

# Breaking Barriers: Increasing the Participation and Completion of Students in Nontraditional CTE Programs

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Oklahoma  
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## Workshop Goals

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- Understand why participation in nontraditional CTE programs is emphasized in Perkins IV
- Identify the root causes that impact student participation and retention in nontraditional CTE programs
- Identify strategies to increase the participation and retention of students in nontraditional CTE programs



# Historical Perspective

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- Gender equity provisions in Perkins
  - 1976 Amendments
    - Full-time Gender Equity Coordinator-\$50,000
  - 1984 Perkins Act
    - Full-time Gender Equity Coordinator-\$60,000
    - Set-asides 3.5% Gender Equity, 8.5% SP/DH



# Historical Perspective

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- Gender equity provisions in Perkins
  - 1990 Perkins Act
    - Full-time Gender Equity Coordinator-\$60,000
    - A-F requirements
    - Set-asides 3% Gender Equity, 7% SP/DH, .5% either
    - Special population focus
  - 1998 Perkins Act
    - State Leadership Set-aside (\$60,000-\$150,000)
    - Accountability Measure
    - Language sprinkled throughout the Act



# Gender Equity Provisions in Perkins IV

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- 2006 Perkins Act
  - State Leadership Set-aside (\$60,000-\$150,000)
  - Accountability Measure
  - Improvement plans and sanctions
  - Language sprinkled throughout the Act
  - Required use of local funds
  - For more detailed analysis go to <http://www.napequity.org/pdf/EquityProvisionsPerkins4TableFinal.pdf>



## Core Indicator

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- Participation in Nontraditional Training and Employment Programs
- Completion of Nontraditional Training and Employment Programs



# Nontraditional Training and Employment

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- Occupations or fields of work, including careers in computer science, technology, and other emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.



# Startling Statements

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- How well do you know the status of nontraditional careers?
- Find three individuals and ask them to guess the number that belongs in your startling statement
- Average your answers and be prepared to report out to the group



# Root Causes

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- Must know the problem before you implement the solution
- No silver bullet
- Barriers/enhancers to student retention in nontraditional career and technical education programs
- Research based



# Review Research Summary

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## Root Causes

- Chapter 6 Tables 19 and 20
- 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](http://www.napequity.org/pdf/Improving_Performance_of_Perkins_III.pdf)



# Root Causes- Recruitment

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- Career guidance materials and practices
- Access to and participation in math, science and technology
- Instructional strategies
- Nontraditional role models
- Early Exposure



# Root Causes- Recruitment

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- Curriculum materials
- Occupational choice
- Self-efficacy
- School climate
- Student attitudes



## Root Causes- Recruitment

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- Family demographic characteristics
- Peer influence
- Spousal/significant other/parent support
- Media representation
- Social attitudes



## Root Causes - Completion

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- Classroom Climate
- Student support services
- Student isolation based on gender
- Role models
- Instructional Strategies
- Self Efficacy
- Spousal/Significant Other Support



# Strategies

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For Increasing the Participation and Completion of Students  
in Nontraditional CTE Programs



# Career Guidance

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- Review career guidance materials and practices for gender bias and nontraditional exposure and support

[Gender Equity Tip Sheets](#)

Taking the Road Less Traveled, [MAVCC](#)  
[Guidelines for Identifying Bias in Curriculum and Materials](#)

Safe Schools Coalition

[Am I a Fair Counselor](#)

Destination Success, [MAVCC](#)



# Educate Parents

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- Invite, involve and educate parents

[Talented Girls Bright Futures](#)

Publication by Project Lead the Way

American Careers Magazine

[Nontraditional Edition](#)

Career Communications, Inc.

[Career Prospects Website](#)

VA Department of Education



# Early Exposure

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- Conduct middle school programs

## Programs and Practices That Work

2005 Award Winner

Minot Public Schools

Minot, North Dakota



National Alliance for  
Partnerships in Equity



# Early Exposure

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- Conduct pre-technical training programs

Rosie's Girls

Vermont Works for Women

IGNITE

Seattle Public Schools

Programs and Practices That Work 2007

Award Winner



# Nontraditional Role Models

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- Provide role models and mentors

[Girls E-Mentoring in Science, Engineering and Technology GEM-SET](#)

USDOL, Women's Bureau

[How to Plan and Facilitate a Job Shadowing Experience](#)

Destination Success, [MAVCC](#)

[Engineer Girl](#)

National Academy of Engineering

[MentorNet](#)



# Outreach

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- Conduct targeted recruitment activities

Summer Camps

Cisco Gender Initiative Strategies

I am an Engineer

Cisco Systems, Inc.



# Collaborations

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- Collaborate with community-based organizations and business/industry

Operation SMART

Girls, Inc.

