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Citi Education Series
on Family Economic Security



Career and Technical Education Programs for High-Wage, High-Skill Jobs: Eliminating Barriers and Improving Access for Girls

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Speakers for this Session



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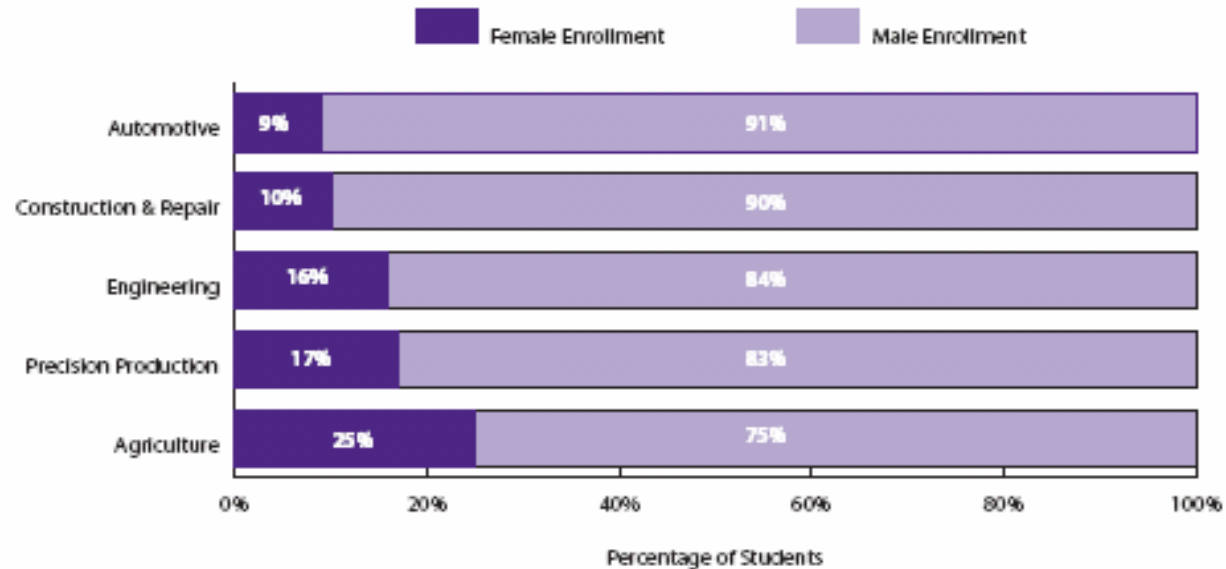
BASIC FINDINGS

OF TOOLS OF THE TRADE

- ❑ Girls continue to be significantly under-represented in CTE classes that are nontraditional for their gender.
- ❑ This under-representation has serious consequences for future economic self-sufficiency.
- ❑ Reasons for girls' under-representation are complex, but include artificial barriers.



