Philadelphia, in the course of the litigation the Principal of Girls' High expressed a sentiment that would continue to resonate throughout the single-sex schooling debate. "What [the three girls] are doing is not helping women," she stated. "They're just destroying another opportunity for women."³⁷ In the end, although Girls' High was forced to technically admit boys, none have enrolled in the fifteen years since the court's decision. On the other hand, Central High proved far more attractive to women, moving quickly to a gender-balanced population. The result is that while girls within the Philadelphia public school system now can choose between an academically prestigious education that is either single-sex or coeducational, that option is closed to boys.

Central High School was a prototype of a first generation single-sex school, an academically prestigious institution that operated for the sole benefit of males. It was established at a time when the prevailing belief among educators was that women were not intellectually fit for this level of intellectual endeavor nor was it appropriate for them to pursue the careers for which the school prepared its graduates. A decade beyond the dismantling of single-sex education at Central and similar all-male public secondary schools, civil liberties groups would use the same arguments to challenge single-sex programs even where the objective was to include previously excluded groups including women and minority males.

Detroit: A Civil Rights Dilemma

From the early to mid 1990s, opponents of single-sex education brandished the sword

of the 1991 district court opinion in *Garrett v. Board of Education*³⁸ enjoining the Detroit School District from opening three all-male Afro-centric Academies for at-risk students. The academies would emphasize male responsibility; would provide mentors, Saturday classes, individualized counseling, and extended classroom hours; and would require students to wear uniforms.

The District presented statistics demonstrating that black males were 39 percent of the graduates from Detroit public schools as compared with 61 percent black females, that the male short-term suspension rate was twice that of females, that 54 percent of black males dropped out of school as compared with 45 percent of black females, and that homicide was the leading cause of death among black males over age 9.³⁹ The court found that these statistics, while compelling, fell short of demonstrating that the exclusion of girls was substantially related to the Board's stated objective to combat high homicide, unemployment, and dropout rates among black males. The court found no evidence that the system was failing males because of the presence of females. In fact, the court concluded that the system also was failing females.

The court further relied on two prior rulings by the Office for Civil Rights, one requested by the Dade County Public Schools⁴⁰ and the other by the Wisconsin Department of Public Instruction,⁴¹ declaring that segregation of students in all male classes or schools violated Title IX. The court followed OCR's lead in reading Title IX's exception for the admissions policies of elementary and secondary schools as applying "primarily" to those schools that had existed as single-sex prior to the enactment of Title IX and not as an authorization to establish new single-sex schools.

The case never went to trial, having concluded in a preliminary injunction with the judge finding that the plaintiffs were likely to succeed on the merits. The Board agreed to admit girls rather than risk the cost of further litigation that it believed it could not win. The schools have continued to offer an African-centered curriculum to an approximately equal number of girls and boys chosen by lottery with priority given to siblings.⁴² While the Detroit decision had no precedential value outside the eastern district of Michigan, it subsequently served as a powerful deterrent to other school systems that were considering similar programs for black males.

The legal arguments challenging the Detroit and similar all-male Afro-centric programs focused on sex discrimination against females. The political controversy, on the other hand, centered on the race issue which found local and national black leaders on opposite sides of the divide. Despite the fact that the population in these communities was predominantly if not totally black, the racial segregation suggested in the approach made Afro-centric schools difficult to justify politically. The NAACP Legal Defense and Educational Fund voiced strong opposition to the concept, arguing that these schools posed a real danger of resegregation and undermined efforts to eliminate segregation of black males in special education classes and separate schools for students with disciplinary problems.⁴³

Just prior to the district court ruling in the Detroit case, the NAACP at its annual convention in Houston had adopted a policy proclaiming its "historical opposition to school segregation of any kind." In lieu of single-sex schools, the organization urged creation of "workable alternatives to the proposed segregated education for African-American males." Detroit delegates opposed the resolution during floor debate and local black leaders shared

their concerns. The president of the Detroit Urban League captured the critical nature of the problem for the black community. "Unfortunately," he noted, "prisons are the male academies that we already have."⁴⁴ Nevertheless, scathing criticism of the academies came from the psychologist Dr. Kenneth Clark whose research had provided controversial social science evidence to support the Supreme Court's decision in *Brown v. Board of Education*⁴⁵ striking down segregated schools as inherently unequal. For Dr. Clark, these schools constituted "academic child abuse."⁴⁶ He characterized them as a "damaging psychological procedure" and a "shameless" "flagrant" "violation of *Brown*."⁴⁷

Despite the political and legal flap generated by the Detroit initiative, urban school systems across the country continued to pursue single-sex education in alternative forms. Some even went underground to avoid legal challenge. A 1996 report published by the General Accounting Office cited numerous examples of single-sex programs throughout the country but refused to identify some of the districts.⁴⁸ Each new program invited threatening noises from civil rights groups with an occasional administrative warning from OCR. Both tactics forced school officials either to admit members of the other sex or terminate the project. In Presque Isle, Maine and Ventura, California, for example, separate math classes for girls were nominally opened to boys when faced with a Title IX challenge. In Irvington, New Jersey, separate boys and girls classrooms in the middle school were shut down by a new superintendent citing guidance from state officials that the classes violated Title IX. In Des Moines, Iowa state officials closed the door on single-sex classrooms operating on a voluntary basis in two public schools for part of the day.⁴⁹ Milwaukee continued its African-American Immersion School but opened admissions to all races and both sexes pursuant to an

agreement with the Office for Civil Rights.⁵⁰ In Dade County, Florida, a kindergarten and first grade program for African American boys was forced to close down by OCR after its first year even though attendance rates had risen by 6 percent, test scores increased by 6 to 9 percent, and there was a noticeable decrease in hostility.⁵¹ New York City revised its original proposal to establish an all-male school, the Ujaama Institute (Ujamaa being the Swahili word for "family"), in response to opposition from civil rights groups who called the plan sexist and racist.⁵² The school district subsequently extended its admissions policy to include any student interested in an African-centered learning experience.⁵³

The legal uncertainty of single-sex education, the continuing achievement gap between low-income and other students, and the lack of adequate data to determine whether public, and not just private, single-sex schools produce academic benefits moved Senator Danforth of Missouri in 1994 to introduce legislation that would have permitted the experimental establishment of single-sex schools on a limited basis. The Danforth Amendment addressed OCR's interpretation and the decision of the district court in the Detroit case. The proposal would have granted the Department of Education permission to waive what appeared to be a Title IX prohibition on single-sex schools and grant school districts permission to establish such programs on a voluntary basis for low-income educationally disadvantaged students. The Department would have been authorized to award ten five-year grants to school districts for the design and operation of educational opportunity single-sex schools for both males and females with a comparable coeducational option.

The proposal was roundly defeated despite support from prominent educators, researchers, lawyers, and government officials. Opponents of the Amendment, including

Senator Edward Kennedy of Massachusetts, rejected the very concept of segregating the sexes for fear that even a limited experimental program might lead to further racial segregation in society and the ultimate shortchanging of women. Joining in the opposition to the Danforth Amendment were the American Association of University Women, the National Coalition of La Raza, the American Civil Liberties Union, the Anti-Defamation League, the NAACP, and the National Organization for Women.⁵⁴

New York City: Constitutional Claims in the Wake of *VMI*

After the Detroit compromise in 1991, another round of litigation did not approach reality until Community School District 4 in New York City announced in the summer of 1996 the establishment of a Young Women's Leadership School. With the ink barely dry on the Supreme Court's June 1996 opinion striking down the Virginia Military Institute's all-male admissions policy, the New York Civil Liberties Union, the New York chapter of the National Organization for Women, and the New York Civil Rights Coalition challenged the legality of the all-girls public school that was scheduled to open that Fall in East Harlem. At that time, there remained only two single-sex public secondary schools in the entire country, Western High School in Baltimore and the Philadelphia High School for Girls, both selective college preparatory magnet schools with long histories of scholastic achievement and accomplished alumnae. Neither school technically excludes qualified male applicants although both have remained *de facto* all-female while the curriculum of both schools is replicated at a nearby co-ed school. OCR investigations in 1992 concluded that neither school was denying admission to boys or girls.

