Virginia’s Longitudinal Data System

May 21, 2014
Background on VLDS

- Funded by a 2009 ARRA Grant from USED
- Staff from seven agencies wrote the grant; VDOE submitted
- Goal was to merge data from K–12 to Higher Ed and Workforce
- Vision was to build a system that was extensible to other agencies in the future
Continued Background on VLDS

- Initial challenges were legal barriers and establishing data governance in a multi-agency environment
- A subsequent DOL grant brought Adult Ed and Workforce agencies into the conversation
- “Go live” in September 2013
- Adopted by the Nevada Department of Education
Challenges/Solutions

- Legal barriers
  - in VA, data from different agencies cannot be comingled in a single data store
- A federated model was approved by the Attorney General
- Governance
  - an 18-month process that ran concurrent with building the system
- Agreed on a consensus model, one vote each
- Used a neutral third-party to facilitate conversations
Agencies Providing Data

- Department of Education (K–12 and Adult Education)
- State Council on Higher Education for Virginia
- Virginia Community College System
- Virginia Employment Commission
- Virginia Department of Social Services (soon)
- Department of Aging and Rehabilitative Services (soon)
- Department of Labor and Industry (soon)
How It Works

- Probabilistic and deterministic matching
- Data are merged based on a common value such as SSN
- Data are merged based on multiple common values such as name
- Data are stored in a central repository or data warehouse
- Data are not stored in a central location (federated model)
Research Projects

- Pair schools with their statistical peers
- Evaluate CTE employment outcomes
- College and career readiness studies
- Outcomes for students in School Improvement Grant schools
- Evaluate the Library of Virginia’s summer reading program
- Evaluate the impact of math specialists in rural schools
- Research students’ data needs to help make college decisions
- Evaluate the outcomes of the Rural Math Excel Partnership
- Kindergarten readiness assessment study
- Evaluate PluggedIn Virginia
PluggedIn Virginia

- A Career Pathways program
- Prepares adult learners for postsecondary and employment
- Incorporates 21st Century Skills into a GED® curriculum

Research question 1:
- What impact does PluggedIn Virginia have on completers’ employment?

Research question 2:
- What impact does PluggedIn Virginia have on completers’ postsecondary outcomes?
Other Possible Adult Ed Studies

- Employment and postsecondary outcomes for GED® recipients (and enrollment in remedial classes for math and English at PS level)
- Impact of GED® with honors score on postsecondary and employment and enrollment in remedial classes for math and English at PS level
- Impact of Adult Basic Education programs (employment, postsecondary, and secondary credential/GED®)
- Impact of Adult Secondary Education programs (employment, postsecondary, and secondary credential/GED®)
- Impact of English as a Second Language Programs
- Impact of English Literacy and Civics Education (EL/Civics) programs (employment and citizenship)
Key Uses of Longitudinal Data in K–12

- Progress Monitoring
- Diagnosis and Prescription
- Internal Benchmarking
- External Benchmarking
- Predictive Analysis
- Evaluation

So, How Do We Get on Board with a LDS?
First Things First

- Data and system governance must be established
- Key policy questions must be identified
- Priorities must be set
- Processes must be established
What Processes?

- Select projects that support agreed-upon priorities
- Establish review boards or committees
- Develop data use agreements and contracts
- Make provisions for data security
- Establish review and approval points
- Consider intellectual property
Data and System Governance in a Multi-Agency Environment

- Getting buy-in can take a long time
- Yes/No or consensus model
- Centralized or Federated model
- Agency culture
- Agency internal governance
- Agency autonomy
- Conflicting agendas
But How Do We Get Others to Do Our Work for Free, or Nearly Free?

- Partner with existing LDSs (K–12)
- University partnerships for research
- Private research firms
- Apps challenges to solve real problems
- The barter system
Other Things to Consider

- Citizen concerns (bills in Virginia and Indiana)
- Big Data and predictive analytics

*The VLDS Privacy Promise*
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