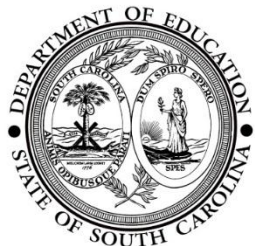


CATE NONTRADITIONAL DATA: The Good, the Bad, and the Ugly

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2011 Education and Business Summit

AGENDA

- **General Data Analysis**
- **Nontraditional Training and Employment**
- **Nontraditional Programs – South Carolina**
- **Nontraditional Performance & Data Analysis**
- **LEA Challenges and Strategies**
- **Session Review, Next Steps, and Evaluation**

DATA ANALYSIS

DATA ANALYSIS

- **Gathering**
- **Examining**
- **Cleaning**
- **Transforming**
- **Reviewing**



DATA ANALYSIS: THE GOOD

- **Answer questions and make comparisons regarding student and program performance**
- **Identify trends and patterns**
- **Make informed data-driven decisions**
- **Direct policy and improvement strategies**
- **Evaluate efforts**

DATA ANALYSIS: THE BAD

- **Inaccurate, invalid, and unreliable data**
- **All questions are not answered**
- **Insufficient data analysis**
- **Ignoring data that is not liked or understood**





NONTRADITIONAL TRAINING & EMPLOYMENT

NONTRADITIONAL TRAINING & EMPLOYMENT

Occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

NONTRADITIONAL PROGRAMS

(SOUTH CAROLINA)

NONTRADITIONAL PROGRAM LIST: FEMALES

- ‡ Agricultural Mechanics & Technology
- ‡ Air Conditioning & Refrigeration Technology
- ‡ Architectural/Mechanical Design
- ‡ Automotive Collision Repair Technology
- ‡ Automotive Technology
- ‡ Building Construction Cluster
- ‡ Cabinetmaking
- ‡ Carpentry
- ‡ Communication Electronics
- ‡ Core Electronics
- ‡ Diesel Engine Technology
- ‡ Electricity
- ‡ Emergency & Fire Management Services
- ‡ Environmental & Natural Resources Mgmt
- ‡ General Management
- ‡ Horticulture
- ‡ Industrial Electronics
- ‡ Information Support and Services
- ‡ Law Enforcement Services
- ‡ Machine Technology
- ‡ Masonry
- ‡ Mechatronics Integrated Technologies
- ‡ Metal Fabrication
- ‡ Networking Systems
- ‡ Plant and Animal Systems
- ‡ Plumbing
- ‡ Programming & Software Development
- ‡ Pre-Engineering (Project Lead The Way)
- ‡ Small Engine Technology
- ‡ Welding Technology

NONTRADITIONAL PROGRAM LIST: MALES

- ‡ **Administrative Services**
- ‡ **Cosmetology**
- ‡ **Early Childhood Education**
- ‡ **Food Science and Dietetics**
- ‡ **Nail Technology**

NONTRADITIONAL PERFORMANCE AND DATA ANALYSIS

NONTRADITIONAL PARTICIPATION (6S1)

➤ Measurement Definition

Denominator

Total number of concentrators enrolled in CATE programs identified as leading to nontraditional training and employment

Numerator

Total number of concentrators of the underrepresented gender enrolled in CATE programs identified as leading to nontraditional training and employment

➤ Districts and multi-district centers

| | FY10 | FY11 | FY12 | FY13 |
|---------------------------------|--------|--------|--------|--------|
| South Carolina Performance Goal | 15.40% | 14.00% | 14.20% | 14.40% |

SC NONTRADITIONAL PERFORMANCE

Performance Summary 2009-10 Nontraditional Participation (6S1)

| | NUM | DEN | Actual Statewide Perf | State Perf Goal | Met Perf Goal | 90% of State Perf Goal | Met 90% of Perf Goal |
|--------------------|-------|-------|-----------------------------|-----------------------|---------------------|------------------------------|-------------------------------|
| Grand Total | 1,257 | 9,070 | 13.86% | 15.40% | No | 13.86% | Yes |
| Male | 138 | 6,247 | 2.21% | 15.40% | No | 13.86% | No |
| Female | 1,119 | 2,823 | 39.64% | 15.40% | Yes | 13.86% | Yes |

