

Aligning Postsecondary Outcomes and Workforce Needs



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A Little Framing

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- Official projections tend to underestimate rising demand for education and skills, which are increasingly necessary in the globally competitive knowledge economy.
- Education programs (CIP) and specific occupations (SOC) are loosely coupled.
- Little attention beyond immediate or initial employment.
- Limits of the pipeline analogy
- More education → higher wages, more geographic mobility
- Fastest growing populations face pervasive educational attainment gaps and are more heavily concentrated in low-wage jobs and stagnating industries.
- Caveat: Not all the worthwhile outcomes of a postsecondary education can be measured with a narrow focus on workforce.



Some Snapshot Indicators of Human Capital Development

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Institutional Graduation Rates

FTFT students beginning at 4-year institutions in 2002	55.9%
FTFT students beginning at 2-year institutions in 2005	30.5%

Student Graduation Rates

All 2003 entering students who earned a BA in 6 years	30.7%
All 2003 entering students who earned an AA or credential in 6 years	18.7%

Adult Education

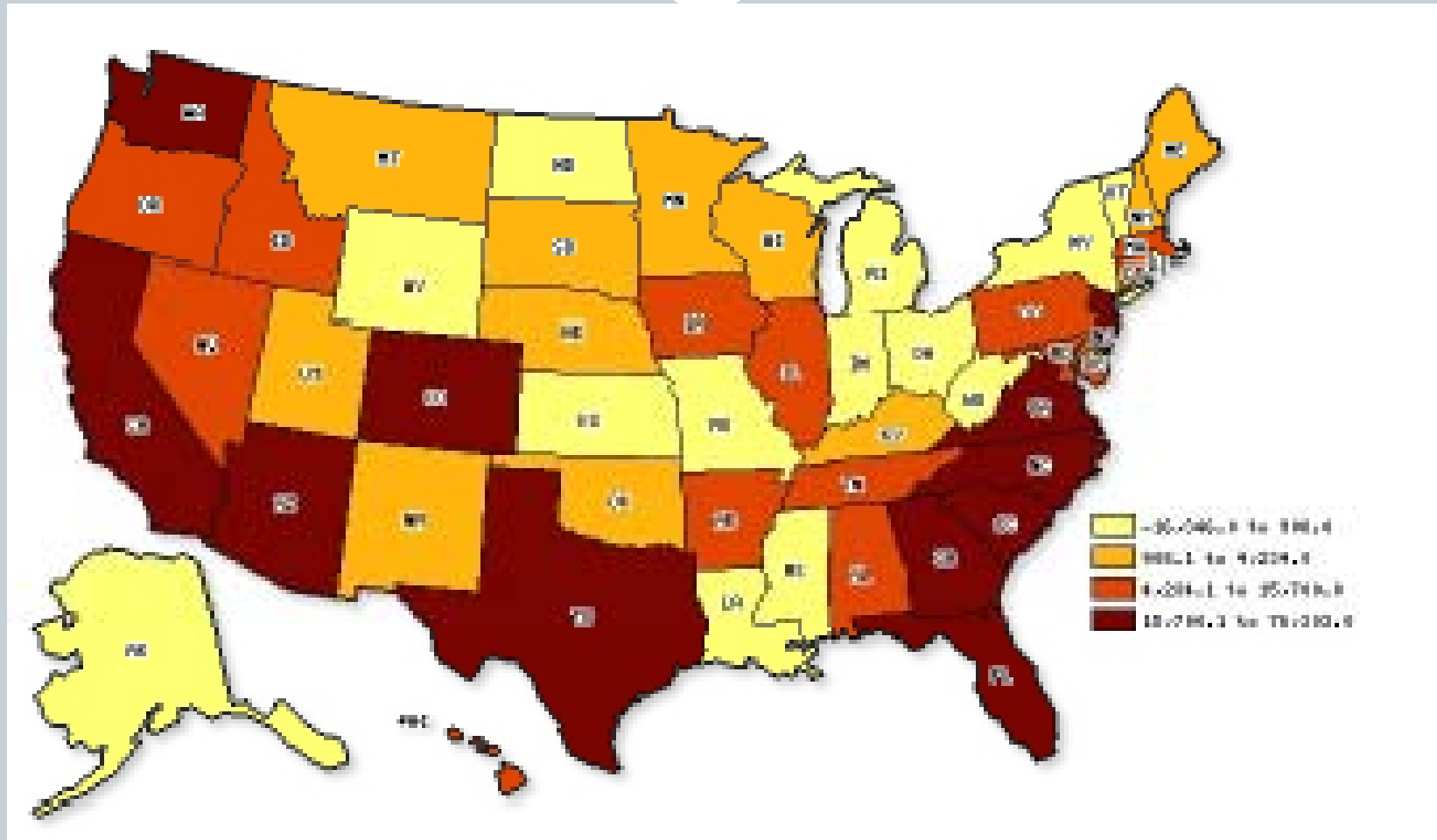
25-64 year olds who enrolled in formal programs leading to a degree/credential at colleges over a 12 month period in 2004-05	6.1%
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Notes: Institutional graduation rates are calculated only for full-time students who graduated from the same institution where they began their postsecondary work. "FTFT" means full-time, first-time. Student graduation rates are calculated for a nationally representative sample of students and track them without regard to where they enroll.