Unlike other city school districts before it, with the exception of ill-fated Detroit, New York was publicly forging ahead into uncertain legal waters without a ruling from the Office for Civil Rights and weighted down with the baggage of the VMI decision and the threat of imminent litigation. The VMI case and its implications for single-sex education nationwide immediately attracted national attention while the East Harlem school provided a focal point around which the broader discussion could center.

The school would offer a strong academic curriculum focusing on math, science, and technology initially to two seventh grade classes, with a grade added in each succeeding year. As soon as the plans became public, the New York Civil Liberties Union fired off a letter to the New York City Chancellor of Schools charging that the all-girls school violated the federal Constitution and federal statutes including Title IX. With the National Organization for Women again joining the opposition as they had in Detroit, along with the New York Civil Rights Coalition, the school quickly became a "hot" topic for the media and the subject of educational discussion nationwide. The three groups subsequently filed a complaint under Title IX with the Office for Civil Rights of the Department of Education.

School districts across the country have watched carefully to see how the New York case would be resolved. New York City officials have stood resolute, refusing to back down as they had in the early '90s when they abandoned their plans for an all-male Afro-centric school. The school opened in September 1996 with fifty seventh grade girls selected from among one hundred applicants. In September 1997, the school added approximately fifty new seventh graders and fifty ninth graders to the student body. School officials plan gradually to expand into a college preparatory school through grade twelve. The matter remains under

OCR investigation.

The federal claims raised by the civil liberties groups are similar to those advanced five years previously in Detroit. However, to strengthen their case they now rely on the VMI decision and several interim Title IX warnings issued by the Office for Civil Rights to other school districts. They speak with certitude, dismissing the core holding of VMI and misreading the language and legislative history of Title IX. But their position has been rejected even by those skeptical of the educational and social merits of single-sex programs. The National Women's Law Center which has represented girls and women in many of the major gender discrimination cases over the past two decades has clearly stated that, "[N]either the Constitution nor Title IX prohibits all public single-sex education, let alone all single-sex education... The law ... recognizes that there are circumstances in which properly designed and implemented single-sex education can play an important role in combatting discrimination and dissipating traditional gender classifications."⁵⁵ Even the Assistant Secretary for Civil Rights in the Department of Education has publicly taken a moderate stand both on Title IX and on the impact of the VMI case. The statute, she has stated, does not prohibit separate schools by gender so long as the facilities and offerings are "comparable" while the majority of the Supreme Court in VMI "was very clearly speaking to the VMI case. It was silent on any other program around the country."⁵⁶

In the late 1980s, VMI had received inquiries from 347 women but responded to none of them. One of these women, a high-school student, subsequently filed a complaint with the Attorney General of the United States. Based on that complaint, the United States sued the Commonwealth of Virginia and VMI, alleging that the institution's all-male admissions policy

violated the equal protection clause of the Fourteenth Amendment. The Supreme Court's 1996 decision in *United States v. Virginia*⁵⁷ upheld that claim.

VMI is a prestigious military academy, and at the time of the Court's decision, the only remaining single-sex public college in Virginia. VMI has a longstanding tradition of preparing men not just for the military but primarily for leadership roles in the corporate world and in government with only 15 percent of its graduates pursuing military careers. In the course of the litigation, the State of Virginia proposed a separate all-women's program, the Virginia Women's Institute for Leadership. The Institute would be supported with state funds at Mary Baldwin College, a private liberal arts college for women. Both the district and appeals courts found the two programs to be "substantially comparable" and upheld the plan. The Supreme Court reversed and remanded the case.

Civil liberties groups maintain that the VMI decision renders all publicly supported single-sex schools unconstitutional. In VMI, however, Justice Ruth Bader Ginsburg, writing for the majority of the Court, stressed the narrowness of the decision and the unique facts of the case. In an artfully yet forcefully crafted majority opinion, Justice Ginsburg, citing several cases that she herself had argued before the Court on gender equality, restated and applied with a "bite" the standard used in gender discrimination cases for the past two decades, that classifications by sex must be "substantially related" to an "important governmental interest." Adding more "teeth" to that standard, the majority noted that courts must apply "skeptical scrutiny," taking a "hard look" at "generalizations or tendencies" based on gender and that categorical exclusions from a state-supported institution such as VMI must be supported by an "exceedingly persuasive justification."⁵⁸ Drawing on the rationale of

Sweatt v. Painter,⁵⁹ a seminal case in the racial desegregation of higher education, the Court held that equality must be measured by both tangibles and intangibles. The Court concluded that the state had failed to show "substantial equality;"⁶⁰ the separate leadership program for women proposed by the State was but "a pale shadow of VMI" in terms of curricular and extracurricular choices, faculty stature, funding, prestige, library resources, and alumni support and influence.⁶¹

The state of Virginia offered two justifications for the exclusion of women from VMI: to preserve VMI's unique "adversative" approach and to provide diversity to an otherwise coeducational state system of higher education. The Court roundly dismissed the first, rejecting in particular lower court findings on gender-based developmental differences that pointed to typically male and female "tendencies." On the state's second justification, the Justices reaffirmed the "state's prerogative evenhandedly to support diverse educational opportunities." In drawing the diversity line at "evenhandedness," they drew attention to the circumstances surrounding VMI where Virginia had denied to women a unique educational opportunity available solely at the state's "premier military institute."⁶² The Court noted the history of pervasive exclusionary policies within higher education until recent decades and suggested that the all-male college is very likely to be a device for "preserving tacit assumptions of male superiority."⁶³ The majority warned that even "benign" justifications offered in defense of categorical exclusions would not be accepted automatically but must be grounded in a genuine purpose and not a post-hoc rationalization.⁶⁴

The Justices stopped short of renouncing all gender-based classifications, leaving open the constitutional door to single-sex schools under certain conditions. They tried to chart a

middle course between competing visions of gender equality, between the quest for absolute equality between males and females and the recognition that women should be compensated for socially imposed disabilities. The Justices recognized the "inherent differences" between men and women as "cause for celebration." Gender classifications are permissible where they "advance the full development of the talent and capacities of our nation's people," but not where they are used "to create or perpetuate the legal, social, and economic inferiority of women."⁶⁵ The Court more directly responded to arguments advanced by 26 private women's colleges and recognized "the mission of some single-sex schools to 'dissipate, rather than perpetuate, traditional gender classifications.'"⁶⁶

The VMI case clearly is more akin factually to the first generation of single-sex schools that generated litigation dating from the '70s and '80s than to the new second generation models as exemplified by the New York and Detroit initiatives. VMI excluded women from a prestigious program based on stereotypical notions of women's capabilities and, as the Court concluded, perpetuated the "inferiority of women" and the superiority of men. Second generation single-sex programs have just the opposite intent and projected effect. The new crop of single-sex schools, for both males and females, focus not on the "inherent" deficiencies of the categorically excluded sex as was the case with VMI, but rather on socially and environmentally created deficiencies of the included sex in order to "advance full development of ... [their] talents and capacities."

