Next Steps in Statewide Longitudinal Data Systems: Making Use of the Data to Inform Policy and Practice

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October 17, 2011
Discussion Topics

- Statewide Longitudinal Data System (SLDS) history over past 10 years
- Moving the focus from building SLDSs to using them
- Next Steps: engaging the necessary people to make full use of SLDSs
History of SLDS Efforts

1990’s
- NCLB Act – requires longitudinal data to meet reporting requirements
- Some states develop Accountability Rating Systems;
- Only 4 states collect student-level data (DE, FL, LA, and TX)

2001-2004
- USED efforts to coordinate & streamline data collections across program areas.
- 2003 & 2004: PBDMI site visits to all states

2005
- EDEN launched; replaces PBDMI
- EDFacts reporting tool launched
- SLDS grant program established in NCES
- States tackle Unique IDs, data warehouses, mostly still compliance reporting. Energy is very heavily focused on IT infrastructure.

2006
- Data Quality Campaign launched and highlighted 10 Essential Elements
- States talk about K-12 and postsecondary data systems. Turf, trust, FERPA, legal authority to share. Share what & how.

2007
- Data Governance issues – most focus on MOUs and not process or programs – still a big issue

2008
- Data Quality Campaign adds 10 State Actions to address use of data

2009
- Early Childhood conversations get going – few have EC data collections

2010
- America COMPETES Act: includes 12 elements that build off DQC 10 elements, but add more re: postsecondary.

2011
- Lots of energy on Teacher – Student Data Link to meet SFSF
- States tackle online portals & sharing reports back to schools & districts
NCLB Act – requires longitudinal data to meet reporting requirement

EDEN launched; replaces PBDMI
EDFacts reporting tool launched

1st Round of SLDS grantees announced November 2005 (14 states, $52.8 million)

2nd Round of SLDS grantees announced in June 2007 (12 states plus DC, $62.2 million)

3rd Round of SLDS grantees announced in March 2009 (27 states, 15 first time grantees, $150 million)

4th Round of SLDS grantees announced in April 2010 (20 states, $250 million)

5th Round of SLDS grants announced in Sept 2011 – requests for proposal due Dec 2011

Some states develop Accountability Rating Systems;
Only 4 states collect student-level data (DE, FL, LA, and TX)

USED efforts to coordinate & streamline data collections across program areas. 2003 & 2004: PBDMI site visits to all states

Data Quality Campaign launched Nov 2005 with survey results re: 10 Essential Elements

SFSF funds to States: $53.6 billion in formula & Race to the Top grants ($4.3 billion)

2 Rounds of RTT in 2010 awards to 12 states (March and August)

USED releases Common Education Data Standards, V1 in Sept 2010

3rd Round of RTT grants announced. Focus on Early Childhood

Ongoing: DQC Annual Survey, including 10 State Actions, updates to EDEN, state budget crises & RIFs

EDFacts launches; replaces PBDMI
## Common Topics in States

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<th>Time Period</th>
<th>Topics</th>
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| **2005-2007** | - IT issues with student-level collections, creating unique IDs  
- Legal issues with student-level data (FERPA)  
- State/district relationships & communication in planning SLDSs  
- Data warehouse = SLDS?  
- Engage policymakers: focus on key issues such as graduation rates |
| **2008-2010** | - K-12/Postsecondary linkage  
- Data Governance; cross-agency sharing within a state  
- P-20 + Workforce – building the case  
- Online data portals to share data back to schools & districts |
| **2010-ongoing** | - Teacher/Student Data Link  
- Common Education Data Standards  
- Data usage –By whom, how, what data, for what purposes?  
- Still: Data Governance, cross-sector sharing, technology solutions |
Who has been engaged to date?

**Advocacy & Federal Policy**
- USED – SLDS grant program @ NCES
- USED – NCLB requirements, America COMPETES Act, SFSF and Race to the Top
- FERPA clarifications through rule-making
- National advocacy organizations, such as DQC, Achieve, NGA, CCSSO

**Information Technology**
- SEA – CIO, IT shop, limited program area or research
- LEA – IT shop and data stewards
- Postsecondary – state agency in charge of IPEDS, not typically IT

**Policymakers**
- Chief State School Officers
- Governors
- State Legislative staff
- P-20 Councils

**NOTE:** SLDS grants go to SEA, usually in CIO office

2nd **NOTE:** where are the researchers and users?
Shift from Building to Using

Build
- Collections
- Data Exchange
- Interoperability
- Privacy, Security

Share
- Portals
- Reports
- Analytical tools
- Role-based access (aggregate or student-level)

Use
- Field (classroom, school, district, etc)
- Policy
- Research
What is Missing? How to Frame it?