Sources: NCES, *Enrollment in Postsecondary Institutions, Fall 2008; Graduation Rates, 2002 and 2005 Cohorts; and Financial Statistics, Fiscal Year 2008: First Look*, Apr. 2010, Table 5; NCES, *Persistence and Attainment of 2003-04 Beginning Postsecondary Students: After 6 Years*, Dec. 2010, Table 1; National Household Education Survey.

Net Migration by State, 22-64 Year Olds With and Associate's Degree or Higher, 2007

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Source: NCHEMS, higheredinfo.org

Environmental Incentives/Pressures for Better Student Unit Record Systems

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State Fiscal Stabilization Fund (SFSF)

Desire for Better P-20 Alignment

National and State Attainment Goals

More Emphasis on Productivity

Complete College America

Race to the Top

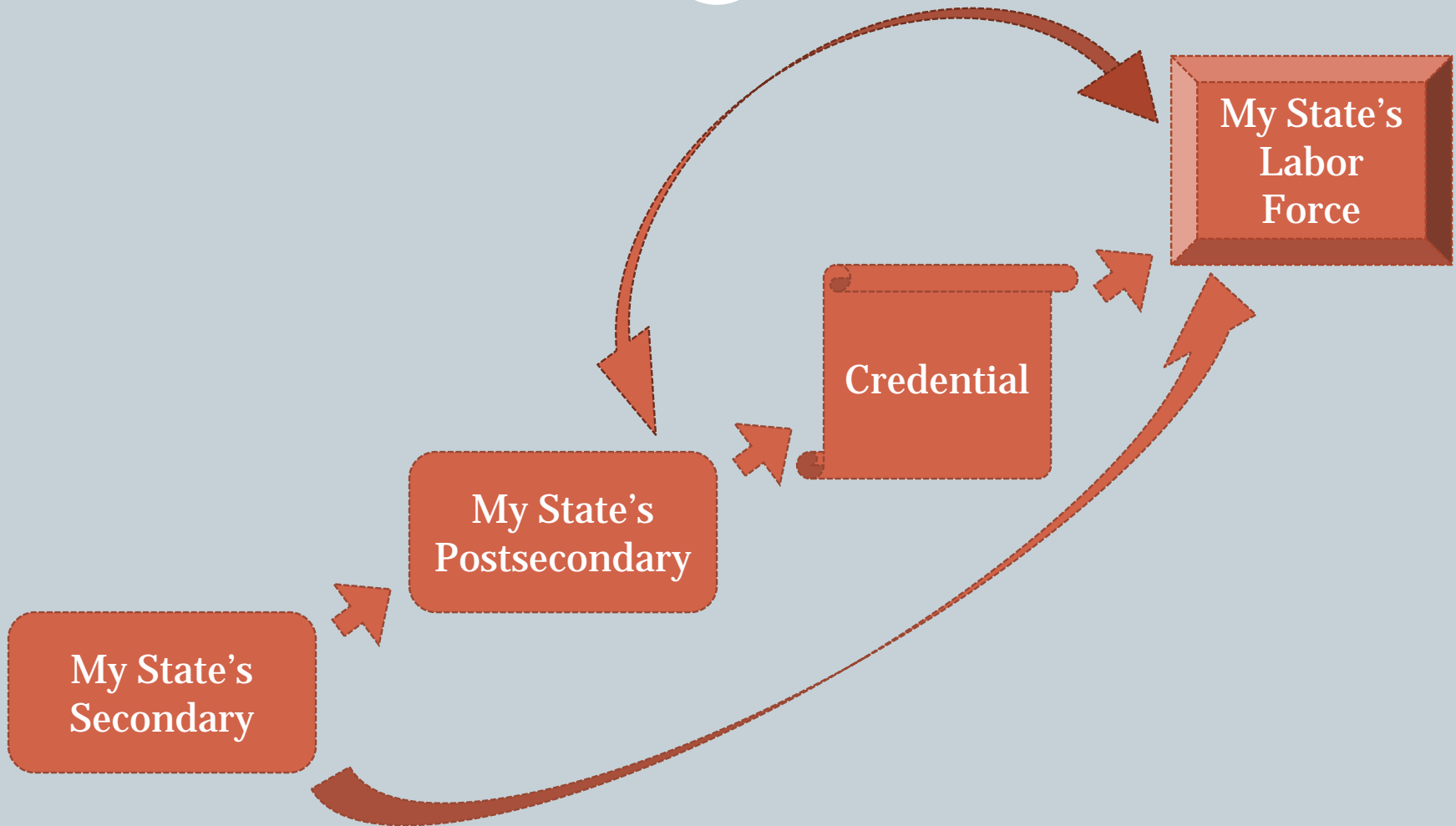
Greater Institutional Accountability

Desire for More Targeted Investment Strategies

SLDS/WDQI Grants

More Comprehensive Information Through Longitudinal Data (Part I)

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Longitudinal Data's Principal Contributions to Research on Education and the Workforce

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- **Indicators of Progress and Outcomes**
 - Postsecondary performance for remediated students, dually enrolled students, etc.
 - Milestone achievement
 - Completion of degree/certificate
 - Workforce outcomes
 - Linkage between supply of educated individuals and workforce needs
- **Disaggregation**
- **Non-Sequential Contact with Formal Education**
 - Delayed entry
 - Concurrent workforce participation
 - Returning workforce participants

