

Linking Data Across States:
The Multistate Longitudinal
Data Exchange



IPEDS Coordinator Workshop and
State Data Conference
April 26, 2016 – Arlington, VA



Overview

- Background and need
- The data environment
- The MLDE
 - Results so far
 - Expansion plans
 - Envisioned uses
 - Limitations
- Questions and Discussion



WHY ARE WE HERE?



Why we're here

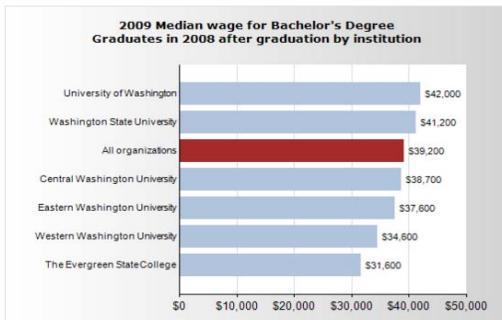


Why we're here

- How can we better use data to improve the education and employment prospects of the students we serve?



Data, data, everywhere



Source: WA ERDC



Home | Comments Policy



23 four-year schools with low costs that lead to high incomes

One of the biggest concerns about college that students and families have is the costs of attending—and the possible opportunities it could create for their careers. Check out 23 four-year institutions of higher education that have demonstrated both high earnings, as well as low costs for their lowest-income students.

Institution	Median Earnings of Students 10 Years After Entering the School	Average Net Price for Low-Income Students
Amherst College	\$56,800	\$3,739
Bowdoin College	\$54,800	\$6,731
Brown University	\$59,700	\$6,104
Columbia University in the City of New York	\$72,900	\$5,497
Dartmouth College	\$67,100	\$7,648
Duke University	\$76,700	\$6,280
Georgia Institute of Technology-Main Campus	\$74,000	\$7,875
Hamilton College	\$57,300	\$7,245
Harvard University	\$87,200	\$3,386
Haverford College	\$55,600	\$5,648
Massachusetts Institute of Technology	\$91,600	\$6,733
Massachusetts Maritime Academy	\$79,500	\$7,519

Data, data, everywhere



- For the most part, we don't need new collections of data
- Key issues:
 - Linkages/combinations of existing datasets
 - Appropriate access to existing data
 - Privacy and security
 - What do we do with all of this information?

Fundamental questions

How are the data we collect, clean, share, and analyze being used?

THE ANSWERS TO THIS QUESTION ARE CRUCIAL TO FIGURING OUT WHAT, IF ANY, CHANGES ARE NEEDED IN OUR DATA INFRASTRUCTURE

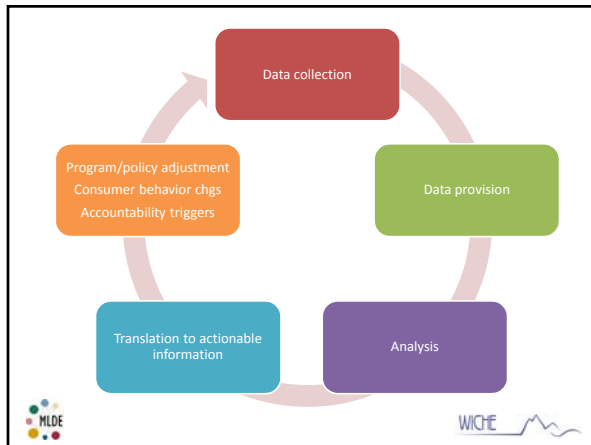



Fundamental questions

How are the data we collect, clean, share, and analyze being used?

- Consumer information
- Accountability regimes
- Policy and program improvement





One problem

- State data systems: Bound by state borders
- Students, workers, and firms: Not so much

Consumer information, data for policy improvement, and accountability measures can be based on incomplete data



One potential solution



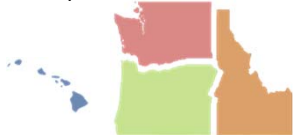
Simply put...

