



SLDS Topical Webinar Summary

Early Childhood Data Use: Support Phase

Currently, states are examining early childhood for its potential benefits to K12 and postsecondary education. However, these benefits are difficult to assess because of incomplete early childhood data in statewide longitudinal data systems (SLDSs).

The need for data can pressure state education agencies (SEAs) to quickly increase the collection of—and access to—early childhood data. However, in order to successfully facilitate the use of these data, SLDS staff must proceed thoughtfully. Careful planning of early childhood data use, followed by the creation of products and resources that meet user needs, and ongoing support of these users will help to ensure that the data inform key early childhood decisions.

This document is the third of three publications based on the State Support Team (SST)—designed framework on Early Childhood Data Use. The first two publications, Planning for Early Childhood Data Use and Early Childhood Data Use: Create Phase, are available online at <http://nces.ed.gov/programs/slids/publications.asp>.

This publication examines the Support phase of the Early Childhood Data Use Framework (see Figure 1) as illustrated by experiences of SLDS leaders in Minnesota and Missouri. It also explores lessons learned from existing early childhood and K12 education research that could be applied to future early childhood data use projects.



Figure 1. SST Early Childhood Data Use Framework

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For more information on the IES SLDS Grant Program or for support with system development, please visit <http://nces.ed.gov/programs/slids>.



The Support Phase: State Examples of User Support, Evolution & Sustainability

The Support phase of the Data Use Framework is dedicated to engaging stakeholders in using, expanding, and adjusting the SLDS so that the system becomes a vital resource beyond the timeframe of its initial grant. Establishing productive, long-term partnerships with SLDS users involves asking and answering several questions about their interaction with the system and how that interaction might change moving forward. Below are examples of how SLDS leaders in Minnesota and Missouri are engaging early childhood stakeholders in using and sustaining their systems.



How will users know how to use the system?

How do we continue to support users and their needs as they expand and evolve?

Minnesota Strategies	Missouri Strategies
<ul style="list-style-type: none"> • Provide group-based and one-on-one training and a wiki • Work with early adopters to revise and refine processes to provide more support and value for others • Build system through strong relationships • Ask users to help prioritize improvements 	<ul style="list-style-type: none"> • Engage Head Start in process from day one • Provide training and technical assistance • Develop and automate data collection; work toward automated analysis in the future • Work to institutionalize roles and responsibilities

Both Minnesota and Missouri have prioritized building strong relationships with early childhood partners. These relationships allow the states to demonstrate the value of the SLDS for those users as well as encourage them to take greater ownership of the system in the future. In Minnesota, SLDS leaders carry out group and one-on-one training sessions with Head Start agencies, as well as other stakeholders, to ensure they understand the system. They also collaborate with early adopters of the system to improve processes for agencies that are newer to the SLDS. Missouri has engaged the state's Head Start Council leaders since the beginning of the grant to make sure the SLDS is a system their agencies can use and adapt to their needs over time. Realizing that cleaning and standardizing data manually was overwhelming available staff, Missouri also created an automated data-entry process that checks for errors and allows contributing agencies to know immediately if there are problems with their data.



How will users understand the data provided by the system?

Minnesota Strategies	Missouri Strategies
<ul style="list-style-type: none"> • Constant communication • Ideally, the core group of users will include a person from each agency representing different program areas to ensure deep understanding • Standardize data entry through a manual for source system element codes and report standards 	<ul style="list-style-type: none"> • Pilot reports include a high level of detail and explanation and are not time sensitive • This question is the struggle for continuing to fund analysis <ul style="list-style-type: none"> - Automation - Who can have access?

For Minnesota, one of the first steps toward creating a shared understanding of SLDS data was ensuring the various contributing agencies had a common data language. Minnesota brought together Head Start representatives from several agencies to develop a standardized data entry system and corresponding manual that everyone in the group understood deeply and could impart to colleagues at their home agencies. This standardization not only helps normalize data coming in from different Head Start organizations, it also readies Head Start data—which generally is reported directly to federal authorities—for integration with a statewide system. Minnesota's data standardization process has informed a similar effort underway in Missouri. During the pilot phase of the Missouri project, researchers provided highly detailed reports, graphs, and tables to each Head Start grantee or delegate to help the administrators interpret the data. Moving forward, Missouri hopes to develop a more automated and standardized reporting system that will limit access to users with security clearances, who are most fully prepared to use and interpret the reports. Eventually the state would like to create public-facing reports that can be shared with policymakers and broader audiences, but for now its focus is on providing feedback to programs and administrators.

- How will users know what to do with the data provided by the system?
- How do we ensure we have the resources to continue meeting users' needs?

