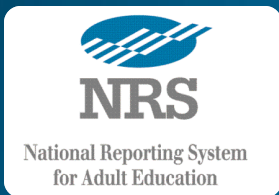


Virginia's Longitudinal Data System

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

“Six Key Uses of Longitudinal Data,” (2007) Chrys Dougherty, Lynn Mellor, and Nancy Smith, National Center for Educational Accountability



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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