- A data resource that links existing state education and employment data systems
 - Provides individual-level, identifiable data to participating states on students they have served
 - Requires states provide the same to other participants
- Expanding to 10-15 states in 2016



How did we get here?

- Four-state pilot: 2010-2014



Key principles

- A *data exchange*, not a *data collection*
 - Data must be provided back to participating states at the individual level



Key principles

- MLDE produces *research datasets* and is not intended for transactional uses
 - Research and evaluation should target transition points in the education and employment pipeline.



Legal mechanisms

- Two key relationships:
 - State education agencies designate WICHE (and each other) as “Authorized Representative” under FERPA
 - Employment agencies designate WICHE as agent/contractor



Pilot results

- High school graduates, 2005
- First time postsecondary enrollees, 2005-06

- 192,000+ individuals

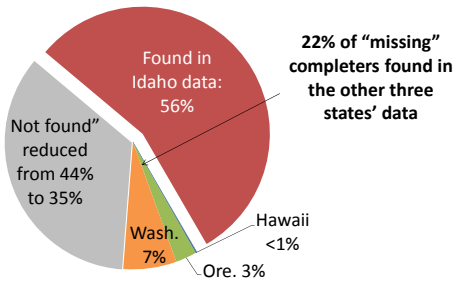


The “meta”-question

- Do the data tell us anything meaningfully different from existing data sources?
 - Can MLDE find those who are “missing” from state data systems?
 - Are their outcomes meaningfully different?



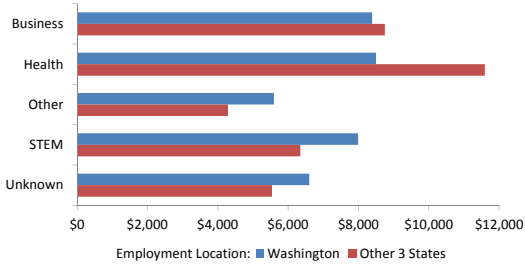
Uncertainty About Employment Outcomes Reduced by 22% in Idaho



Notes: 3,158 students who received associate's or higher award from an institution in Idaho by Dec. 2010 and had a valid SSN



Median Wages of Washington Bachelor's Degree Earners by CIP Field and Employment Location



Note: These data only apply to students captured in the original cohort definitions and who completed an associate's degree or higher by Dec. 2010 and who were not simultaneously enrolled. Employment was measured 10-12 months after receipt of award.

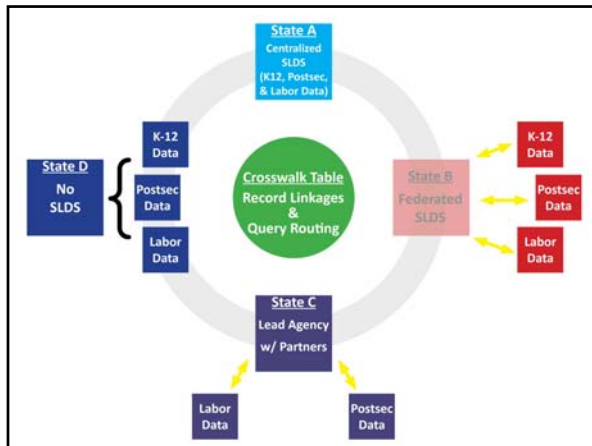
MLDE 2.0: EXPANSION, USE, AND SUSTAINABILITY

