# Defining and Measuring Postsecondary Value

Robert Kelchen

**Professor and Department Head** 

University of Tennessee, Knoxville

rkelchen@utk.edu

# Why value? Why now?

- Public perception of higher education is slipping
- Concerns about rising affordability...even though tuition increases mostly stopped a decade ago
- State budgets are becoming tighter
- Need to justify higher education funding, so focusing on value/ROI is one way to do it

# Today's talk

- Big philosophical questions about measuring value/ROI
- Potential metrics and approaches
- Nitty-gritty of particular data sources

# Four big philosophical questions

- Private ROI versus public ROI
- Institution-wide metrics versus by field of study
- Debt versus earnings
- How long to wait after college to measure outcomes?

# Private vs. public ROI

- Individual return on investment much more about debt and earnings
- Public return on investment includes other items:
  - Do graduates stay in state?
  - Do colleges produce people in high-need fields, regardless of pay (teaching, social work, nursing, etc.)?
  - Do individuals rely on public benefits?
  - Is there civic engagement and social cohesion?

#### How to measure outcomes

#### Institution-level outcomes

- Includes most/all undergraduate students
- Can adjust for mix of majors
- One single measure to examine
- Often not the measure students/families/policymaker s want

#### Program-level outcomes

- Typically graduates only
- Can break out by credential level
- Cell sizes become an issue, but can roll up CIP codes/years
- How much can programs control outcomes?

# Debt versus earnings

- Many states focus heavily on limiting student debt (caps/curbs on tuition increases, annual debt notification letters)
- But is more debt okay if it helps students get through faster and access more lucrative majors?
- And how should PSLF-eligible fields be taken into account?

#### When to measure outcomes

- Shorter-term outcomes may better reflect what colleges are doing right now as well as current student demographics
- But longer-term outcomes may better reflect overall value to individuals and communities
- College leaders and politicians often have short time horizons, and faculty and staff often try to wait them out

# Potential metrics to consider

- Completions (especially by field of study)
- Employment
- Earnings
- Debt/loan repayment
- Return on investment

# Number of completions

- Traditional model to include in state higher education funding models, and enrollment-based funding models get at this in part
  - Also common to provide funding based on delivery costs
- Some states limit funding to credentials earned by state residents
- Logic model: Graduates tend to do better than non-graduates, so incentivize completions
  - Challenge: <u>Performance</u> or <u>other funding</u> models rarely affect completions in a meaningful way

# Completions by field of study

- Some examples (from InformEd States data collection):
  - Indiana: Funding based on STEM completions
  - <u>Kentucky</u>: STEM and health degrees
  - Louisiana: Free two-year college in five industry sectors
  - <u>Nevada</u>: STEM, health, business, and skills certificates
  - <u>Utah</u>: Fields that map onto four/five-star jobs, as defined by the state
  - <u>Wisconsin</u>: Tech colleges evaluated on top 50 occupations with heavy employer demand (including childcare workers and truck drivers)

### **Completions data sources**

- IPEDS, by six-digit CIP code and credential
  - Data on second majors seems to be iffy
  - No data on noncredit programs
  - Cannot break down by modality (if of interest)
- State longitudinal data systems (SLDS)
  - Details vary considerably across states, especially coverage for nonpublic institutions

#### **Completions data considerations**

- How to develop list of priority fields—based on private or public benefits?
- Weights for different fields of study and credential lengths
- Enrollment versus performance funding models
- Lots of variation within STEM (e.g., biology)

### **Employment metrics**

- Related to conversations on high-demand fields, but apply across all fields of study
- Growing importance in recent years in state funding models
- Ties to repeated federal pushes for gainful employment metrics
- Focus is rarely on employment in field tied to the credential earned

## Examples of employment metrics

- <u>Kansas</u> (some community colleges): Share of graduates working in-state or continuing their education
- <u>Tennessee</u> (community colleges): Job placements (details unknown)
- <u>West Virginia</u> (four-years): Graduates earning wages in state or continuing their education
- Wisconsin (tech colleges): Self-reported employment rates and whether employment tied to field of study six months after graduation

#### Employment data sources

- State workforce data systems
- Statewide surveys of graduates
- Institutional surveys of graduates

#### Employment data considerations

- How detailed is the statewide UI system? Are certain professions excluded?
- Are there resources to do quality student surveys?
- How should people enrolled in higher-level credentials be treated?