Four “Master” Questions

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1. How are former high school students performing in post-secondary education?

- Within a certain time period?
- By school/institution attended?
- By key demographics (race/ethnicity, gender)?
- By type of curriculum?
- By level of readiness?
- By “departure condition” (diploma, GED, no award)?
- By different postsecondary enrollment conditions (financial aid awardee, full-time/part-time)?
- By different postsecondary completion outcomes?

2. How are former high school students performing in the workforce?

- Within a certain time period?
- By key demographics (race/ethnicity, gender)?
- By characteristics of school attended?
- By type of high school curriculum?
- By industry of employment?
- By region within state?
- By “departure condition” (diploma, GED, no award)?



Four “Master” Questions

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3. How are former postsecondary students performing in the workforce?

- Within a certain time period?
- By key demographics (race/ethnicity, gender)?
- By characteristics of institution attended?
- By field of postsecondary study (CIP code)?
- By industry of employment?
- By region within state?
- By different departure conditions (graduated/not graduated, number of postsecondary credits earned)?

4. How are current and former workforce participants accessing formal education systems?

- Within a certain time period?
- By key demographics (race/ethnicity, gender)?
- By characteristics of institution attended?
- By field of postsecondary study (CIP code)?
- By industry of employment?
- By region within state?
- By educational attainment level?



