



**TITLE IX AND EQUAL OPPORTUNITY IN  
VOCATIONAL AND TECHNICAL EDUCATION:  
A PROMISE STILL OWED TO THE NATION'S YOUNG WOMEN**

**A Report of the  
National Women's Law Center**

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## SUMMARY

This June 23 marks 30 years since the passage of Title IX of the Education Amendments of 1972, the federal law that prohibits sex discrimination in all aspects of federally funded education programs. When Title IX was passed, many colleges and professional schools had quotas limiting the number of women they would accept. Some schools labeled their buildings as for boys only; others were similarly restricted to girls. Many high schools prohibited boys from taking home economics and girls from taking shop or auto mechanics. To help high school students make career choices, schools across the country routinely used blue forms for boys – asking if the boys wanted to become President of the United States -- and pink forms for girls, asking if they wanted to become First Lady.

Substantial progress has been made in opening important educational opportunities for women, and Title IX has relegated the era of pink and blue forms – and these explicit types of discrimination against girls – to the history books. But in the area of vocational and technical education, women and girls have, sadly, been left behind. Thirty years after enactment of Title IX, the patterns of enrollment in vocational and technical programs look shockingly similar to the patterns that existed prior to passage of the law. Biased counseling, the provision of incomplete information to students on the consequences of their career training choices, sexual harassment of girls who enroll in non-traditional classes, and other forms of discrimination conspire today to create a vocational system characterized by pervasive sex segregation. Young women remain clustered in “traditionally female” programs that prepare them for low-wage careers and do not provide them with the training or technical skills necessary to enter high-wage jobs. Young men, on the other hand, fill the vast majority of slots in programs leading to higher-wage careers that can provide true economic self-sufficiency.

This sex segregation in the nation’s vocational classrooms -- and the relegation of girls to traditionally female programs -- has deep impact on the earning power and job prospects of the young women who graduate from these programs. Moreover, these young women often receive a substandard education in the predominantly female programs into which they are placed. While school districts are updating their vocational course offerings, providing more advanced classes, and adding high-technology programs such as Cisco Networking Academies, girls are too often bypassed for these opportunities. Where enrollment in a traditionally female program leads to fewer chances to take advanced courses or to master the technology that is so important in the information age, girls are doubly harmed.

Because the stakes for expanding vocational and technical education opportunities for young women are enormous, the National Women’s Law Center undertook a nationwide investigation of the extent of sex segregation in vocational and technical programs at the high school level. The findings of that investigation are presented below, along with the Center’s conclusions and recommendations. Accompanying this Report, the Center is also filing 12 Petitions for Compliance Review with each of the regional offices of the Office for Civil Rights of the United States Department of Education. The Center calls on those federal offices to

conduct full investigations of the sex segregation in vocational and technical programs in specific states within, as well as throughout, their regions and to remedy the discrimination that has resulted in these unacceptable barriers to full educational opportunity for girls and women. Thirty years after enactment of Title IX, the country owes a debt to the young women who have been left behind, and whose educational and economic prospects have significantly suffered as a result.

## FINDINGS

- ***There is pervasive sex segregation in vocational and technical programs at the high school level in schools across the country.***

The Center's investigation conclusively demonstrates that pervasive sex segregation in vocational and technical programs – with girls predominantly enrolled in “traditionally female” programs and boys primarily participating in “traditionally male” courses – exists nationwide. The Center sought data from every state and the District of Columbia and examined in depth the enrollment patterns in vocational programs in 12 states – one for each of the 12 regions where the Department of Education has a civil rights enforcement office. The Center thus evaluated data on the gender breakdown of students in vocational programs in **Arizona; California; Florida; Illinois; Maryland; Massachusetts; Michigan; Mississippi; Missouri; New Jersey; North Carolina; and Washington.**