What is Missing?

• Real examples of what it means to use data in each role
• Understanding of difference between research, analytics, BI tools, data mining, evaluation...

Existing Frameworks for Data Use

• Compliance reporting
• Accountability Rating Systems
• America COMPETES Act and Race to the Top Requirements
• DQC’s 10 State Actions
# Uses of Educational Data

| **Analytics** | deals with modeling or analyzing data specifically to highlight useful information, address specific questions, suggest conclusions and support decision making. |
| **Business Intelligence** | concentrates on analysis of aggregate data (classroom, school or district summaries) and business information, such as statistics about school graduates, dropouts and assessment performance. |
| **Data mining** | focuses on predictive modeling, such as early warning indicator systems used to identify students at risk of dropping out. |
| **Evaluation** | looks at the impact of a specific program or intervention in relation to specific outcomes, such as a teacher’s value-added to student achievement or the effectiveness of a reading or dropout intervention program. |
| **Research** | references either academic or applied research that is conducted in a rigorous and systematic way, and is based on observable experience or empirical evidence. |

DQC, 2011, *Leveraging the Power of State Longitudinal Data Systems: Building Capacity to Turn Data into Useful Information*
Describing Use of Longitudinal Data

Six Key Uses of Longitudinal Data (DQC, 2007)

**Progress Monitoring**
- Which students who started the year academically behind are progressing rapidly enough that they are likely to catch up in the next two years?
- Are middle school students growing at a rate that puts them “on track” to success in challenging high school courses?

**Diagnosis and prescription**
- Which of our students’ difficulties in mathematics appear to be based on concepts not learned in previous years?
- When and where did this student first encounter difficulty reading grade level material?

**Internal Benchmarking**
- Which teachers in our school have been most successful with students who have had trouble with mathematics in prior years?
- Which schools in our district have experienced the greatest success in improving students’ reading skills between second and fourth grade?

**External Benchmarking**
- Which schools across the state have been most effective in teaching Algebra 1 to students who were at the basic level or below in seventh grade mathematics?
- Which high schools have been most successful in improving the success of students who entered the school with poor reading skills?

**Predictive Analysis**
- What early indicators help us identify the students at greatest risk of not graduating from high school?
- What proficiency levels in eighth and eleventh grades ensure a low probability that a student will need remediation when she or he enters college?

**Evaluation**
- If we randomly pick classrooms to try out the new reading program, how does student academic growth in those classrooms compare with growth in classrooms that are still using the old reading program?
- Do teachers and schools who are found to be better implementers of the district’s new writing strategies have students that show greater improvement on the district’s writing rubrics?
Next Steps: Who Needs to be Engaged in Conversations?

- Education analysts and applied researchers
- Teachers, administrators, counselors
- State policymaker staff (e.g., Governor’s office, legislative staff)
- Teacher & Superintendent preparation programs
- Regional Education Laboratories
- Vendors
- Others who can define and help imbed data use into daily activities
Who will articulate how different stakeholders can effectively use data?

Who will train users and provide technical assistance?

How do we connect users to data system managers? What is that role? Who will fill it?

How do we connect data system managers, researchers, and users?

What can you do to make SLDSs valuable?
Beware the Hurdles

Culture change is HARD!

Limited staff at SEA and few research & evaluation divisions in SEA

Unfunded mandates; focus on compliance when faced with limited time & resources

As DQC says: Turf, Trust, and Technology
Suggested reading and viewing

- Measuring the Education Pipeline: Critical Data Elements Indicating Readiness, Transition and Success (http://www.dataqualitycampaign.org/files/67355_PipeLineX3_LoRes.pdf)
- Video about Ohio’s tools for teachers and administrators: www.d3a2.org
- Video about Oregon’s DATA project teaching the field how to use data: http://www.youtube.com/watch?v=xEWtRCauAgo
- The Complexities of Integrating Data-Driven Decision Making into Professional Preparation in Schools of Education, Ellen Mandinach and Edith Gummer, (http://www.wested.org/cs/we/view/rs/1094)