NONTRADITIONAL DATA ANALYSIS

Performance Summary 2009-10 Nontraditional Participation (6S1)

| Gndr | Cluster and Program | Num | Den | Perf | Met PG (15.40%) | Met 90% PG (13.86%) |
|------|---|-----|-----|--------|--------------------|------------------------|
| F | AGR: Plant and Animal Systems | 200 | 341 | 58.65% | Yes | Yes |
| F | ARC: Electricity | 15 | 322 | 4.66% | No | No |
| F | LAW: Law Enforcement Services | 119 | 295 | 40.34% | Yes | Yes |
| F | MAN: Machine Technology | 8 | 219 | 3.65% | No | No |
| F | STM: Project Lead The Way | 84 | 820 | 10.24% | No | No |
| F | TRA: Automotive Collision Repair Technology | 27 | 370 | 7.30% | No | No |
| M | BUS: Administrative Services | 104 | 219 | 47.49% | Yes | Yes |
| M | EDU: Early Childhood Education | 16 | 531 | 3.01% | No | No |

NONTRADITIONAL COMPLETION (6S2)

➤ Measurement Definition

Denominator

Total number of 12th grade concentrators of the underrepresented gender enrolled in CATE programs identified as leading to nontraditional training and employment

Numerator

Total number of 12th grade concentrators of the underrepresented gender who completed CATE programs identified as leading to nontraditional training and employment

➤ Districts and multi-district centers

| | FY10 | FY11 | FY12 | FY13 |
|---------------------------------|--------|--------|--------|--------|
| South Carolina Performance Goal | 91.00% | 75.00% | 75.50% | 76.00% |

SC NONTRADITIONAL PERFORMANCE

Performance Summary 2009-10 Nontraditional Completion (6S2)

| | NUM | DEN | Actual Statewide Perf | State Perf Goal | Met Perf Goal | 90% of State Perf Goal | Met 90% of Perf Goal |
|--------------------|-----|-----|-----------------------------|-----------------------|---------------------|------------------------------|-------------------------------|
| Grand Total | 520 | 700 | 74.29% | 91.00% | No | 81.90% | No |
| Male | 36 | 62 | 58.06% | 91.00% | No | 81.90% | No |
| Female | 484 | 638 | 75.86% | 91.00% | No | 81.90% | No |

OUR PLAN...IN SEARCH OF THE UGLY

- **Part 1 – Performance by Program**
 - ◆ Calculated performance for all nontraditional programs
 - ◆ Identified programs not meeting performance goals

- **Part 2 – Performance by Districts/Centers and Program**
 - ◆ Calculated performance by district/center and program
 - ◆ Identified programs within districts/centers not meeting performance goals

- **Part 3 – Performance by Program and District/Center**

NONTRADITIONAL DATA ANALYSIS

Performance Summary 2009-10 Nontraditional Participation (6S1)

| Gender | Cluster and Program | Num | Den | Perf | Met PG (15.40%) | Met 90% PG (13.86%) |
|--------|-------------------------------|-----|-----|--------|--------------------|------------------------|
| F | AGR: Plant and Animal Systems | 200 | 341 | 58.65% | Yes | Yes |
| M | BUS: Administrative Services | 104 | 219 | 47.49% | Yes | Yes |

Performance Summary 2009-10 Nontraditional Completion (6S2)

| Gender | Cluster and Program | Num | Den | Perf | Met PG (91.00%) | Met 90% PG (81.90%) |
|--------|-------------------------------|-----|-----|--------|--------------------|------------------------|
| F | AGR: Plant and Animal Systems | 49 | 87 | 56.32% | No | No |
| M | BUS: Administrative Services | 22 | 42 | 52.38% | No | No |

NONTRADITIONAL DATA ANALYSIS

| Performance Summary 2009-10 Nontraditional Completion (6S2) | | | | | | | All 12th Grade Concentrators | | |
|--|-------------------------------|-----|-----|--------|--------------------|------------------------|------------------------------|-----|-----------|
| Gen | Cluster and Program | Num | Den | Perf | Met PG (91.00%) | Met 90% PG (81.90%) | Num | Den | Comp Rate |
| F | AGR: Plant and Animal Systems | 49 | 87 | 56.32% | No | No | 80 | 146 | 54.79 % |
| M | BUS: Administrative Services | 22 | 42 | 52.38% | No | No | 69 | 112 | 61.61% |

BEYOND THE DATA



- **Shared data with staff members**
- **Program staff contacted LEAs to determine what the data could not show at face value**
- **Findings**
 - ◆ **Courses were not being offered for completion of the program** (*requirement of a state-recognized program*)
 - ◆ **Students were unable to take all of the courses needed to complete the program** (*other course requirements*)

LEA CHALLENGES AND STRATEGIES

FOOD FOR THOUGHT

CATE data should be working for you...

- **Go beyond data entry**
- **Calculate performance**
 - ◆ **Overall**
 - ◆ **By program and school**
- **Use data entered in PowerSchool**



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**The greatest value of a picture
is when it forces us to notice
what we never expected to see.**

— John W. Tukey, *Exploratory Data Analysis*