Data from each of these states revealed the same pattern of sex segregation across the board. For example, these data demonstrate that female students make up 96% of the students enrolled in Cosmetology, 87% of the students enrolled in Child Care courses, and 86% of the students enrolled in courses that prepare them to be Health Assistants in every region in the country. Male students, on the other hand, comprise 94% of the student body in training programs for plumbers and electricians, 93% of the students studying to be welders or carpenters, and 92% of those studying automotive technologies. *See Attachment A.*

The pattern of sex segregation is even worse in some states than these statistics would suggest. In Florida, for example, 99% of the students in Cosmetology are women, while 100% of the students taking Plumbing are men. Males comprise 97% of welding classes in Michigan; the same percentage of the Heating, Air Conditioning, and Refrigeration classes in Mississippi; and the same percentage of the students taking Electrician classes in Missouri. In Arizona, Florida, Maryland and North Carolina, females comprise upwards of 98% of the students enrolled in Cosmetology. *See Attachment B.*

- ***This sex segregation results in substantial disparities in the wages earned by female and male graduates of vocational and technical programs.***

The pervasive sex segregation of female students into traditionally female programs has a serious adverse impact on their economic well-being. For example, students entering Child Care

fields will earn only a median salary of \$7.43 per hour, and Cosmetologists will earn a median salary of \$8.49 per hour. By contrast, the median salary for students who become Plumbers and Pipefitters is \$18.19 per hour, and the top 10% of workers in that field will make \$30.06 per hour. Similarly, Electricians have a median salary of \$19.29, and are eligible to earn up to \$31.71 while progressing in the career tracks created in their field. In no case, moreover, does the amount earned by the top 10% of workers in the predominantly female fields of cosmetology, child care, or medical assistant even begin to approach the *median* wages earned by those employed in predominantly male occupations. While the top 10 percent of Child Care workers earn \$10.71 per hour, for example, that is 41% *lower* than the median amount earned by mechanical drafters. *See* Attachment C. The differences are stark, and the consequences for these students and their families enormous.

- ***This sex segregation results in inferior educational opportunities for women and girls enrolled in “traditionally female” programs.***

The Center’s investigations have also revealed that young women enrolled in traditionally female programs often have fewer opportunities to take advanced level classes, particularly in math and science; fewer chances to enroll in high-technology programs such as Cisco Networking Academies; and inferior instruction in the classes that they do take. Once again, the disparities in treatment are substantial and disturbing.

In New York City, for example, 13 of the 18 Career and Technical Education schools are highly sex segregated -- four have student bodies that are more than 70% female and nine have student bodies that are more than 70% male, including three schools that are more than 90% male. The schools that are 70% or more male offer, on average, 3.89 Advanced Placement courses per school, while the vocational schools that are 70% or more female average only 1.75 courses per school. None of the four predominantly female vocational schools offers any AP classes in Calculus, Statistics, Biology, Chemistry, Physics, or Computer Science -- including those schools that purport to prepare their students for careers in the health field or the business world. However, six of the predominantly male schools offer AP Calculus; four offer AP Biology; two offer AP Chemistry; two offer AP Computer Science; one offers AP Physics; and one offers AP Statistics. Similarly, the New York City Board of Education has implemented Cisco Networking Academies, which lead to industry certification in computer networking, at five vocational high schools – all of which are more than 55% male, and three of which are more than 70% male.

In Virginia, moreover, an observer reported that the extent of the educational activities of the solely female Cosmetology class consisted of curling the same strand of hair over and over again. The only “technological” opportunity provided in this class was a computer program that permitted the students to view a person’s image with several different hairstyles. Young women in Virginia have also reported that schools are not informing them about opportunities to take technology-related courses, that counselors have steered females away from advanced computer

courses, and that the few females who do enroll in technology-related courses are subjected to a hostile environment.

- ***This sex segregation results from discrimination in violation of Title IX.***

Contrary to the claims sometimes made by critics of Title IX, these stark patterns of extreme sex segregation are not the product of independent choices made by young women alone. In fact, the evidence and the historical record make resoundingly clear that these patterns result from -- and manifest -- enduring sex discrimination.