# Earnings metrics

- Typically take one of two forms:
  - Threshold-based approach: earning above a certain amount
  - Median earnings
- Can also consider percentile-based approaches (e.g., 25<sup>th</sup> percentile)
- Can be measured for graduates or all students, depending on the approach

### Examples of earnings metrics

- <u>California</u> (community colleges): Earning the regional living wage
- <u>Florida</u> (four-years): Median wages at or above \$43,200 one year after graduation
- <u>Kansas</u> (some community colleges): Increased wages of students hired over previous 3-year average
- <u>Texas</u> (technical colleges): Earnings of graduates through Returned Value Formula (receive a commission on earnings)

#### Earnings data sources

- State workforce data systems
- College Scorecard (federal aid recipients only)
  - 1-5 years post-completion at the program level (4-digit CIP, OPEID)
  - 6-10 years post-entry at the institution level (undergraduates only)
  - Covers most employment
- <u>Post-Secondary Employment Outcomes</u> dataset (Census)
  - Measured 1, 5, and 10 years post-graduation
  - Covers nearly all employment (2/4-digit CIP, OPEID)
  - Conditional on full-time employment

#### PSEO data coverage

**PSEO Coverage Map** 



#### Earnings data considerations

- Where to set a threshold—is the goal high earnings or staying out of poverty?
  - Does this vary by field of study/credential level?
- What are the limitations of data coverage?
- How should those with zero/minimal earnings be handled?
- When should earnings be measured?
- Should this include all students, or just graduates?

## Debt/loan repayment metrics

- Can examine the percentage of students taking on debt, average/median debt of borrowers or both
  - Federal student loans, private loans, or parent loans
- Loan repayment metrics could include cohort default rates, share of students paying down principal, or share current on payments
  - But harder to think about until student loans get back to whatever the new normal is!

### Examples of debt/loan repayment metrics

- <u>North Carolina</u> (four-year): Debt at graduation for first-time and transfer students
- <u>Wisconsin</u> (four-year): Debt at graduation
- Not aware of any others—please send them along!

#### Debt/loan repayment data sources

- College Scorecard: Federal debt at completion, cohort payment status data, cohort default rates
  - Have federal undergraduate, graduate, and parent debt separately
- State longitudinal data systems: Debt that colleges are aware of (including most private debt)

# Debt/loan repayment data considerations

- Loan repayment metrics are rather limited, as states likely won't have access to much data
- How to address debt incurred for living expenses?
- Should parent debt be considered?
- Should Public Service Loan Forgiveness be addressed?

# **Conceptualizing ROI**

- Quite a few states have metrics in several of the above categories
- But metrics that combine categories are relatively unusual
- Prominent federal example is gainful employment—based on a debt-to-earnings metric at the program level
- Can also consider ROI metrics that are more qualitative in nature or get at public mission of higher education

# Example ROI metric

- 5% of <u>Michigan's community college performance funding</u> formula based on "local strategic value," including:
  - Providing on-site training for businesses
  - Provides facilities for cultural enrichment of the community
  - Operates an advanced technology center
  - Has partnerships with public universities
- Seems like colleges always get the money, but these are interesting ideas

# Big questions to consider

- What are your values for public higher education?
- What is the capacity of your SLDS? What are the limitations?
- To what extent are ROI metrics within colleges' control?
- Is the goal providing information to the public, or is it aligning state funding with policy goals?
- How can you guard against unintended consequences in funding/financial aid models?

#### For more information

- More data coming soon at informedstates.org
- Please reach out with any questions about potential metrics and limitations
- <u>rkelchen@utk.edu</u>