

# Building the Capacity of Educators to Use Data for Effective Decision Making

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## Defining the Issue

States have made remarkable progress in the past four years in their efforts to build and implement statewide longitudinal data systems. However, collecting the data alone is not enough to improve student performance, and making the data available to educators is not sufficient to drive data use. If data users have not been trained to access, analyze,

### **DQC State Action 9 to Ensure Effective Data Use**

Based on three overarching imperatives: link data across P-20; ensure data access; build capacity for data use, the Data Quality Campaign (DQC) has identified 10 State Actions to Ensure Effective Data Use. Action 9 encourages states to implement policies and promote practices, including professional development and credentialing, to ensure educators know how to access, analyze, and use data appropriately. DQC's first survey on the 10 State Actions will be released late January 2010.

For a state-by-state analysis of educators'

interpret, and use the information, the new system likely will not lead to the desired changes in student performance. There must be a focus on rich professional development centered on the appropriate interpretation and use of data. This will allow educational stakeholders, such as teachers and principals, to use data to improve instructional practices and thus impact student performance. The state should take the lead in setting policies and

promoting practices that will lead to educators' having a better understanding of how to use data to improve student performance.

### How Do We Build Educator Capacity?

The guidance from the U.S. Department of Education for both the Race to the Top competition and the State Fiscal Stabilization Fund (SFSF) places a great emphasis on requiring that states get relevant student-level data back into the hands of educators to inform instructional decision making. However, the SFSF language makes clear that the nation's educators are not prepared to effectively use this data.

The Department also understands that an important element of State efforts to inform teachers of the estimated impact of their teaching on student achievement is providing professional development for principals and teachers on the interpretation and use of those data in raising student achievement. (July 29 Notice of Proposed Rulemaking for the State Fiscal Stabilization Fund)

According to the American Institutes for Research, districts in the U.S. spend over \$1 billion in federal funds on professional development. For states to meet the requirements of the stimulus funding, they must collaborate with districts to ensure that professional development funds are appropriately targeted. Through the [Oregon DATA Project](#) the state has developed a comprehensive training program to increase educator assessment literacy at all levels and to help school and district leaders create a culture of data. The New Mexico Principal Support Network (PSN) is providing professional development to principals and superintendents on the analysis, interpretation, and use of assessment data. The innovative curriculum includes how to communicate data to constituencies such as school boards,

teachers, and the community. Members of the PSN also work directly with their peers to analyze data, build comprehensive school improvement plans, and share promising practices for interventions (see <http://education.nmdfa.state.nm.us/>). A state's ability to link teacher and student data (Element 5 of the DQC's 10 Essential Elements of a longitudinal data system) is critical to the effective development and implementation of a comprehensive professional development plan. Without this link in place, states must rely solely on district-level data, which is especially difficult in lower capacity districts and inconsistent across districts statewide.

While professional development is critical, states need to also look at preservice training. In a recent speech at Teachers College, Columbia University, U.S. Education Secretary Arne Duncan said that when asked about their experience in teacher preparation programs, teachers repeatedly tell him, "... they were not taught how to use data to differentiate and improve instruction and boost student learning."

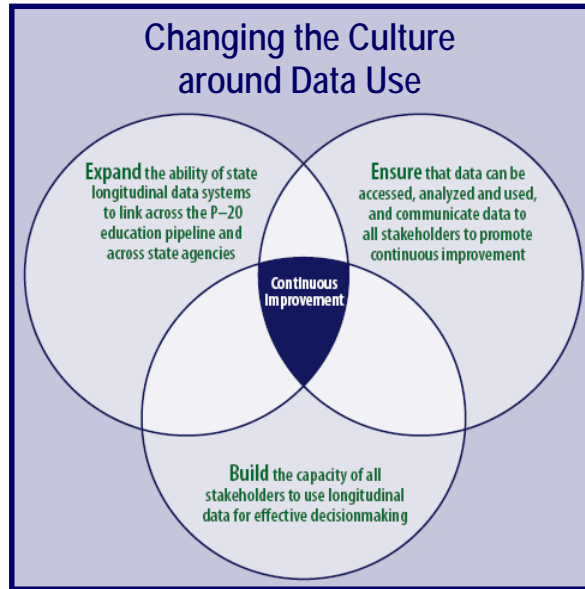
Using their federal Statewide Longitudinal Data System grant funds, Oregon partnered with seven institutions of higher education to develop preservice training modules based on their successful professional development program. They are working collaboratively with faculty from these teacher

#### **The Need for Data Governance**

Through data governance, organizations define the roles and responsibilities needed to institutionalize their commitment to data quality and use. Georgia's Alliance of Education Agency Heads is well suited to guide the development of a comprehensive state plan to build educator capacity. Heads of the following critical state agencies are among those represented: Georgia Department of Education, University System of Georgia, Georgia Professional Standards Commission, and the Governor's Office of Student

preparation programs to incorporate their material into courses for both teachers and administrators. Topics include: Formative Evaluation; Evaluation Statistics and Growth Models; Large Scale Database Analytics;

and e-Learning and Differentiated Instruction. Oregon developed an evaluation component in both their professional development and preservice work so that they can understand the degree to which data use is implemented following training, as well as the impact on student learning. To ensure that these efforts become embedded in a state's education system, states should use their credentialing/licensing



authority to require educators seeking certification or certification upgrades to demonstrate competence in the analysis, interpretation, and use of data. However, without the ability to link teacher and student data, states will be unable to return important information back to teacher preparation programs to help them further refine their curriculum, and the state will be unable to evaluate the success of additional professional development and new certification requirements in this area.