The recent wave of single-sex initiatives compensate for past discrimination and aim at eliminating arbitrary barriers that historically have impeded the advancement of certain groups in society, particularly women and racial minorities. Unlike the single-sex schools of

the pre-Title IX past, most of which prepared women for a clearly defined narrow role in society, the present-day model is designed to expand students' options, developing in them the knowledge and skills to compete in mainstream society. According to the Court in the VMI case, this type of compensatory program complies with the equality standard of the Fourteenth Amendment. Nevertheless, critics fail to draw these subtle but significant distinctions, their vision clouded by the memory of hard-fought battles to open the doors of academically prestigious institutions that historically had excluded women.

In fact, there is a confusing inconsistency in oppositionist arguments that single-sex education merely resurrects the "separate but unequal" doctrine struck down by the Court more than four decades ago in *Brown v. Board of Education*. First of all, students attend single-sex programs on a voluntary basis and not under legal mandate as was the case with racially segregated schools. Secondly, these schools do not impose a badge of inferiority on students but rather enhance their self-esteem and their educational and economic opportunities. Choice within the context of single-sex schooling is markedly different from southern "freedom-of-choice" plans initiated in the 1960s to circumvent school desegregation mandates. There the intent was pernicious, to disempower black children, circumscribe their options, and permanently exclude them from the mainstream. In theory, the child's choice was free. In practice, it depended on black initiative, stamina, and fortitude to circumvent the numerous bureaucratic obstacles set in their path and to withstand the violence that often erupted when blacks tried to attend white schools.⁶⁷ In the case of single-sex education, choice is freely exercised and the intent is to empower students to develop their own life plan within mainstream society.

Title IX: Caught in a Web of Ambiguities

This concept of compensatory justice is also key to the discussion of Title IX. Enacted as part of the Education Amendments of 1972, the statute provides as follows:

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."⁶⁸

Title IX is enforced by the Office for Civil Rights of the Department of Education as an agency authorized to award funds for educational purposes. The statute directs OCR to promulgate regulations based on legislative intent, and to enforce the law by terminating federal funds from non-complying institutions and by "any other means authorized by law, including complaint investigations and resolution and compliance reviews."⁶⁹ As Senator Birch Bayh of Indiana, co-sponsor of the original legislation noted, Title IX was designed to be "a strong and comprehensive measure [that would] provide women with solid legal protection from the persistent, pernicious discrimination which is serving to perpetuate second-class citizenship for American women."⁷⁰

With regard to admissions policies, the statute expressly applies "*only* to institutions of vocational education, professional education, and graduate higher education, and to public institutions of undergraduate higher education (emphasis added)."⁷¹ It explicitly excludes the admissions policies of religious educational institutions whose tenets are inconsistent with the law,⁷² military training schools,⁷³ and undergraduate public institutions of higher education that traditionally and continually from their establishment had a policy of admitting only

students of one sex at the time the statute was enacted.⁷⁴ The statute is silent as to admissions in private undergraduate colleges and elementary and secondary schools, other than vocational schools.

Opponents of public single-sex schools cite to the district court opinion in the Detroit case interpreting the explicit and implicit exemptions for admissions policies as "applicable primarily to historically pre-existing single sex-schools and not as an authorization to establish new single-sex schools."⁷⁵ However, there is no evidence in the language of the law or its legislative history to support this interpretation. A more reasonable reading is that Title IX implicitly excludes the admissions policies of all institutions not expressly covered.

Remarks by Senator Bayh confirm this interpretation. Bayh believed that it would be "fairer to require all schools to adopt sex-neutral admissions policies." Understanding that such a blanket requirement would only come from further study, he proposed that the Commissioner of Education hold specific hearings to respond to issues raised by the types of institutions exempted, including the question of requiring single-sex high schools to admit students of both sexes. He expressed amazement that the Office of Education had not maintained statistics on "how many elementary and secondary schools -- even public schools - - are restricted in admission to one sex."⁷⁶ Senator Bayh's reference here to both public and private schools is noteworthy. It appears that the Senate sponsor of the legislation himself believed that the admissions policies of single-sex elementary and secondary schools, both public and private, were at least temporarily exempt from Title IX pending further congressional action.

Whether Title IX covers a particular educational practice, however, turns not only on

the statute itself but on regulations adopted in 1975 by what was then the Department of Health, Education and Welfare and now enforced by the Department of Education. The regulations distinguish between sex discrimination in admissions and in access to course offerings. As to the first, the regulations repeat the language of the statute and expressly limit the provisions covering admissions "only to institutions of vocational education, professional education, graduate higher education, and public institutions of undergraduate higher education."⁷⁷ As to course offerings, they seemingly present a broad prohibition, banning institutions from "provid[ing] any course or otherwise carry[ing] out any of its education program or activity separately on the basis of sex, or requir[ing] or refus[ing] participation therein by any of its students on such basis."⁷⁸

The regulations, however, recognize gender differences and the importance of maintaining privacy and safety interests. Separate teams for contact sports, grouping students in physical education activities by ability assessed by individual assessment of performance, providing separate portions of classes that extensively address human sexuality, and permitting separate musical choral groups based on a particular vocal range or quality all fall within exceptions to the general ban on single-sex programs or activities.⁷⁹ The regulations also permit separate programs for pregnant students as long as participation is completely voluntary and the program is comparable to the program offered non-pregnant students.⁸⁰

In recent years, the general prohibition against separation of the sexes in educational programs or activities has formed the basis for arguments challenging single-sex classes within coeducational schools. The exceptions do not cover any of the core academic subjects such as math, science, and computers which currently are the focus of many of these

initiatives. A compelling counter-argument draws from another key provision within the Title IX regulations that permits schools to take "affirmative action" to "overcome the effects of conditions which resulted in limited participation therein by persons of a particular sex" even where there are no formal findings of discrimination.⁸¹ A compelling argument can be made that single-sex classes, and single-sex schools for that matter, are designed to overcome socially and environmentally imposed conditions that have impeded academic advancement among certain student groups. Those conditions have limited academic interest and participation in subjects such as math, science and computers among young women and limited academic achievement among low-income minority students.

An alternative argument raised by opponents of single-sex schools is based in the "comparability" clause of the regulations. Here school districts are prohibited from discriminating on the basis of sex in "any ... school or educational unit" unless "comparable" courses, services, and facilities are offered to those who are excluded.⁸² Civil rights groups give the "comparability" requirement a strained reading. They go so far as to reject the concept of even a separate school for the excluded group and require that comparable means "identical" and only in a coeducational setting. However, the comparability requirement does not mandate expressly that courses, services, and facilities be provided to the excluded group in another single-sex setting. In other words, a public single-sex school for girls need not trigger a legal obligation to establish a comparable single-sex school for boys (although it is legally questionable whether the opposite holds under the affirmative action rationale) as long as educational opportunities of equal quality are offered even in a coed setting. In the case of the Young Women's Leadership School in New York, for example, the school district

maintains that it already provides numerous "comparable" opportunities for boys within several coeducation schools throughout the district.

School districts that have established single-sex schools and classes, therefore, have available three defenses to OCR findings of non-compliance with Title IX. They can argue that OCR is acting *ultra vires*, that is, that the agency is acting beyond the scope of its power and misinterpreting congressional intent in applying Title IX to the admissions policies of public elementary and secondary schools. In the alternative, school systems can maintain that the comparability requirement is flexible and not limited to providing an identical single-sex program for members of the opposite sex but can include a similar educational program provided in the context of coeducation. Finally, in view of research findings on low achievement particularly in math and science and diminished self-esteem among girls, combined with the social and academic problems that flow from poverty among minority students, single-sex schools and classes can be justified as affirmative action measures for certain populations within the meaning of the Title IX regulations. But it should not be forgotten that even if single-sex programs can survive a statutory challenge under Title IX, they are still subject to constitutional norms which need to be tested further in the wake of the VMI decision.