National Association of Women in  
Construction

Society of Women Engineers

Association for Women in Aviation  
Maintenance



# Collaborations

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- Collaborate with community-based organizations and business/industry

Women Chefs and Restaurateurs

Top Women Chefs Talk



# Collaborations

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- Collaborate with community-based organizations and business/industry

American Assembly for Men in  
Nursing

Male Nurse Magazine



# Professional Development

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- Increase teacher and administrator quality and equity-capacity through professional development

NAPE Professional Development Institute –

April 6-9, 2008 Washington, DC

CTEEC Best Practices Conference –

September 27-28, 2007

Oklahoma City, OK

GESA and The Equity Principal

Graymill



# Professional Development

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- Increase competence in diversity and sexual harassment prevention

[Gender Equity Tip Sheets](#)

[Tolerance.org](#)

Southern Poverty Law Center



# School Climate

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- Implement and model gender-fair institutional strategies

[Checking Your School for Sexism](#)

Destination Success, [MAVCC](#)

[Gender Equity Item Bank](#)

Midwest Equity Assistance Center

[The Equity Principal](#)

Graymill



# Student Support Systems

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- Provide a continuum of support services
  - Tutoring
  - Child care
  - Transportation
  - Financial Aid
  - Books, Equipment, Tools, Clothing
  - Tuition
  - Modification of Curriculum, Equipment
  - Student/Teacher Aides
  - Support Groups
  - More



# Evaluate Materials for Bias

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- Evaluate materials for gender bias and positive nontraditional images

[Gender Equity Tip Sheets](#)

[Curricular Detecting Skills](#)

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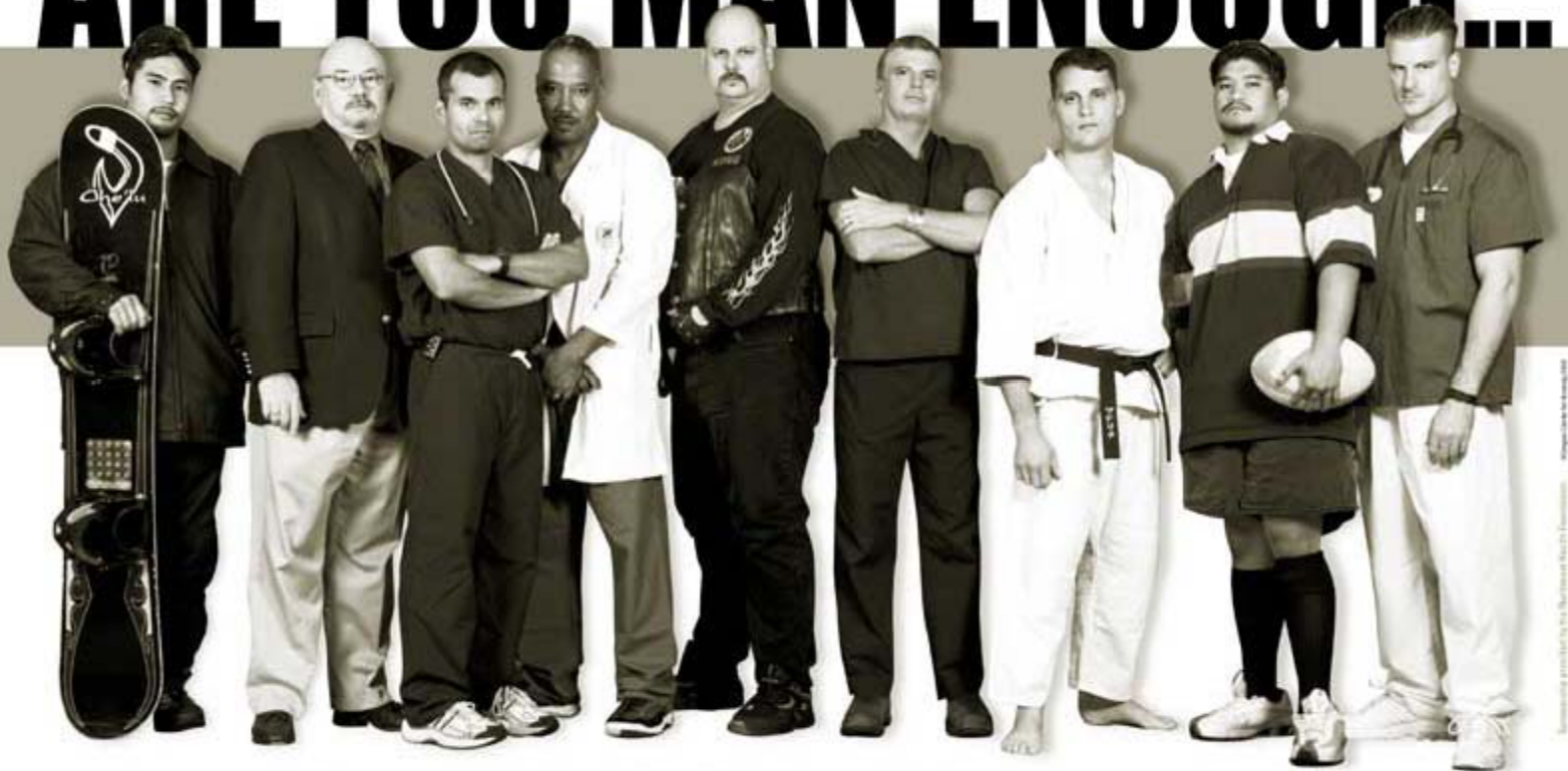
Sandra Lea RN, CNOR  
Director of Outpatient  
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of Nursing  
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**Yuri Chavez RN, CRNA**  
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# Questions?

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