In 1979, the then Department of Health, Education and Welfare found “that male and female students were concentrated in programs traditionally identified as intended for them.” Commenting on patterns of sex segregation that are virtually identical to those identified in the Center’s investigation, the Department stated that the patterns resulted from “unlawfully discriminatory practices” by educational institutions. Vocational Education Programs Guidelines For Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap, 44 Fed. Reg.17,162 (1979).

The data uncovered by the Center demonstrate that these discriminatory practices have not been adequately dismantled, and are, in fact, continuing to limit equal opportunity for women. The data show that schools have not adequately fulfilled their responsibilities to monitor and address the various forms of discrimination that can limit girls’ access to non-traditional vocational programs, whether through career counseling that relies on gender stereotypes, recruitment focused on the gender traditionally enrolled at the school, or failure to correct classroom conditions that undermine equal opportunity for girls.

Among other findings, the Center uncovered the following recent examples of discrimination perpetuated in the nation’s vocational schools:

- In Los Angeles, California, young women are frequently steered into Cosmetology courses by their guidance counselors, who are reported to have consistently lower expectations of female students.
- In Massachusetts, a teacher at a Boston vocational high school has steered young women toward Cosmetology and away from vocational programs in the trades, based on sex stereotypes. Another teacher instructed a female student not to choose a vocational program in the trades because she would be taking a boy’s spot.
- In New York City, a vocational school that is 83% male displayed a large banner over its recruiting table stating that the school “Builds Mechanical Men,” sending the message that its mission is to educate male students in mechanical fields.

- Young women in one Chicago high school vocational shop reported that their teacher encouraged male students to “learn by doing,” while telling the female students to sit and study their textbooks.

Moreover, the Center has determined that half of the states across the country have not met their legal obligation to designate a Title IX coordinator who will oversee the state’s efforts to comply with and carry out its responsibilities under Title IX. This is an independent violation of the law, and the absence of an official specifically designated to monitor the state’s compliance with Title IX means that discriminatory patterns in the state’s vocational programs will likely go unnoticed and unremedied. The following states lack a Title IX coordinator: **Alabama, Arizona, Colorado, Delaware, District of Columbia, Indiana, Kansas, Louisiana, Massachusetts, Michigan, Mississippi, Missouri, Idaho, Montana, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Vermont and Virginia.**

- *The scope of the sex segregation and discrimination in vocational and technical education has been largely ignored in the 30 years since enactment of Title IX.*

The patterns of sex segregation identified in the Center’s investigation demonstrate the inadequacy of the attention that has been paid to uncovering and remedying the underlying discrimination. In fact, numerous states lack even basic data to help them to monitor sex segregation in their vocational programs. Delaware, Georgia, Louisiana, Minnesota, Oregon, Virginia and the District of Columbia, for example, reported to the Center that they either did not collect enrollment data for vocational courses or did not collect the data broken down by sex. Alabama, Alaska, Colorado, Hawaii, Idaho, Indiana, Maine, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Rhode Island, Utah, Vermont and Wyoming did not respond in any way to the Center’s request, and the information is not otherwise publicly available or accessible.

These state failures reflect the absence of any requirement that data related to vocational and technical programs be maintained on a systematic -- and, across the states, uniform -- basis. The Department of Education collects only limited data on vocational education that are insufficient to permit even a basic analysis of the type undertaken by the Center in the course of this investigation.

## RECOMMENDATIONS

- *The Center calls on the Office for Civil Rights of the United States Department of Education to undertake compliance reviews of high-school level vocational and technical programs.*

The Center is today filing 12 Petitions for Compliance Review – one in each regional office of the Department of Education’s Office for Civil Rights (OCR). These Petitions call on OCR to investigate, identify and remedy the discriminatory practices that have perpetuated the

pervasive sex segregation uncovered through the Center's investigation. Among other issues, the Center calls on OCR to determine:

- whether counseling of students considering vocational and technical options is non-discriminatory and provides full information on the consequences of career choices, or whether counselors steer girls away from non-traditional training based on gender stereotypes or other concerns;
  - whether recruitment practices for vocational and technical programs are non-discriminatory, including whether promotional activities for the programs portray women engaged in, and welcome women to enter, non-traditional training programs;
  - whether admissions criteria for vocational and technical programs unfairly screen out, or otherwise discriminate against, girls and women;
  - whether there is sexual harassment in vocational and technical programs, or other conduct that limits girls' access to opportunities to pursue non-traditional training; and
  - whether sex segregation in the underlying vocational and technical programs has limited girls' access to technology-related programs and advanced courses.
- ***The Center calls on the United States Department of Education to begin collecting data on enrollment in high-school level vocational and technical courses, broken down by sex by race, ethnicity, and disability status, or for Congress to respond by requiring such data collection.***

The Department of Education has the authority to mandate data collection by states and other recipients of federal funds. The data currently collected by the Department to evaluate gender equity in vocational and technical programs is collected in occupational categories that are so broad they mask the sex segregation that the Center's investigation has shown is pervasive across the country. These data collection efforts, for example, do not show enrollment patterns for specific courses such as Cosmetology, Child Care, or Carpentry.

The Center thus calls on the Department of Education to collect the data necessary for OCR to conduct its Compliance Reviews, and to require for the future regular collection and submission of systematic data on enrollment patterns in each high-school level vocational and technical course. These data should be disaggregated by sex, and by race and ethnicity and disability status for each gender, to enable OCR to monitor and address any patterns of sex segregation that remain following its Compliance Reviews.



Should OCR fail to require the data collection necessary to monitor and assess equality of opportunity in high-school level vocational and technical programs, the Center calls on Congress to enact legislation mandating collection and submission of such data on an annual basis.

- ***The Center calls on states without Title IX coordinators to immediately designate an official responsible for investigating and remedying barriers to equal educational opportunity.***

The failure of states to designate a Title IX coordinator has adverse effects on equality of opportunity in high-school level vocational and technical schools. The Center calls on states to immediately rectify this situation, and to charge each Title IX coordinator with the responsibility to monitor and address sex segregation in vocational and technical programs.

- ***The Center calls on states to adopt compliance programs to prevent, identify and remedy sex discrimination in vocational and technical programs.***

OCR's Guidelines for equality of opportunity in vocational programs make clear that states are required to adopt such compliance programs, which should include collection and analysis of relevant data and information and the conducting of periodic compliance reviews. Vocational Education Guidelines at 17,165. This state-level enforcement obligation supplements, and does not supplant, the federal government's investigative responsibilities under Title IX and its implementing regulations, but can enhance efforts to promote voluntary compliance with the law.

- ***The Center calls on school districts and local education agencies to fulfill their own responsibilities under Title IX and relevant state laws to investigate, identify and remedy the discrimination that is leading to pervasive sex segregation in vocational and technical programs.***

Independent of OCR, school districts and local education agencies, as recipients of federal funds, have the obligation to investigate whether they are providing sex-segregated course offerings -- and, if so, to take the steps necessary to remedy the discriminatory practices leading to such sex segregation. The Center calls on schools districts and local education agencies to immediately fulfill these obligations.

- ***The Center calls on the business community to exercise leadership, in partnership with the schools, to promote non-traditional training for women.***

Such partnerships can enhance prospects for young women to receive training and, ultimately, jobs in non-traditional fields. The business community can play a vital role in these efforts by partnering with individual vocational and technical programs; offering apprenticeships or other internships for students pursuing non-traditional training; providing high-technology options for traditionally female programs; and the like. Businesses should also take steps to ensure that their contributions to the schools are not steered away from use by female students.

## **CONCLUSION**

The pervasive sex segregation in vocational and technical courses compromises the educational opportunities of, and economic prospects for, girls and women relegated to traditionally female training programs. The evidence points to sex discrimination as a major cause of the rampant sex segregation and the disadvantage that results from it, in violation of Title IX. These violations must be remedied without delay. The Center calls on OCR, the states, the business community, and the schools themselves to immediately take the necessary steps to ensure that young women in vocational and technical programs are provided with truly equal educational opportunities.