Whether framed in the language of "affirmative action" under Title IX or as an "exceedingly persuasive justification" under the equal protection clause of the Fourteenth Amendment, the legal standard under federal law places school officials under careful judicial and administrative scrutiny to prove single-sex schools and classes exist within the bounds of the law. In presenting the case for single-sex education, school districts must overcome a

strong political and legal presumption against the categorical separation of students and the exclusion of members of one sex based upon an immutable characteristic. They also must overcome the fears of civil rights advocates that the approach may, in the long run, harm both its intended beneficiaries and undermine almost three decades of struggle to promote gender equity throughout education and society. The evidence lies in documented research findings supported by anecdotal reports of the academic, social, and developmental benefits that at least some students derive from single-sex education.

THE RESEARCH EVIDENCE

Research findings on single-sex education lend themselves to varied and conflicting interpretations. The conclusions drawn depend on a number of factors, including the underlying question, who is posing it, the tested impact or effect, programmatic objectives, pedagogical practices, and the needs of the particular student population. Despite the indeterminacy, lawyers, policymakers, educators and parents are looking for definitive answers based in empirical evidence that point the way towards single-sex or coeducation.

Lawyers ask whether the findings are sufficiently persuasive to meet the federal legal standards. As a statutory matter under Title IX, are single-sex classes and schools justifiable as "affirmative" steps toward overcoming the effects of conditions that have resulted in limited educational participation by girls in general, by black boys, or by minority girls and boys? Even if permissible under Title IX, single-sex programs must comply with

constitutional norms under the Fourteenth Amendment. Is there an adequately tight "fit" between the means used (separation of the sexes) and the governmental interest to be served (improving academic achievement, enhancing self-esteem, compensating for prior discrimination, providing diverse educational opportunities).

Policymakers undoubtedly raise legal concerns, but they also weigh the benefits and the costs of establishing single-sex classes and programs on a limited or on a more extensive basis. On one side of the balance are the potential gains in academic achievement and even the value of providing students and families with educational options. On the other side are the potential dangers of racial and gender stereotypes, unequal services, racial resegregation, and diversion of public resources from addressing broader systemic and societal problems dealing with gender and race.

Early Research: From Youth Culture to Women's Colleges

Contemporary challenges to the canon of coeducation find their sociological roots in the publication of James Coleman's 1961 book, *The Adolescent Society*.⁸³ Here Coleman examined the value systems of adolescents in ten schools and communities leading him to conclude that the youth culture in secondary schools exerts a negative effect on intellectual activities. In what he referred to as "the competition for adolescent energies," adolescent values emphasizing popularity rather than academic achievement resulted at least partially from the coeducational organization of the schools. The "cruel jungle of rating and dating," he maintained, proved particularly harmful for girls whose primary emphasis was on making themselves into "desirable objects for boys." He concluded that "coeducation in some high

schools may be inimical to both academic *and* social adjustment."⁸⁴ Coleman understood that his findings were not applicable to the universe but only to "some" high schools.

Despite the intuitive appeal of Coleman's findings, his conclusions did not stem the tide of coeducation in the following two decades. Nevertheless, his research has resurfaced in recent years to support single-sex education for girls and minority males, two populations that seem especially vulnerable to the non-academic values and social pressures that arguably serve as academic distractions in the typical coeducational school.

While Coleman's work was set aside for several decades, some of the earliest policy arguments supporting single-sex education relied on data gathered from students and graduates of women's colleges in the 1960s and 1970s. Compared with women attending coeducational institutions, students at single-sex colleges were found to be more satisfied with their overall college experience,⁸⁵ and more likely to major in nontraditional disciplines⁸⁶ and to demonstrate higher levels of self-esteem and leadership skills.⁸⁷ Graduates of all-women's colleges were found to have achieved greater success in their chosen occupations and greater marital happiness.⁸⁸ A survey of nearly 5,000 women's college graduates from the classes of 1967 and 1977 found that nearly half had earned advanced degrees and almost half were working in traditionally male-dominated jobs such as lawyer, physician, or manager, while ninety percent stated that their colleges were successful in fostering and developing self-confidence in women students.⁸⁹

The population examined in these early studies formed a highly selective group of women, many of them attending elite private colleges at a time when access to prestigious all-male institutions was closed to them. Research conducted after coeducational options for

women had been broadly expanded has yielded less consistent findings. Similar results on measures of student satisfaction with the women's college experience except on the issue of social life have been reported. Single-sex students also have demonstrated a greater likelihood of obtaining a degree.⁹⁰ Contrary to earlier studies, however, more controlled research has yielded less positive results. Controlling for SAT scores and socio-economic status, a broader-based sampling of students, only ten percent of which attended "Seven Sister" schools and twenty percent high-quality four year schools, found that graduates of women's colleges were less likely to obtain a graduate degree than graduates of coeducational institutions. On the other hand, they were more likely to hold a high-prestige job than their counterparts from coeducational institutions. This difference between educational level completed and job prestige may be a function of the comparative quality of the undergraduate experience, that is, the particular single-sex college degree may have had greater purchasing power on the job market.⁹¹

Despite the appeal of the early research findings on women's colleges, the obvious differences between the college and secondary school setting and the populations served render this data of limited direct relevance to the current debate over single-sex education. This observation, however, does not suggest that these studies should be dismissed outright. In fact, research on women's colleges, while now outdated, has helped shape contemporary discourse on single-sex schools and has provided insights into the factors that may contribute to the academic advancement of women, including role models, high expectations of students, more collaborative teaching and learning techniques, opportunities for student leadership, peer support, and faculty who are committed to women's development and who believe that

women are capable learners.⁹² These institutional factors also could prove significant to the education of other groups who have been foreclosed historically from full equal opportunity, particularly low-income minority students.

Examining the Evidence: Is the Glass Half-Empty or Half-Full?

Prior to the mid-1980s, single-sex education was held in such disfavor particularly in the public sector that there was little interest or opportunity for researchers to pursue comparative studies. The modern-day retreat from single-sex public schooling in the wake of Title IX effectively eliminated the field and subjects for meaningful research in this country. Since the 1980s, however, renewed interest in the concept has generated repeated analysis and discussion of a limited body of social science research in a seemingly fruitless search for conclusive findings. These studies draw largely from three research contexts: studies from abroad examining private and government operated schools, studies from the United States examining private independent schools, and studies of Catholic schools. Obviously, each of these settings presents institutional and cultural distinctions that prove problematic when applying the findings to the American public school context. That in itself presents a compelling argument for further experimentation with a broad range of single-sex programmatic models. Nevertheless, in view of the absence of more directly relevant data, the existing research studies have now become critical to the current debate over single-sex schooling.

The bulk of research on single-sex schooling has compared student performance and behavior by gender and school type. More recent studies have expanded the analysis and

focused on the relative cognitive and affective benefits to be gained by black and Hispanic minority students, and particularly males, educated in single-sex settings. The discussion that follows addresses the key issues raised and findings made in each of these contexts.

A number of reported studies include at least a partial review of the research. Two comprehensive and politically significant overviews, however, demand particular discussion for their distinct perspectives, their differing conclusions, and their potential impact on educational practice. The differences stem, in part, from the particular studies and outcomes selected for examination and from the particular position supported by the sponsoring organization. With that caveat in mind, these both establish a framework for examining the field of research questions asked and the conclusions drawn before moving on to several major studies that have helped shape the research agenda and the policy debate over the past decade. The first overview was commissioned by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education during the Bush Administration. The second is the report, *Separated by Sex*, recently released by the American Association of University Women, .