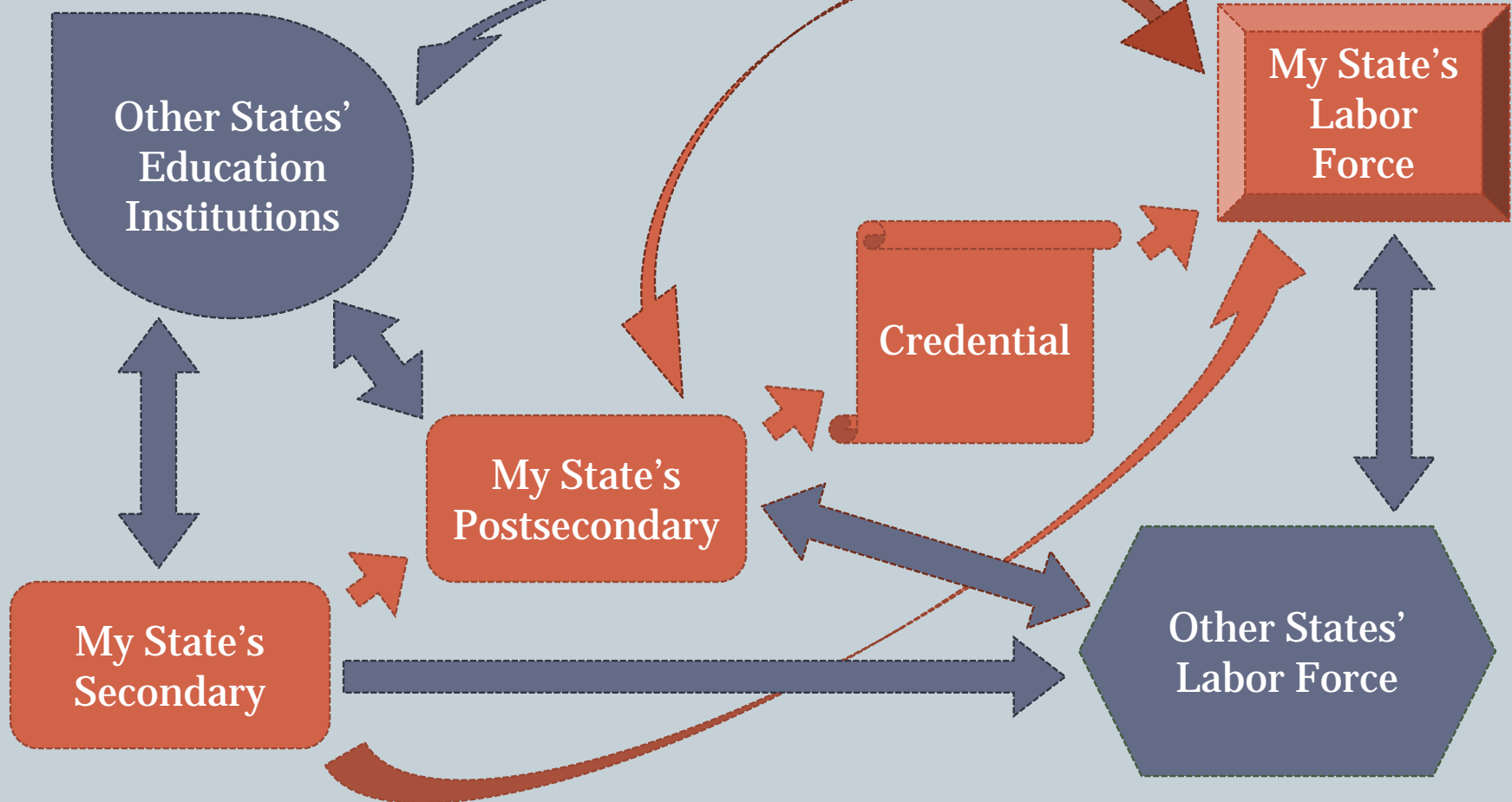
Selected Examples of Research Using Longitudinally Linked Data

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- **NCHEMS four-state study findings**
 - Graduation rates improved by measurable amounts by accounting for student movement among four states
- **WICHE/CUE analysis of Nevada student progress**
 - Pinpointing where leakage is concentrated for underrepresented student populations
- **Washington SBCTC's Tipping Point study**
 - One year of postsecondary coursework is the “tipping point” for meaningful wage gains
- **ADARE study of Maryland teacher education**
 - Teacher placement and retention for recent program graduates in Maryland and adjacent states.