Minnesota Strategies	Missouri Strategies
<ul style="list-style-type: none"> • Create data analysis plan prior to coding • Provide examples of how other agencies have used the data, ideally indexed to standard federal reporting and common local needs • Work with user group to prioritize the largest impact improvements 	<ul style="list-style-type: none"> • Facilitate Head Start ownership of data and analysis through multiple groups: <ul style="list-style-type: none"> - Data element and protocol workgroup - Governance committee • Revisit data processes annually

Borrowing from a Missouri initiative, Minnesota created a high-level data analysis plan outlining topics and questions that can inform future reports. The plan gives stakeholders an idea of the information coming out of the SLDS and how it will be used. The state is also working with its Head Start partners to identify and address their most immediate data needs. To promote sustainability for its SLDS, Missouri is trying to encourage Head Start agencies to take greater ownership in the system. Head Start agencies will be involved in a workgroup to review data elements and protocol as well as a Head Start governance committee to evaluate data collection needs and practices annually.

- How do we make the system an essential resource for users?

Minnesota Strategies	Missouri Strategies
<ul style="list-style-type: none"> • Create a data analysis plan identifying opportunities to support core initiatives within Head Start • Provide reports as a way to intensify relationships with partners <ul style="list-style-type: none"> - For example, do children with high needs really attend full-day kindergarten after Head Start? 	<ul style="list-style-type: none"> • Maintain an open dialogue with partners, programs, and practitioners <ul style="list-style-type: none"> - Eventually expand dialogue to parents and policymakers • Continue adaptation and development

One key element in ensuring sustainability for an SLDS is building a group of partners who rely on the system and will contribute actively to its continuation. In Minnesota, where Head Start programs are administered by the state Department of Education, SLDS leaders emphasize the system's insight into how children transition from early childhood to primary education. Through a sub-project of its SLDS grant, the department was able to support a data analysis effort already underway in the state's Head Start association by assigning unique identifiers to Head Start students and gathering data from multiple agencies into a central database. Missouri is focusing on deepening relationships with existing partners, expanding the involvement of parents and policymakers, and establishing specific roles and responsibilities for each partner in the system's future. In addition to giving stakeholders a mechanism for sharing their needs and goals, this strategy also aims to give all partners a strong sense of ownership in the system.

Lessons Learned from Research

Existing studies of data use in education have focused primarily on the K12 sector, where student achievement assessments and accountability reporting historically have driven data collection. Even so, this body of research reveals useful information that can be applied to early childhood contexts, including insights into how educators and policymakers understand and use data, how to support changing user needs over time, and how data can be used to make decisions.

- How do users understand the data provided by the system?
- How do users know what to do with the data provided by the system?

Research supports the idea that close collaboration and interaction among the organizations that use data systems are essential to building understanding of those systems. Data are complex and multilayered; when agencies work together to discuss and unpack data, they come away with a greater understanding of its significance.

However, the benefits of collaborative data use depend largely on users' comfort level with the data and the data system. Studies show that anxiety about whether or not they can use the data affects users' willingness to take advantage of data tools, which in turn has implications for the quality of collaborative data efforts.

Research also shows that having the right data is essential to its use. For teachers hoping to impact student learning and behavior, macro-level data aggregated for district or state reporting purposes is not as useful as micro-level classroom data. With the right data in hand, it is possible for teachers to draw conclusions and suggest solutions for long-term behavioral change focused on deep understanding of subjects rather than concentrating on test-centered skills.

How do we continue to support users and their needs as they expand and evolve?

According to research, agency leaders play a key role in promoting the use of sustainable data systems by modeling data use, talking about data use, and explaining how they use data to make decisions. Because of this, it is imperative that agency leaders have a deep understanding of the data system and how it is used. Studies also show that having coaches within organizations who can help users make connections between the data and the areas they want to impact makes them more likely to internalize data use practices. In addition, users understand data better and make better decisions when they have a solid understanding of the content areas described by the data. This finding emphasizes the importance of involving content experts—whether in academic areas such as science or reading, or in behavior areas such as attendance—in the decisionmaking process.

How can data be used to make decisions?

Research-based suggestions for utilizing early childhood data in decisionmaking processes include:

- *Start with the program's goals and align the data to the goals.* Decisions should be based on improving underlying processes and not only on outcomes.
- *Apply early childhood data to understanding and solving broader education challenges.* Research at the K12 level has identified problem areas such as critical reading and multi-step problem solving in student assessments. Early childhood data can help determine whether those and similar issues can be addressed much earlier.
- *Develop multiple structures and layers for decisionmaking.* Having an effective decisionmaking structure helps ensure decisions are made at the appropriate level.
- *Translate numbers into meaning.* Help audiences understand data in short, easy-to-read visualizations rather than detailed spreadsheets.
- *Translate meaning into action.* Leaders should model data use in order to demonstrate the value of data-based decisionmaking for early childhood programs.

Additional Resources

Early Childhood Data Use: Create Phase
<http://nces.ed.gov/programs/slds/publications.asp>

George Mason University College of Education and Human Development
<http://cehd.gmu.edu/>

Minnesota Department of Education
<http://education.state.mn.us/mde/index.html>

Planning for Early Childhood Data Use
http://nces.ed.gov/programs/slds/pdf/webinar_summary_early_childhood_data_use.pdf

University of Missouri Center for Family Policy and Research
http://hdfs.missouri.edu/cfpr/centers_CFPR.html

Related Research

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