In 1992, OERI convened a group of scholars and practitioners to examine the effects of single-sex education on students from the academic and social/affective dimensions. The meeting resulted in the publication of a two volume report. The second volume consists of nine papers prepared and presented by researchers and practitioners, including several heads of all-boys and all-girls schools both independent and Catholic, all supporting the concept of single-sex education.⁹³ The first volume presents an overview of twenty studies on single-sex schooling.⁹⁴ Many of the studies conducted abroad did not control for student and family

background characteristics including socioeconomic status, parents' education, prior achievement scores, and curriculum track.

Among the reported findings from the United States were that girls in single-sex schools experienced significantly greater improvement in science and reading achievement between the second and third years of high school than their coeducational counterparts;⁹⁵ that female graduates of all-girls schools subsequently attended more selective colleges, had higher educational aspirations, and were more satisfied with the college environment;⁹⁶ and that both white girls and minority students of both sexes outperformed their counterparts in coeducational programs on a variety of academic measures.⁹⁷

Several studies indicated that while girls may benefit from single-sex schooling, coeducation may be more conducive to academic achievement for boys.⁹⁸ Research conducted in Nigeria⁹⁹ and Thailand¹⁰⁰ found that boys in coeducational schools demonstrated higher achievement levels and held less stereotypical views of math than did boys attending single-sex schools. The same findings were made for girls in single-sex schools. On the other hand, several studies examined in the OERI report found little or no differences in outcome measures between the two approaches for either boys or girls.¹⁰¹

The report concludes that, despite the inconclusive research findings, there is sufficient empirical evidence to support the proposition that single-sex schools may produce positive outcomes particularly for young women, and that the countervailing evidence to reject that proposition is not sufficiently convincing. The report recommends future directions for research comparing the effects of single-sex and coeducation, including drawing data from larger samples, examining the effects of single-sex classes, and exploring the differential

effects of specific educational practices within single-sex and coeducational schools. The report recommends that researchers agree on the use of specific and more appropriate statistical techniques and control for individual differences. It further suggests that future research efforts both expand the set of outcomes examined to include such measures as dropping out of school and teen parenthood and compare the effects of different models and practices on different racial-ethnic groups. The report sounds a warning that unless current findings are extended and refined, there will be little opportunity to learn from single-sex schools because few of them will survive.¹⁰²

Here was a government report challenging the conventional wisdom of coeducation and supporting single-sex schooling, a position that should have ignited a storm of debate and further research on the topic. Yet it received scarce attention in the educational community or in the press. By the time the report was published in 1993, the Bush Administration appointees who had commissioned the study had left the Department of Education and the report became buried beneath a pile of government documents only to resurface as an occasional bibliographic entry.

Five years later, a similar report examining much of the same research and including papers presented by several of the same researchers participating in the OERI project, would create a firestorm of controversy in the popular press and send shock waves throughout the educational community.¹⁰³ This time it was the American Association of University of Women, the same group whose series of reports in the early 1990s had sparked a similar debate over coeducation for girls, that was voicing its opinion and the opinion was that "separating by sex is not the solution to gender inequity in school."¹⁰⁴ With only a select

group of educators and researchers reading the full report, the group's press release became virtually the sole piece of evidence in the court of popular opinion. The release listed among the report's findings that "[t]here is no evidence *in general* that single-sex education works or is better for girls than coeducation;" that "[s]ome kinds of single-sex programs produce positive results for some students including a preference for math and science among girls;" and that "there is no significant improvement in girls' achievement in single-sex classes."

The media ran with the first and third of these findings and totally ignored the second which obviously qualifies the other two. In the days following the report's release, newspaper headlines read: "All-Girl Schools Questioned as a Way to Attain Equity;"¹⁰⁵ "Report Casts Doubt on the Value of Single-Sex Schooling;"¹⁰⁶ and "Separate and Unequal? A study finds no evidence that all-female classes are better, but some girls are happy on their own."¹⁰⁷ As one news commentator speculated, the AAUW issued the press release and report with an embargo against premature release which suggested significance. "Reporters naturally think it their duty to find that significance and not get lost in inconsistencies. But in this case, the inconsistencies may be the heart of the story."¹⁰⁸

The National Coalition of Girls' Schools immediately published a counter-press release and called the AAUW to task for its blanket assertion that "separating by sex is not the solution" while the experts the group had convened had concluded that "there is insufficient data to make a definitive judgement." The NCGS statement continued with a list of quantifiable areas in which all-girl education does in fact work: NCGS students score almost 100 points above the national mean for the SAT, receiving a 594 verbal and 575 math as compared with scores of 503 and 494 among girls nationwide taking the test in 1997; 77

percent of NCGS students taking Advanced Placement Examinations score a three or higher; 7.8 percent of NCGS students were National Merit semi-finalists in 1997 while another 13 percent received letters of commendation.¹⁰⁹

The AAUW report is divided into two main parts. The first is an extensive literature review divided into two sections: attitudinal and environment variables and achievement variables which covers both single-sex classes and single-sex schools. The second part of the report presents four papers presented in a roundtable discussion among sixteen researchers. A careful reading of the report belies the negative conclusions highlighted in the Association's press release and in subsequent reporting by the press. In fact, of the four roundtable presenters, only one flatly rejects single-sex education. The other three suggest either that it works for certain populations or that the educational and research communities define more clearly the pedagogical practices that fall within the concept and proceed with caution before investing additional public resources in a concept that begs for further empirical support. In a nutshell, the report speculates that perhaps it is not the single-sex setting itself that yields benefits at least to some students, but certain organizational elements that typically characterize single-sex schools, including smaller classes, a strong academic curriculum, parental involvement, orderly classrooms, and non-sexist teaching practices. Yet the report fails to offer sufficient empirical support for that speculation. The thrust of the report is that the remedy for gender inequity is not to separate girls from boys but to reproduce these elements in the coeducational public school.

Among the reports findings from the existing research are the following.

- There is consistent evidence from a variety of settings that girls in single-sex schools

perceive subjects such as math and science as less "masculine," suggesting this to be a factor intrinsic to the single-sex environment.

- Contrary to popular belief, there appears to be no consistent relationship between sex stereotyping and type of school; the mere separation of girls and boys does not decrease the reinforcement of gender roles.

- The relatively few studies on single-sex classrooms yield inconsistent results. While girls more highly estimate single-sex math and science classes, there is no evidence that this preference is accompanied by achievement gains.

- Research findings on the effects of single-sex schools on student achievement are inconsistent. Some studies have found no differences in achievement attributable to school type but more significant differences due to socio-economic status. Others have in fact shown positive effects.

Single-Sex Classes: Hard vs. Soft Evidence

The AAUW report accurately notes that there are few research studies on single-sex classes, an approach that is gaining increased interest in school districts across the country. Those studies that exist, most of them from abroad, generally report no differences in achievement between students in single-sex and mixed classes although some indicate that students in single-sex math classes develop more positive attitudes toward the subject,¹¹⁰ higher confidence levels that are associated statistically with achievement and greater persistence in advanced mathematics classes for girls,¹¹¹ and an overall preference among females for the single-sex classroom environment.¹¹²

Several underlying questions demand attention before drawing any conclusions from these findings. What are the goals of the program -- academic, social and behavioral, cultural, or a combination of some or all of these? What outcomes are educators attempting to achieve and are these the same outcomes that researchers are examining? What does it mean to say that a particular pedagogical approach is "better"? Does it mean that it produces higher achievement in the short-term as measured by some objective standard or could it mean that it produces enhanced interest, more positive attitudes or certain behavioral changes that lead to more long-term success and academic pursuit?

Single-sex classes cover a wide range of goals and implementation strategies making it difficult to draw valid conclusions as to the effectiveness of the single-sex class concept. In recent years, school districts have used the approach primarily in three contexts. The first model separates students by sex in specific elective subjects, particularly advanced math and science and more recently computers, to address diminished achievement and interest reported among girls as they progress from elementary through middle and high school. The second model separates them for all or the major part of the school day which is the model adopted in some of the Afro-centric programs such as those operating in Milwaukee and Baltimore. A third approach is to provide, within a coeducational school, single-sex classes that are an integral part of the regular curriculum beyond math and science.

