



Here's How

State Sustainability Strategies

State Data Systems

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Using Your State Longitudinal Data System to Sustain Your Evidence-based Reading Program

State education agencies (SEAs) can assist local educators in getting the assessment data needed to improve instruction by taking their needs into consideration as the statewide longitudinal data system is built. Simply put, a statewide data system is a mechanism for storing data that affect student achievement at all educational realms. Advantages of a statewide longitudinal data system that includes reading data are: (1) providing an extensive and accurate picture of student reading achievement across the state, (2) making it possible to identify consistently high-performing schools so that educators and the public can learn from their success, and (3) helping determine the effectiveness of particular programs. Having the right data readily available is one of the critical supports that makes sustaining evidence-based reading programs possible—and a well constructed state longitudinal data system that contains the right information can go a long way to achieving that.

The Components of Effective Statewide Data Systems

Most initial statewide longitudinal data systems were developed to manage financial and budgeting information and personnel records. Monitoring district compliance came next, followed only recently by tracking student assessment data. Though some statewide data systems may contain a variety of components, there are some

critical elements that should be maintained regardless of the type of system—such as unique student identifiers; a teacher identifier system with ability to match teachers to students; a state data audit system for assessing data quality, validity, and reliability; and ability to match student records be-

tween P-12 and higher education systems. These essential elements and other fundamental concepts were identified by the Data Quality Campaign, a national collaborative effort to encourage and support state policymakers.

What can Reading First staff do?

State Reading First directors are in an ideal position to collaborate with and influence others on the important considerations for a statewide longitudinal data system. Through participation in Reading First, directors have gained much knowledge on valid and reliable assessments—especially the use of formative

assessments, data analysis techniques, and data-based decision making. Further, Reading First represents a constituency of local educators who are committed to data driven improvement and are skilled data users. Ultimately, the point of any data system is the *use of data* to increase student

achievement. Evidence-based reading programs provide a powerful example of the benefits of using data within a state education agency. It only makes sense to take advantage of this through the development of a state longitudinal data system.

Sustainability is the ability of a program to operate on its core beliefs and values (its reading culture) and use them to guide essential and inevitable program adaptations over time while maintaining improved outcomes.

Adapted from Century and Levy, 2002

Developing a Longitudinal Data System

Where does our state stand?

A first step for Reading First directors in establishing collaboration with colleagues working on the state data system is to become familiar with your state's system and its current components. Then, to get an overview of how your state compares to other state's systems, see the [findings of a survey](#) conducted by the Data Quality Campaign and the National Center for Educational Achievement (NCEA) to determine the number of

states that have built the infrastructure that will make the best use of longitudinal data. Reading about [lessons learned](#) in building state longitudinal data systems in four states may also be helpful in reflecting on what your state has already accomplished. Be sure to talk about collaboration with other offices in your SEA to ensure data requirements are not duplicated and can be shared when necessary.

The Process: Establishing and Revising a Statewide Data System to Support Effective Reading Instruction

Some states are in the beginning stages of the development process and are scheduling meetings with stakeholders or developing strategic plans, while others are refining their statewide data system to meet current demands. Wherever your state falls on the development continuum, it is important that the state longitudinal data system serves as a model in creating a culture of data use and that action steps are taken to achieve that goal. Reviewing the key questions on the next page may give you ideas about where your state should go next.

Case Study

Florida's Fully Developed Data System

Florida was the first state to obtain all the essential elements of an effective longitudinal statewide data system K-12 by establishing the Florida Information Resource Network (FIRN) in 1986.

FIRN was a device that enabled districts to transmit data from their local system to the state. Since 2002, the Florida Education Data Warehouse (EDW) has provided a single location for data retrieved from numerous sources covering all areas of the P-20 educational system.

Also in 2002, Florida developed the Progress Monitoring and Reporting Network (PMRN) to make reading data available from screening, progress monitoring, and outcome assessments.

By creating this network, Florida was at the forefront in using progress-monitoring data to increase student reading achievement. Initially this data was available for Reading First schools only. However, the goal is to eventually make it available for all Florida schools.

The Process (Cont.)

A [research-based analysis of state-wide data systems](#) suggests that state education agencies should create an education data oversight commission to manage the development and ongoing implementation of the education data system. The commission should meet regularly and ensure that the data is collected and reported in useful and timely ways. The commission should also manage the development of the state's technical and personnel capacity to assist local education agencies in using the data effectively. For example, states should provide technical assistance to districts to familiarize them with logistics of the data system, as well as information on how to generate reports and the processes for data analysis. It is also advantageous for districts to have their own data managers who can serve as liaison to the state, as well as support the district data use needs. The state should provide professional development opportunities regularly to train these individuals and others, and should determine a plan for the distribution of information and resources locally related to data. For example, Florida was able to earmark a percentage of state resources provided to districts for data and informational systems.



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What's next?

Once state education agencies have an efficient longitudinal statewide data system in place, they will want to focus on how they analyze student data. When a state can analyze student achievement data based on patterns of individual student growth over time rather than percentages of students meeting standards, they will be better able to extract the instructional implications. This will enable the state to

provide more effective statewide professional development to educators, which in turn affects student reading outcomes. Ultimately, when an SEA's data system includes comprehensive and detailed information to assist in improving instruction, it will be better prepared to respond to the challenges that districts face as they try to sustain a reading initiative over time.

Key Questions

Keep these questions in mind as you consider the next steps for your state.

- What data system do you want? (Remember to include the essential elements proposed by the Data Quality Campaign.)
- Given these elements, what policy and school improvement questions do you want your system to answer? How can you involve potential users in the design and use of the data system?
- What are the design specifications? How can you answer the data needs of state and local policymakers—as well as the public?
- What technology and data infrastructures do you already have in place that you can build on?
- What expert assistance do you need? How can you ensure these vendors are expert, are cost effective, and will deliver what they promise? How do you hold them accountable?
- How should local educators be involved and trained in these new data systems—since they both originate and use the data?
- How can states both create and be responsive to user needs?
- Given that the ultimate goal of these systems is to improve student achievement, what is the state role, what is the district role, and what supports do they need to use these data to improve student achievement?
- What are new uses for the data system? How do you identify these new uses and ensure the system is flexible enough to include them easily?
- How does the state longitudinal data system work with/complement existing district data systems?
- How do you guarantee adequate on-going resources to maintain and enhance the system?

Source: Data Quality Campaign (2006). *Creating Longitudinal Data Systems: Lessons Learned by Leading States*. Downloaded July 14, 2008. p. 10

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