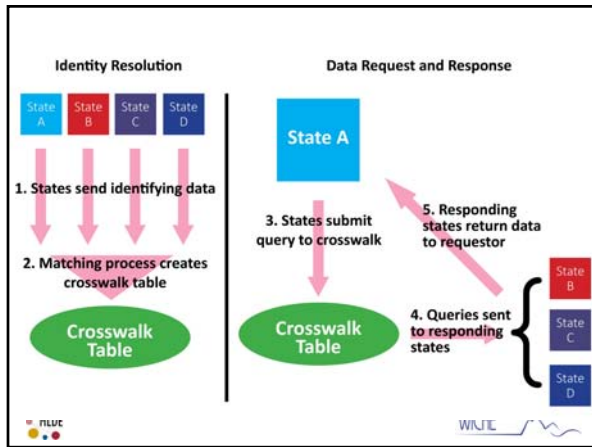
MLDE WICHE

Additional key principle

- *State ownership and control of data, as well as security and privacy protections, trump efficiency, cost, and ease of use*
 - Easiest process: Create a giant database with all education and employment records with queries that automatically pull data
 - Actual process: Federated model with state control over exchanged data

MLDE WICHE





What states get back

- Individual-level, “re-identifiable” data
- “Decoder ring” to link back to their own SLDS or other data systems
 - Restrictions on additional redisclosure
 - Opens up a much wider range of variables, disaggregates, etc.

Deidentified dataset

- “Common” dataset limited to those elements agreed to in the exchange
- States direct research agenda
- WICHE carries out research



Uses: Standard

- Postsecondary access, progression, success
 - Effect of preparation
 - Effect of state/district/institutional policies and programs
 - Time to degree by different cohort definitions
 - Remediation/developmental rates (!)
 - Broad range of disaggregates
- Return on investment
 - Median wages by program
 - Longitudinal studies of wages
 - Employment stability and wage growth



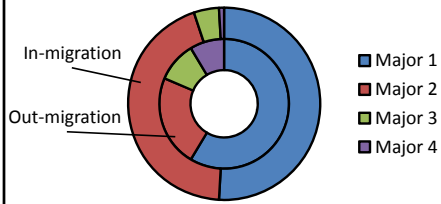
Non-standard Uses

- Measuring “career readiness”
 - Wages as pct. of industry avg.?
 - 4 quarters of stable employment?
 - 4 quarters of employment with same firm?
- Mobility-specific questions
 - Who goes where and why?
 - How do state policies to produce, retain, and attract talent work?
 - What is the balance of trade among states by field?

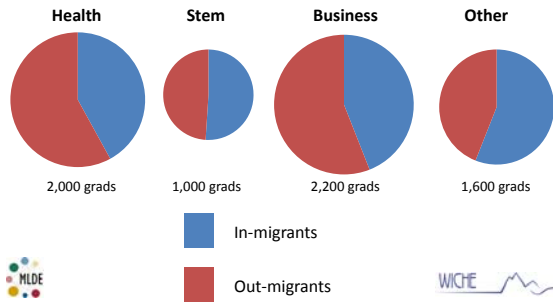


Hypothetical research—Balance of Trade

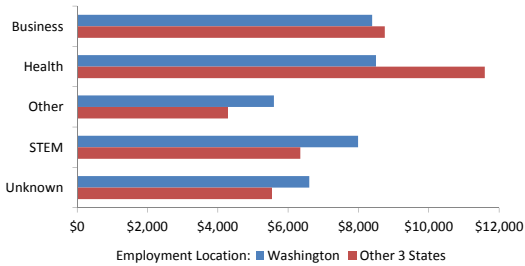
What is the education and training of in-migrants to your state compared to out-migrants?



Hypothetical research—Balance of Trade



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Other questions & research avenues

- Economic outcomes for stop-outs
- Incorporating workforce demand
- Student debt vs. earnings
- Workforce training programs
- Linkages/confirmations with workforce demand data



SUSTAINABILITY



Three pillars

Governance

Use

Funding



Costs

- State staff burden for participation
- Gates funding through 2018
- Estimate: \$500,000-\$600,000/year



Limitations and challenges

- Value dependent on who else participates
- SLDS sustainability
- UI data limitations
- Trust and relationships
- Shifting public and political environment
- Data cleanliness
- Policy responses



QUESTIONS AND DISCUSSION



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