The model that has gained the most interest in school districts across the country is the all-girl math, science and computer class. Some researchers in recent years have challenged the basic assumption that school achievement among females is consistently lower than among males.¹¹³ National Assessment of Educational Progress data from 1996 reveal that females

now outstrip males in math by 8th grade,¹¹⁴ showing average scores of 271 and 270 respectively although females continue to lag behind in science with average 8th grade scores of 149 as compared with 151 for males.¹¹⁵ Nevertheless, these gains for females in math are not sustained in Scholastic Aptitude Test scores where the average math score for females in 1997 was 494 and for males 530.¹¹⁶ The relative differences between 8th grade math and senior year SAT scores could be a function of more males than females taking more advanced level mathematics courses in high school.

Advanced Placement exam data confirm a widening gender gap in math/science interest as students progress through the grades. In 1997 girls comprised only 12 percent of students nationwide taking the AB-level and 20 percent taking the A-level computer science exams, and only 36 percent of students taking the BC-level math calculus exam.¹¹⁷ Even girls who enroll in advanced placement classes may experience self-doubts. In a study of 160 high school girls taking advanced placement in mathematics and physics, 40 percent reportedly "played down good grades in mathematics in front of classmates and peers, especially male classmates and peers."¹¹⁸ Taken together, the data reveal noticeable gender-related differences among adolescents in competence, attitudes, and participation levels in math, science, and computer technology. These differences carry over into college and career planning. According to recently released data, only 2.6 percent of female as compared with 15.2 percent of male college freshman plan to major in engineering with 1.4 percent of females as compared with 3.7 percent of males planning a technology major.¹¹⁹

It is not that females lack a "math-science gene" but rather something operating in the social/school/home environment and any combination of the three that prevents the gene from

activating. Research on occupational choices suggests that women retreat from math and science because gender socialization inhibits their confidence in their abilities and expectations of success while causing them to place less subjective task value on these fields than on other possible options.¹²⁰ This resonates with the notion of "academic disidentification" which has been advanced with regard to minority students and academic failure.¹²¹

While the gender gap has been clearly documented, the question remains on how best to narrow it. Empirical research on single-sex classes to date has been far too limited to prove useful in assessing policy options. However, single-sex classes in math, science and computers have produced a substantial body of anecdotal assessments. These reports, while subjective, non-scientific, and not the sole basis upon which to carve policy and practice into stone, provide useful insights into the learning process and suggest directions for future program design and research. Many of these classes technically are open to both boys and girls in order to insulate them from legal attack. However, they actively recruit from among the female population sending the clear message that, "Boys need not enroll."

The all-girls algebra class operating in the Presque Isle (Maine) High School since the late 1980s is an example of this approach. Now called "College Algebra with Emphasis on Women's Contributions in Mathematics," the course is offered as an elective for both male and female students yet no male has chosen to take the course. School officials report that girls who have taken the class have tended to take more math and science courses in high school, are more likely to consider a career involving math, demonstrate enhanced self-confidence, and are more likely to demonstrate an increase in scores on the statewide math test from eighth to eleventh grade.¹²² Another example is the Walker School, a private

coeducational school in Marietta, Georgia, which started separating boys and girls in 8th grade algebra five years ago. Many of its middle-level math and science classes are now offered only in single-sex classes. While school officials acknowledge that girls' achievement has not changed noticeably, the number of girls enrolling in upper-level math and science classes has increased from one-third to from 45 to 55 percent. As the head of a coeducational middle school in Bedford, New York that has used single-gender math classes for the past four years has noted, "What you can't measure in a quantitative way is how these kids feel about themselves. It's enough to know that I have more girls saying, "I love math."'"¹²³

Aside from math and science, educators have become concerned with the relatively low numbers of girls taking elective computer classes which could foreclose them later from career opportunities. Washington Middle School in Olympia, Washington offers an all-girls class combining technology skills with issues that are particularly interesting to adolescent girls, such as nutrition, eating disorders, career exploration, and women's self-defense. Before the class was instituted, twice as many 8th and 9th grade boys as girls enrolled in technology electives. The ratio between boys and girls is now more evenly balanced. As one eighth grade girl observed, "A lot of girls that are shy around boys will feel more comfortable in a class like this and will not be afraid to ask questions."

Manchester High School in Connecticut offers both single-sex and mixed-gender sections of a course in Technology in the World using the same curriculum for both. Officials report that the program has enhanced the students' self-confidence and their interest in technology careers. It also has increased the enrollment of girls in technology electives from 15 percent to 24 percent of total enrollment. Both the Washington and Connecticut schools

technically open all their technology classes to girls and boys, again to meet the comparability requirements of Title IX. However, in Connecticut the course description for the all-girls sections reads, "for female students but open to boys by request," while the Washington school holds a promotional meeting only for girls when recruiting students for the special class.¹²⁴

The obvious question that remains unanswered in these reports is whether separating by gender is the only way or even the most effective way to achieve the same ends or whether alternative approaches could prove as effective. Schools might initiate after-school math and science clubs for girls or invite women engaged in math and science to discuss their careers or serve as mentors. The issue of single-sex classes in all its permutations demands more carefully controlled longitudinal studies. Nevertheless, the reported outcomes from the existing programs expand the discussion of single-sex education from focusing on short-term achievement gains to examining the effects of short-term attitudinal and behavioral changes on long-term career opportunities.

Single-Sex Schools: Gender, Race, and Socio-economic Class

In addition to the lack of empirical data supporting single-sex classes, the recent AAUW report concludes that research on single-sex schools has produced highly inconsistent findings. Several of these studies, in fact, have played a critical role in shaping the current debate on single-sex schools for girls. Beginning in the mid-1980s, Valerie Lee in collaboration with several researchers and Cornelius Riordan separately reported on a series of research studies examining the effects of single-sex and coeducation on girls' and boys'

achievement. Their field of research primarily was Catholic schools, although Lee subsequently extended her research into the private independent sector. Both researchers participated in the 1992 OERI and 1997 AAUW roundtable discussions.

In two widely-cited studies of secondary school students and graduates in the 1980s, the first with Anthony Bryk and the second with Helen Marks, Lee found positive effects of single-sex schooling for girls but few differences attributable to school type for boys. Both studies used data from *High School and Beyond* (HS&B), a national survey sponsored by the National Center for Education Statistics in 1980. They drew data from sophomores in 1980 with a follow-up two years later in senior year. In comparing girls and boys attending single-sex and coeducational Catholic schools, they found that girls in all-girls' schools expressed a more positive attitude toward academics and demonstrated higher achievement gains in reading, writing and science than their coeducational counterparts. Single-sex school boys did not show statistically significant gains between sophomore and senior years but were more likely to enroll in math and science classes and less likely to enroll in vocational classes than their coeducational counterparts.¹²⁵

Lee subsequently found that these positive effects were sustained in college. Both females and males were more likely to attend selective four-year colleges and were more likely to have considered attending graduate school than their coeducational counterparts. The effect on girls from single-sex schools extended to attitudinal and behavioral outcomes, with members of this group holding significantly less stereotypical attitudes about women in the workplace and demonstrating a greater likelihood of being actively involved in politics by the end of college.¹²⁶ Lee subsequently examined students attending independent schools for

similar differences in achievement and attitudes, collecting similar data in 1989 and 1990. Finding no consistent pattern of effects for either boys or girls, she expanded the scope of the study and reported findings on why students and families choose a single-sex over a coeducational school.¹²⁷ Unable to explain the inconsistencies between Catholic and independent secondary schools by differences in dates of data collection, motives of parents in selecting single-sex education, or historical differences in the status of single-sex versus coeducational schools between the two sectors, Lee has shifted the focus of her research to examine school organization effects on student outcomes.