The stimulus funding provides a unique “table” for the critical discussions about educators’ capacity to use data to finally begin in earnest. These aligned funding streams are providing states with a strategic opportunity to break down traditional silos and engage policymakers and educators at all levels in a thoughtful dialogue about using data for continuous improvement. In addition to working together to create user-friendly data tools for analysis and reporting, stakeholders must begin to develop and implement the

policies and practices necessary for educators to use the data for instructional decision-making.

## Key Questions

1. To what extent has your state implemented DQC's Element 5 (linking teacher/student data)?
2. What is the role of the state in ensuring that educators are able to access, analyze, and use data?
3. How can your state work more effectively with districts to build the capacity of educators?
4. Have the appropriate people been identified at each state agency to implement policies and promote practices to build educator capacity?
5. Is there a state-level governance structure in place to facilitate these policy discussions and develop a plan for the state to move forward to ensure that educators know how to use data appropriately?
6. Do educators have the necessary technological tools to access, analyze, and use data to make educational decisions?
7. What initiatives are being implemented by educator preparation institutions to develop educators with the skills needed to access, analyze, and use data to make educational decisions?
8. Do educators have the time to collaborate with peers about the data and the autonomy to make instructional decisions in their schools/classrooms?
9. How will the state evaluate their efforts and measure success?
10. How will states and districts know they have created a culture of data?
11. Is teachers' capacity to use data part of the state's research agenda for its statewide longitudinal data system?

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The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to improve the collection, availability, and use of high-quality education data and to implement state longitudinal data systems to improve student achievement. The managing partners of the Data Quality Campaign include Achieve, Inc.; Alliance for Excellent Education; Council of Chief State School Officers; Education Commission of the States; The Education Trust; National Association of State Boards of Education; National Association of System Heads; National Center for Educational Accountability; National Center for Higher Education Management Systems; National Conference of State Legislatures; National Governors Association Center for Best Practices; Schools Interoperability Framework Association; State Educational Technology Directors Association; and State Higher Education Executive Officers. In addition, the DQC has over 50 endorsing partners. Visit [www.DataQualityCampaign.org](http://www.DataQualityCampaign.org) to learn more about the 10 Essential Elements and the 10 State Actions required to establish, maintain, and use a quality longitudinal data system

# THE OREGON DATA PROJECT

BUILDING EDUCATORS' CAPACITY FOR USING DATA TO IMPROVE STUDENT ACHIEVEMENT

## Collaboration is key. Project partners include:

- Oregon Department of Education (ODE)
- \* Education Enterprise Steering Committee (EESC)
- Education Service Districts (ESDs)
- Oregon Community Colleges
- Oregon University System (OUS)
- Oregon Prof-12 (PK-12)
- Oregon School Board Association (OSBA)
- Confederation of Oregon School Administrators (COSA)
- Oregon Education Association (OEA)
- Teacher Standards and Practices Commission (TSPC)
- The Governor's Office

## Input from the field determined project design:

- Focus groups held statewide
- Identified need for instructional & technical training
- Created grassroots support
- Created collaborative atmosphere
- Produced ongoing input from districts

For more information, visit  
[www.oregondataproject.org](http://www.oregondataproject.org)

## Pre-service project adds crucial link:

- Through separately funded SLDS grant
- Features co-teaching between university staff & project trainers; meta-cognitive approach
- Licensing & recertification requirements
- Teacher-student performance feedback loop to universities
- Participating universities include:
  - Eastern Oregon University
  - Oregon State University
  - Portland State University
  - Southern Oregon University
  - University of Oregon
  - Western Oregon University



\* The EESC is a partnership among ODE, ESDs, K-12, Higher Education and the Governor's Office

## Field Input

## Pre-Service

## The Oregon DATA Project

## In-Service

## Sustainability

## Evaluation

## In-service data-use training developed:

- INSTRUCTIONAL STRANDS**
- For administrators, teachers
  - Three levels: District, building, classroom
  - Statewide roll-out '08-09
  - Content: Finding, organizing, and analyzing data; linking to increased learning
- TECHNICAL COMPONENTS**
- For data input teams
  - Provides data steward/oversight model
  - Statewide roll-out '09-10
  - Content: How to build a culture of data quality
  - ODE Help Desk supports effort
- SCHOOL BOARD MODULE**
- Adapted by OSBA
  - Content: Importance of data; questions to ask

## Sustainability strategies ensure future:

- Regional centers develop district plans
- ESD, K-12 trainers certified, supported
- "Deep" implementation project funded
- On-demand training videos posted online
- Resources shared nationally via LDS Share, webinars

## Evaluation components built into all training:

- Pre/post assessments of PD quality & meaningfulness; degree of implementation
- Participant implementation plans
- Efficacy scale-degree of implementation
- 3DME-assessment of beliefs
- Oregon Assessment of Knowledge and Skills (OAKS) & student performance