More Comprehensive Information Through Longitudinal Data (Part II)

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WICHE's Pilot Data Exchange

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- Underway as of Summer 2010
- Four initial participating states:
 - Washington
 - Oregon
 - Hawaii
 - Idaho
- Principle goal: to inform public policy by exchanging data spanning secondary education, postsecondary education, and workforce data in multiple states in order to enable more comprehensive analyses of the development and flow of human capital.

Five Types of Policy Questions

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1. What proportion of students beginning college in Oregon earn a bachelor's degree in six years?

	K-12 Sector	Postsecondary Sector	Workforce
WA			
OR		①	
ID			
HI			

2. What proportion of students completing high school in Hawaii enroll in college in that state within a year?

	K-12 Sector	Postsecondary Sector	Workforce
WA			
OR			
ID			
HI		②	

Five Types of Policy Questions

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3. What proportion of high school graduates in Washington complete college within 10 years and are earning \$35,000 or more per year?

	K-12 Sector	Postsecondary Sector	Workforce
WA		3	
OR			
ID			
HI			

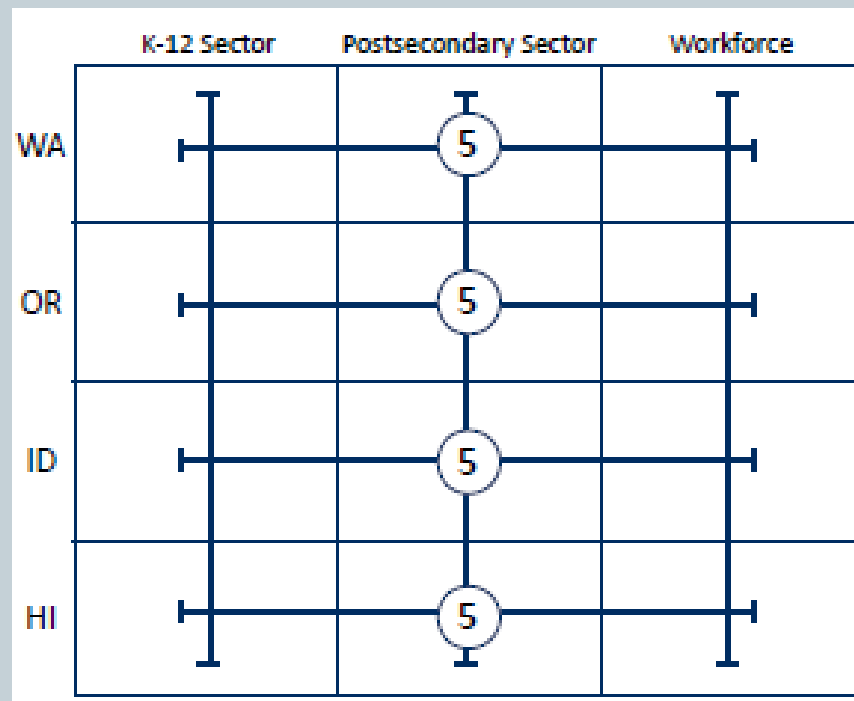
4. What proportion of students who were enrolled in college in Idaho in a given year are enrolled in Washington, Oregon, or Hawaii the next year?

	K-12 Sector	Postsecondary Sector	Workforce
WA			
OR			
ID		4	
HI			

Five Types of Policy Questions

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5. What proportion of students who complete high school in Washington also complete at least an associate's degree and are employed in the aeronautics industry in the state or in Idaho, Oregon, or Hawaii?



Investigating the Workforce-Education Nexus

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- Unemployment
- Wage premium
- Mobility among employers/industries and states
- Rates of return to acquire further education

- Disaggregations
 - Student characteristics (race/ethnicity, age, etc.)
 - Program of study
 - Institutional type
 - Employer industry
 - Geography

Common Issues in SLDS Development

(and, by extension, WICHE's multistate exchange project)

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- Governance
- Confidentiality (FERPA)
- Common data element definitions
- Effective use
- Transactional vs. research purposes
- Balancing “good enough” and “perfect” information
- Accountability vs. formative evaluation
- Short-term vs. long-term analytical frames and the availability of data going back in time
- Limitations of workforce information

- And, adding multiple states to the mix:
 - Unequal sophistication among state data systems
 - Participation is altogether voluntary, so governance looms even larger

Questions?

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