It is significant that one of the leading researchers on single-sex education now has withdrawn her support for the concept. In 1992 she noted in her closing remarks to the OERI roundtable that "there is something important going on in some single-sex schools for young women" and therefore we should "not allow this option to disappear from the American educational landscape." Five years later, she did a complete turnaround in her AAUW roundtable presentation, unequivocally stating that "separating adolescents by gender for secondary schooling is not an appropriate solution to the problem of gender inequity in educational outcomes, either in the short or in the long run."¹²⁸

Riordan has remained more steadfast in his support for single-sex schooling, although he has refined his position over the years. His research has received wide attention primarily for his examination of the effects of single-sex schooling on black and Hispanic male and female students.¹²⁹ Similar to Lee, Riordan used the *High School and Beyond* survey data to compare the performance in sophomore and senior years on cognitive and affective measures of white, black, and Hispanic students attending single-sex and coeducational Catholic

schools. His findings revealed that white girls and black and Hispanic students of both sexes fare better in single-sex schools while coeducation might prove more beneficial to white boys. When scores were adjusted for initial ability, school variables and home background, girls and minority boys attending single-sex schools demonstrated higher cognitive achievement, higher self-esteem, higher internal control, and more liberal attitudes toward working women than their counterparts in coeducational institutions. The opposite effect held for white boys in single-sex schools with their coeducational counterparts surpassing them on all cognitive and affective measures used in the study. While the affective differences were not large, it appeared from the data that white males attain healthier attitudinal outcomes in coeducational schools. Single-sex schools, on the other hand, provide minority males in particular with an environment and set of school policies that foster the growth of internal control mechanisms through which they believe that they control their own destinies.

How can the marked differential effect of single-sex and coeducation between white and minority males in particular be explained? Riordan suggests that white males in coeducational schools may gain an advantage by comparing themselves as a group to females who may serve as a "negative reference group." In the competitive environment of predominantly white all-male schools, some low performing males end up serving that function thereby driving overall achievement scores down. Offsetting these forces for minority and white female students in single-sex schools, he maintains, is the "greater receptivity" for school effects among low-status students together with the benefits of role models and what he calls the "adolescent subculture" of athletics, social life, and dating which he found strongest among boys in single-sex schools. Riordan notes that for both black

and Hispanic boys and girls, about 70 percent of the test score difference between minorities in single-sex and coeducational schools can be explained by adjusting for school variables including curriculum, course work, homework, and the adolescent subculture. These formal and informal school structures apparently have a more significant effect on minorities than on white males. Riordan's findings confirm those of previous studies, that the overall effects of school quality are greater among minorities¹³⁰ and among the poor.¹³¹

In his remarks to the AAUW roundtable participants in 1997, Riordan acknowledged findings that appear to contradict the results obtained in his own studies and that of Lee and Bryk dating from the 1980s. Recent research on Catholic schools in the 1990s indicates that students in single-sex schools do not outperform their coeducation counterparts on various measures of achievement.¹³² He maintains that Catholic school students have become more affluent over the past decade and therefore recent findings are completely consident with those of Lee with regard to private independent schools where no differences in academic achievement were observed between students in single-sex and coeducational programs. He concludes that the effects of single-sex education fall within a hierarchy of low-status characteristics (female, racial minority, low SES). The greatest effects are found among black and Hispanic females from low socio-economic homes, slightly diminished effects among black and Hispanic males from low socio-economic homes, smaller effects still for white middle-class females, and virtually no differential effects among affluent students regardless of race or gender. While he agrees with Lee that certain organizational features including small school size and a strong academic curriculum explain the greater academic effectiveness of single-sex schools, he argues that they do not totally explain the difference. For him,

features that flow out of school type, including role models, leadership opportunities, diminished youth-culture values and an affirmative pro-academic parent/student choice are key to the success of single-sex schools for historically disadvantaged student populations.

Based on a cross-national study of four countries (Belgium, New Zealand, Japan and Thailand), Riordan suggests that as single-sex schools become more common, the achievement differential between them and coeducational institutions may diminish.¹³³ This may explain the more frequently reported achievement differences found in the United States than abroad. In many of the countries where similar studies have found no differences, there is a more even balance between single-sex and coeducational schools both private and government operated. In the United States, in contrast, single-sex schools form a small sector of the country's educational system and seemingly attract different students than those educated in the larger coeducational sector. In view of the strong resistance in this country to the single-sex model, however, it is improbable that single-sex schools will approach the numbers of coeducational institutions, particularly in the public sector, to realize this phenomenon of diminishing differential effects.

In the meantime, the results of studies on minority students indicate that single-sex schooling may hold promise for transforming the lives of inner city girls and boys caught in the downward spiral of poverty and the destructive forces that flow from it. In cities across the nation, the number of black and Hispanic children living in impoverished neighborhoods has risen to staggering levels, reaching 97 percent for blacks in Washington, D.C. and 86 percent in Detroit.¹³⁴

According to the sociologist Claude Steele, at the root of academic failure for black

students in particular is the failure of public schools to develop and constantly reaffirm what he calls "academic identification," that is, the belief that school achievement is a promising basis for self-esteem.¹³⁵ Achievement levels among minority students in urban school districts lend credibility to this observation. Only 42 percent of urban students nationwide scored at basic level or higher on the 1994 National Assessment of Educational Progress fourth grade reading test as compared with 63 percent of students attending non-urban schools. The equivalent levels for eighth grade math were equally low, with 42 percent in urban school districts and 66 percent in non-urban districts scoring at basic level or higher.¹³⁶

Despite rising test scores nationally, the achievement gap between students in urban and non-urban school districts remains wide as does the gap between minority and non-minority students in urban areas. Data drawn from several urban areas confirm this observation. While nearly three-fourths of Illinois third graders in 1996 were rated "proficient" on the state reading test, fewer than half the students in Chicago met that standard. In 1996, the average Connecticut fourth grader was ten times as likely as the average fourth grader in Hartford to achieve proficiency on all three of the state's mastery tests.¹³⁷ Add these compelling statistics to the figures on crime, dropout rates, drug abuse, teenage pregnancy and homicide for minority youth and the educational needs of minorities in the inner city reach crisis proportions. If research evidence suggests that single-sex education is most effective within low-income minority student populations, both females and males, then it is worth consideration at least on an experimental basis.

CONCLUDING THOUGHTS

Single-sex education is a complex web of unanswered questions and promising leads all searching for a definitive resolution in the law, in policy alternatives, and in research findings. All three strands join together in an interactive relationship, each sensitive to developments in the other. As is often the case in education, the policy initiatives on single-sex schooling initially took off despite uncertainty in the law and limited evidence in the research.

The legality of single-sex education -- from schools, to classes, to dual academies -- has been placed on hold at this time, with OCR apparently taking a wait-and-see approach to the various single-sex models now operating throughout the country. OCR's foot-dragging in resolving the Title IX complaint brought by civil liberties groups against the Young Women's Leadership School in New York is clear evidence of this cautionary approach. The agency apparently has waited for the issue to play itself out more fully in the policy and research arenas. Agency officials are struggling to accommodate the law to an educational concept that at least in theory is gaining popularity among parents and legitimacy among educators and politicians.

It remains to be seen if the American Association of University Women's recent report has a significantly negative impact on the single-sex movement in this country. The report casts a dark cloud over supportive arguments based in research findings on the cognitive and affective gains that arguably flow from separating girls and boys at least during the early adolescent years. Yet such findings may be critical to OCR's ultimate position under

Title IX. Empirical support may also play a key role in the judiciary's application of the equal protection clause of the Fourteenth Amendment, although the Supreme Court in the VMI case suggested that diversity itself may be a sufficiently persuasive justification for single-sex schooling provided the intent and effect are not to promote gender stereotypes.

