Preparing Underrepresented Students for Success in Non-traditional Occupations

Interpreting and Using State Perkins Data for Program Improvement

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Non Regulatory Guidance

**Numerator:**
Number of CTE participants from underrepresented gender groups who participated in a program that leads to employment in nontraditional fields during the reporting year.

**Denominator:**
Number of CTE participants who participated in a program that leads to employment in nontraditional fields during the reporting year.
Non Regulatory Guidance

**Numerator:**
Number of CTE concentrators from underrepresented gender groups who completed a program that leads to employment in nontraditional fields during the reporting year.

**Denominator:**
Number of CTE concentrators who completed a program that leads to employment in nontraditional fields during the reporting year.
Common Reporting Mistakes

• Failing to differentiate between participants and concentrators
• Basing measurement on differing programs across local providers
• Adding or deleting programs associated with nontraditional occupations over time
• Failing to clearly define special population categories
• Failing to distinguish among pathways within clusters
• Incorrect measure construction, for example…
  • Numerator: all students participating in/completing CTE programs identified as preparing students for nontraditional employment
  • Denominator: all students participating in/completing CTE programs
Data Analysis Strategy

• Sort district or college data by performance

What to Look For:

• Program outcomes that are:
  • Abnormally low or high
  • Invariant for a given district or college over time

• Student counts that are missing for:
  • Race-ethnicity or special population groups
  • Programs associated with nontraditional employment that are commonly found in most schools or colleges
Table 1: Performance by Indicator

**Analysis Purpose**
Assess how student performance differs across the Perkins measures based on…
- Provider type
- Nontraditional status
- Nontraditional gender

**Questions**
- How do underrepresented genders perform on the Perkins measures relative to other students?
- How do the underrepresented genders perform on the Perkins measures relative to other students, by provider type?
- How do underrepresented females and underrepresented males perform on the Perkins measures, by provider type?
Analysis Purpose
Assess how providers perform on the nontraditional measures based on...
• Year

Questions
• How consistent are individual provider outcomes over time for a given measure?
• How do individual providers perform on the participation and completion indicators over time?
• Do any providers stand out for above average or below average performance, and if so, why?
Tables 3 & 4: Provider Relative Performance

Analysis Purpose
Compare how providers perform on the nontraditional measures based on...
• Population size
• Current year
• Comparison to weighted state average performance

Questions
• How do provider performances compare?
• Do underrepresented student counts match district demographics?
• Which providers exhibit the highest and lowest performance?
• How do provider performances compare to statewide average?
• How far above or below the state average do providers perform?
Table 5: Performance by Program

Analysis Purpose
Assess underrepresented participation rates in programs identified as preparing students for nontraditional employment, based on...
• Population size
• Program type
• Program outcomes relative to labor force composition

Questions
• Which are the largest and smallest programs?
• Which programs have the highest participation rates? Lowest?
• Which programs are contributing to reducing inequality within the state?
Table 6: Performance within Programs

Analysis Purpose
Assess performances within specific programs identified as preparing students for nontraditional employment, based on...
• Population size
• Provider comparison to weighted state average performance
• Labor force participation rate

Questions
• Which are the largest and smallest programs?
• Which LEA have the highest participation/completion rates?
• Which LEA are contributing to reducing statewide performance?
• Which LEA are contributing to reducing inequality within the state?
Table 7: Top Performers

Analysis Purpose
Assess program performances within individual providers selected, based on...

- Population size within programs
- Provider performance relative to statewide average

Questions
- Which programs have the highest participation/completion rates?
- Which LEA are contributing to reducing statewide performance?
- Which LEA are contributing to reducing inequality within the state?
The CAR instructions report Risk Ratios for males and for females in all nontraditional programs.

**What are Risk Ratios?**

Provide a means for assessing males’ and females’ willingness to participate in programs nontraditional for their gender, as compared to students of the same gender in all nontraditional programs.

**CAR Reported Measure Construction:**

# underrepresented males in programs nontraditional for males
# male students in all nontraditional programs
What are Actual Participation Rates?

Provide a means for assessing males’ or females’ willingness to participate in programs that are nontraditional for their own gender.

Example of Measure Construction:

\[
\frac{\# \text{ underrepresented males in programs nontrad for males}}{\# \text{ students (males & females) in programs nontrad for males}}
\]

See handout for description of how to calculate this rate.
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