A Cross-State Comparison of Postsecondary CTE Student Graduation Rates and Completions: Determining the Efficacy of Using IPEDS Data for Perkins Reporting

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The Center Partners

Partner Organizations

- University of Minnesota
- Cornell University
- NOCTI
- University of Louisville
- SREB
- Clemson University
- ACTE
- AED
- State Directors

Academy for Educational Development

National Association of State Directors of Career Technical Education Consortium
The Center - RFP

Purpose . . . to carry out scientifically-based research and evaluation, and to conduct dissemination and training activities consistent with the purposes of the Act.
The RFP: Four Plans of Work

- Scientifically Based Research
- Professional Development
- Tech Assistance
- Dissemination
LOGIC MODEL

Variables:
- Education
- State LMI Variables
- National Variables

Steps:
1. Graduation Rates
2. Completion Rates
3. Projected Completions contributing to AGI Targets

Factors:
- Average Retention Rate
- Financial Aid
- Demographic variables
- Unemployment
- CC Governance Index
- New Economy Index
DATA SET

• Sample from 1,024 Two-year Title IV Colleges in 44 States.
  • Sample delimited to States with five or more public degree granting community colleges.

• Awards Included:
  • Associates degrees up to two years,
  • Certificates 1 – 2 years
  • Certificates 1 year or less
DATA SOURCES

- IPEDS Data Center (NCES/USDE)
  - (All education statistics)
- Bureau of Labor Statistics (USDOL)
  - (Labor Market Information).
  - Unemployment rate used is 4.5%
- Community College Governance Index (Lovell and Trouth, 2004).
- New Economy Index (Progressive Policy Institute)
Assumptions

- Unemployment rate remains at 4.5 percent
  - Same as base year 2006.

- Absolute rise in New Economy Index as a measure of Global Competitiveness.

- Independent and dependent variables are related linearly
Methodology: Simulation Exercise

- Regression #1: *Estimated Graduation Rates*

- Objective to obtain the predictive value for Graduation rates for each of 44 states.

- Regression analysis with Several IVs to predict DV: Graduation rates (First Time, Full Time)

- Selected IVs that were significant = <.10
Methodology

- **Regression #2: Estimating Completions**
- **Objective:** To predict completions per 1000 enrolled (Weighted across states)
- **DV:**
  - Completions/1000 enrolled students
- **IVs:**
  - Predicted Grad Rate
  - Community College Central Governance Index
  - New Economy Index (2008)
Methodology

- Trend Analysis: *Enrollment Projections*
- Used IPEDS projected enrollment to 2017
- Estimated the three subsequent years 2018/19/20.
- Used 2006 as Base year for prediction of 2020 Graduation rates
  - Go to Paper Handout
Results and Conclusions

- LMI is an important predictor of AGI success.
  - Higher unemployment rates which generally result in rising enrollments, predicts a decrease in completions.
  - *See Input Changes*¹

- Rising unemployment is a drag on completion rates.
  - Graduation rates variable is lower and completions remain unchanged
  - *See Input Changes*¹
Results and Conclusions

• Academic and student support important for raising graduation rates but impact on completions small
  • College improvements in Retention Rates, Financial Aid Awards, Percent First-Time Minority in All First time Students has an increasing but the effect is small if there is no reinforcement from a lower unemployment rate.
  • See Input Changes²

• Impact of Global Competitiveness (Absolute Rise in NEI)
  • Reinforcing effect on graduation rates and completions
  • See Input Changes³
Implications

- As enrollments rise, academic and student support become even more crucial for raising graduation rates and increasing completions.

- Lowered unemployment rates will provide positive externalities to college-led solutions for raising graduation and degree completion rates.

- Higher global competitiveness requires “right-skilling” that better matches education to employment but also requires managing the swirl that occurs between education and employment.
Limitations

- Not a structural model.
- Did not examine the enrollment status
  - Full-time vs. Part-time enrollment
  - Implications for Financial Aid awards which are currently limited to full-time students.
Next Steps

- Do analysis at the college level
  - Limitation: LMI may not be robust enough
- Reevaluate how effective governance is derived.
  - Centralization vs. non centralization
- Distinguish contributions of Certificates vs. Degrees.
Next Steps

- Critically analyze the concept of global competitiveness.
- Examine more deeply responsiveness of the community college system for the ensuring higher underserved graduation rates.
- Revisit the secondary to postsecondary pathways (POS) discussion.
Using IPEDS for Perkins: A Poor Fit?

- IPEDS focuses much of its data collection and reporting efforts on first-time, full-time students, a population that does not fully represent the postsecondary CTE populations that most states serve.
- The IPEDS data do not explicitly distinguish CTE data from the data collected for all programs.
- Information could be imputed from the program data submitted by colleges, but at an aggregate level making the calculations of Perkins performance measures difficult.
At present, only awards (completion) data are directly obtainable through IPEDS.

Enrollment and performance data are not directly available, nor can they be imputed from what is currently available within the IPEDS Data center http://nces.ed.gov/ipeds/datacenter.