While reasonable minds may disagree over the comparative benefits of single-sex and coeducational schooling and some may even argue that it is purely a matter of personal taste, advocates of single-sex schools and classes bear the legal burden of coming forward with sound social science evidence to support departing from the presumed norm of coeducation.

Research findings also influence the thinking of policymakers and educators particularly those who are searching for scientific evidence to support their particular preferences. The AAUW reports of the early 1990s, coming on the heels of the Sadkers' research on how coeducation shortchanges girls, demonstrate how a limited body of controversial research can ignite a national debate, turn the conventional thinking on educational practice around by at least 90 degrees, and quickly generate programmatic experimentation at the local level. Time will tell whether a narrow set of reportedly inconclusive findings, capitalized upon by the media, will now send those same forces into retreat.

There is no doubt that single-sex education fails to hold up when put to the test of rigorous empirical research. But for that matter, does coeducation or many other pedagogical approaches fare any better? The continued debate over whole language vs. phonics and the ongoing controversy over bilingual education vs. English immersion, even after more than two decades of inconclusive research findings, are two examples of how educational practices

often take root with insufficient theoretical grounding. Part of the problem is the flawed nature of educational research itself, where it is impossible to control the many differential factors that operate across classrooms and schools and to isolate the particular element producing the observed effect. The other part of the problem is that in the vast world of diverse student needs, practice often outstrips theory in the rush to remedy every newly diagnosed problem in response to popular or political pressure.

Perhaps researchers on single-sex education have been asking the wrong questions. As the anecdotal evidence on single-sex classes demonstrates, the focus on objectively measurable short-term outcomes in achievement score gains, for example, may simply divert attention from the real question of short-term behavioral and attitudinal changes that ultimately produce long-term effects in career choices and greater control over one's life plan. It could be that empowerment and not higher test scores per se is at the heart of single-sex education. Unfortunately, the personal benefits that flow from empowerment are not clearly apparent or measurable in the short-term.

Stripping away all the rhetoric of "benevolent sexism" and "silver bullets" and focusing on the educational issues reveals a perplexing inconsistency in the equality arguments advanced by the opponents of single-sex schooling. Their position, in fact, turns the equality ideal on its head. Over the past three decades, that ideal has come to mean not just "same is equal" but sometimes "different is equal" and even "more is equal" when applied to various student populations. Clear examples of students receiving differential treatment, some of it mandated by law, are the economically disadvantaged in compensatory programs, linguistic minorities in bilingual education programs, and the disabled assigned to

special education services. Why should gender differences not be afforded similar recognition? Single-sex education, particularly for women and minorities, is merely an extension of the very concept of equality that these same civil rights groups have pressed before courts, legislatures, and administrative agencies.

This is not to suggest that school districts mandate separate schooling or that it is appropriate for all students or even for all members of certain groups. While the research on achievement gains in girls is inconclusive, there exists evidence that at least some girls experience a certain comfort level and develop greater self-confidence, interest, and academic identification in single-sex settings. The research also suggests that single-sex programs can prove especially beneficial for low-income black and Hispanic students. More significantly, there are no research findings that single-sex schools harm students in any palpable way, other than speculations on gender stereotyping and some suggestions as to the negative effects on non-minority boys. Given the general lack of harm to students, the inconclusive empirical findings on cognitive benefits to girls, the supportive findings as to the benefits to minorities, and the observational reports on affective gains, it is seriously questionable whether government should mandate, as some opponents argue, that all public school students attend a coed school.

Viewed in the context of the larger debate over school reform, single-sex education is another issue where the principles of individual liberty (in the form of choice) and equality (in the form of equal educational opportunity) are clearly reconcilable and mutually reinforcing despite assertions to the contrary, assertions grounded more in ideology and misplaced fears than in sound pedagogy. This argument is particularly salient in the case of

minority students for whom inner city public schools and three decades of compensatory programs have proven such a dismal failure. If equality is truly a fundamental goal of public education particularly in the inner city, then public schools should afford to the disadvantaged, with potentially greater personal and social returns, the same choice and opportunity that historically have been enjoyed by those attending private schools.

The concerns raised by women's groups who challenge single-sex education, however, must not be summarily dismissed but addressed directly. Their expressed fears of gender stereotyping as a potential danger are understandable given the battles fought to break down the doors of exclusionary institutions. In view of that all too recent history, school districts must watch vigilantly to assure that single-sex programs do not in fact slide back into pre-Title stereotypes that limit rather than expand the horizons of young women and certain young men. The mere possibility of backsliding, however, does not negate the potential benefits of the approach at least for some students. Without carefully planned experimentation, school districts will never have the chance to test the strength of that potential.

There is also validity to the concern expressed by both the AAUW and civil rights groups that gender inequities continue to permeate education nationwide and that school districts should focus more attention on remedying these inequities. But the need for systemic change does not preclude testing more focused incremental reform at the same time. Single-sex education is no more costly than coeducation and therefore should not divert resources from systemwide remedial action. Ironically, the legal challenges themselves have brought undue attention to these programs, dissuaded school officials from testing and implementing

creative models, and made single-sex schools and classes largely symbolic while at the same time diverting public concern for broadscale change to promote gender equity throughout the system. As a result, both programmatic and system-wide efforts to address gender inequities have suffered. It may in fact be true that separating by sex is not *the* solution to gender inequity in school, but it may be one of several solutions along with certain organizational supports and teacher training.

There is no doubt that more carefully controlled longitudinal studies that examine a broader range of effects are needed before school districts make sizeable investments in any particular single-sex models. But that rule should hold for any pedagogical approach and particularly for one that is so controversial. In the meantime, however, school districts around the country should continue to serve as laboratories of experimentation, opportunity, and diversity from which can emerge the most effective approaches to educating future generations of girls and boys, whether separately or together.

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Rosemary C. Salomone is Professor of Law at St. John's University School of Law where she has served as Founding Director of the Center for Law and Public Policy (1994-97) and Associate Academic Dean (1992-94) and currently teaches constitutional, administrative, and local government law. From 1980 to 1985, she was a faculty member at the Harvard Graduate School of Education where she taught courses in education law and finance in the Administration, Planning and Social Policy Program. From 1981 to 1990, she served on the faculty of Harvard's Institute for Educational Management in which she annually presented a series of lectures on higher education and the law. From 1985 to 1995, she was a Trustee of the State University of New York and served as chair of the Academic Planning Committee. She also has served as Chair of the Education and the Law Committee of the Association of the Bar of the City of New York (1993-96) as well as Chair of the Section on Education Law of the Association of American Law Schools (1995). She has published and lectured extensively on educational policy and the law and is the author of *Equal Education Under Law* (St. Martin's Press, 1986). Her articles have appeared in the *Yale Law and Policy Review*, the *Harvard Educational Review*, the *Virginia Journal of Social Policy and the Law*, the *Georgia Law Review*, the *New Mexico Law Review*, the *Hastings Constitutional Law Quarterly*, the *Journal of Law and Education*, the *Annals of the Academy of Political Science*, and the *Journal of Urban Education*. Her research has been supported by the National Science Foundation, the Ford Foundation, the Spencer Foundation, the U.S. Department of Education, and the Milton and Mark DeWolfe Howe Funds of Harvard University. She holds a Ph.D. and LL.M. from Columbia University where she was the Bretzfelder Fellow in Constitutional Law during the 1983-84 academic year. She is currently completing a book, to be published by Yale University Press, on parental rights and schooling in America.