**FIGURE 3: ENROLLMENT IN COURSES LEADING TO NONTRADITIONAL OCCUPATIONS,
BY CATEGORY**

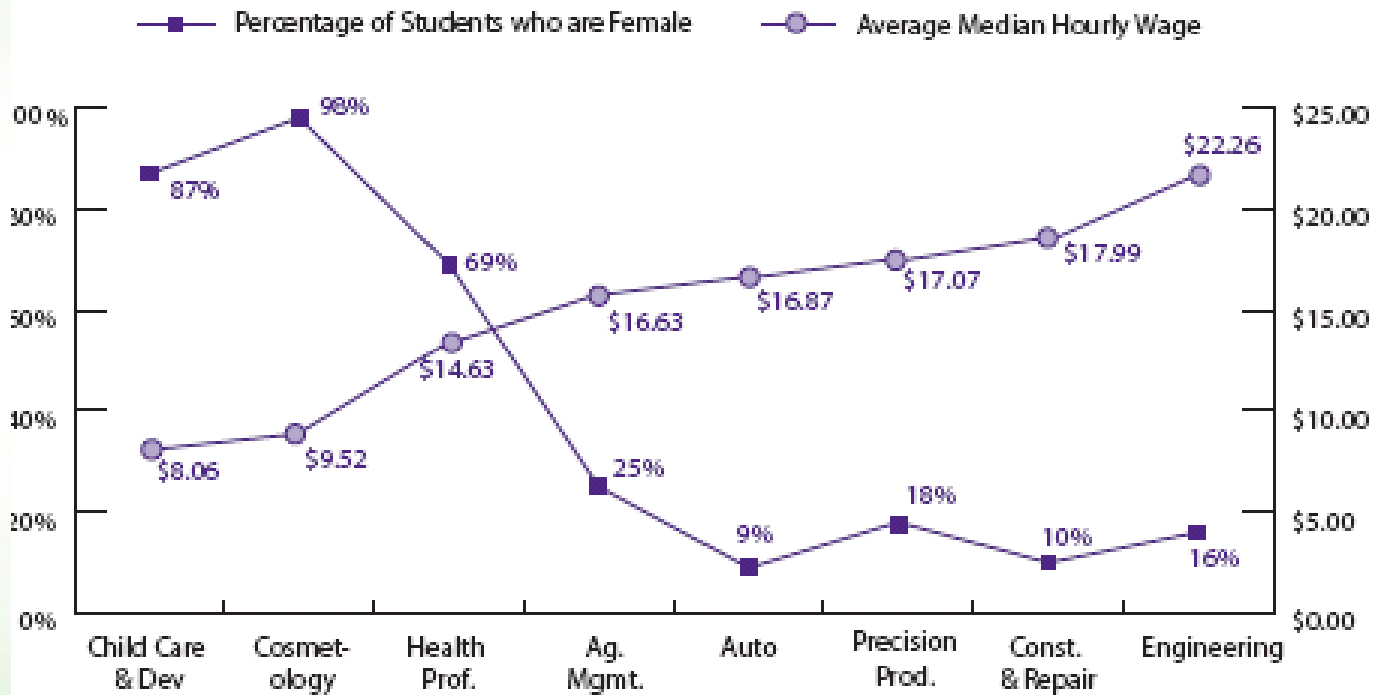


Source: NWLC analyses of 12-state CTE enrollment data.

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FIGURE 5: FIELDS WITH A HIGHER MEDIAN WAGE HAVE FEWER FEMALE STUDENTS



Source: NWLC analyses of 12-state CTE enrollment data; U.S. Department of labor, Bureau of Labor Statistics, May 2004.



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IGNITE

Inspiring **G**irls **N**ow **i**n
Technology **E**volution



Our Mission

To inspire young women to consider
Science, Technology and Engineering as
a positive career choice.



Why IGNITE is needed

There are not enough women in Science, Technology and Engineering

- From 2000-2006, women in network & computer systems administrator positions **decreased 29%**
- From 1996-2004, the number of women employed in IT **decreased by 23%**
- In 2004, women received **only 17%** of the undergrad IT degrees awarded
- In 2006, women held **only 2%** of the CIO positions in California's 200 largest public companies



Why Women are Needed

- Different creativity/thought processes
- More women in the mix provides:
 - Full use of collective intelligence
 - Multidimensional science and technology
- More innovations in the areas of
 - Medicine
 - Technology
 - Engineering



What keeps women away

- Lack of female role models
- Perception of technology as being competitive rather than collaborative
- “Nerd” Image
- Lack of exposure for K-12 teachers & counselors
- Insufficient efforts to attract women to careers in technology and science



IGNITE is the answer

- Elicits almost immediate changes in girls' perceptions of technology careers
- Provides strong role models who reflect local demographics
 - A good example goes a long way in a girl's life
- Offers hands-on opportunities at local technology companies

Since 2000, more than 10,000 young women have participated in IGNITE events. Today, girls claim an average of 40% of the seats in IT classes in the Seattle Public Schools.

It must be a continuing effort. It may take generations. IGNITE is the long term answer.



How IGNITE works

Personal Presentations are the **HEART**
of IGNITE

Other Activities that inspire continued
participation by the girls:

- Field Trips
- Job Shadows & Internships
- Coaching on 'next steps'
- Mentoring



What makes IGNITE unique

- Works within the school curriculum
- Long-term involvement
- Local resources / global community
- Lowest cost
- Reproducible
- Ready today!



IGNITE'S Pathways

- Ignite in all middle schools
- Ignite in all high schools
- Ignite in all colleges
- Ignite in the workplace

**IGNITE CREATES A CONTINUOUS PATHWAY TO THE
CAREER IGNITE STUDENTS CHOOSE**



Creating an IGNITE Chapter

- Purchase an initial toolkit today to get familiar with the program
- Register your school district as a chapter either using the website or mail-in form
- Determine which schools will be having an IGNITE program. These schools are called member schools
- Each member school will need a designated IGNITE Coordinator and their own start-up kit
 - Start-up kit includes toolkit, Resource CD, Presentation DVD, one consulting session



Thriving as part of the IGNITE community

- Each chapter gets its own website!
- IGNITE has a message board for us to ask each other questions and communicate exciting developments.
- Students get access to our directory of professional women and men to contact for mentoring, job shadowing and general questions.
- IGNITE events and conferences



IGNITE Successes to Date

Spring 2002: Cisco Gender Initiative Award, + \$25,000 cash award

2002 - 2003: Girls outnumber boys in two of three technology classes at Ingraham High

Summer 2004: 66% of high school internships at Microsoft filled by IGNITE girls

June 2007: IGNITE receives top national Award from Programs and Practices that Work project

2006 - 2007:

- WA and CA states add chapters
- Idaho brings IGNITE to 50 schools
- Schools in Accra, Ghana adopt IGNITE
- State of Virginia pilots 7 chapters



Strategies for Increasing the Participation of Student in Nontraditional CTE

Mimi Lufkin

National Alliance for
Partnerships in Equity



Research Summary

Strategies

- Improving Performance on Perkins III Core Indicators: Summary of Research on Causes and Improvement Strategies
- http://www.napequity.org/pdf/Improving_Performance_of_Perkins_III.pdf
- Chapter 6



Strategies

- Review all school materials and practices for gender bias and nontraditional exposure and support
- Invite, involve and educate parents
- Conduct middle school programs



Strategies

- Conduct pre-technical training programs
- Provide role models and mentors
- Conduct targeted recruitment activities



Strategies

- Collaborate with community-based organizations and business/industry
- Increase teacher and administrator quality and equity-capacity through professional development



Strategies

- Increase competence in diversity and sexual harassment prevention
- Implement and model gender-fair institutional strategies
- Provide a continuum of support services



Programs and Practices That Work

- Partnership
 - National Association of State Directors of Career Technical Education
 - Association for Career and Technical Education
 - National Alliance for Partnerships in Equity
 - National Women's Law Center



Programs and Practices That Work

- Recognize exemplary programs that have been successful in increasing the participation of males or females in nontraditional career and technical education programs
- Identify models and best practices



Programs and Practices That Work

- Applications Due January 25, 2008
- Evaluation criteria
 - Quality
 - Impact
 - Documentation/Replicability



Programs and Practices That Work

- Recognition
 - ACTE National Policy Seminar - March
 - NASDCTEC Spring Conference - April
 - NAPE Professional Development Institute - April
 - Briefing on Capitol Hill – June
 - Programs and Practices That Work Annual Report



Programs and Practices That Work

Programs Recognized in 2005

Highest Recognition

[Minot Public Schools](#): Diva Tech, Define Your Dreams,
and Technology on the Go

Honorable Mention

[Michigan Breaking Traditions Award](#)

[Northeast Community College Career Camp](#)



Programs and Practices That Work

Programs Recognized in 2006

Highest Recognition

[Illinois Center for Specialized Professional Support's
"NTO Look Program"](#)

Honorable Mention

[Minneapolis Public School's "High Tech Girls' Society"](#)



Programs and Practices That Work

Programs Recognized in 2007

Highest Recognition

Seattle Public Schools: SPS IGNITE program ["Involving Girls Now in Technology Evolution"](#)

Honorable Mention

[St. Paul College "Respiratory care program"](#)

[Northeast Community College "Mentoring program"](#)



Programs and Practices That Work

- For more information go to:

http://www.napequity.org/nape_programsthatwork.html



For More Information...

- On the National Women's Law Center, visit www.nwlc.org
- On IGNITE, visit www.ignite-us.org
- On the National Alliance for Partnerships in Equity, visit www.napequity.org