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 second of three publications based on the State Support Team–designed framework on Early Childhood Data Use. The first publication, Planning for Early Childhood Data Use, is available at http://nces.ed.gov/programs/slds/pdf/webinar_summary_early_childhood_data_use.pdf.

In this second installment, the framework's Create *phase is discussed, including experiences shared by Mississippi, Minnesota, and Kentucky.*
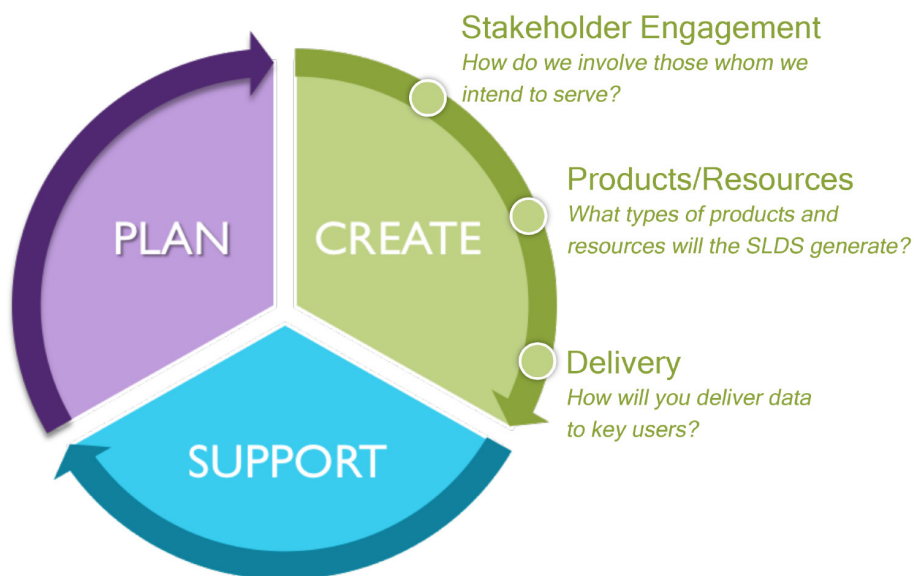

Figure 1. SST Early Childhood Data Use Framework

Stakeholder Engagement

How do we involve those whom we intend to serve?

Early childhood stakeholders (e.g., other state agencies, other early childhood groups, and programmatic experts) should be involved in *every* step of the data use strategy, including the initial planning. However, to ensure that these resources are responsive to users' needs, it is critical to involve stakeholders *before* determining the resources that will be generated by the SLDS. The SLDS team should work together with stakeholders to determine which questions the early childhood data products and resources will aim to answer and how to best use the data.

In order to increase participation from stakeholder groups, emphasize that the collaboration is a learning process—agencies respond positively to opportunities that allow them to be part of a community of learners without fear of consequences. Creating a stakeholder engagement plan will help outline an effective strategy regarding who is engaged, how they are engaged, and for what purpose.

At the beginning of any stakeholder engagement effort, it is important to communicate the effort's mission and key goals so that stakeholders understand their part in the broader effort. Ensure that expectations are explicit for the engagement with each group, including what will be provided to them, what is needed from them, and what will be done with the feedback they provide. Be sure to make a distinction between simply communicating about the effort and asking for input that will be used to inform the system. Whenever input is requested from stakeholders, conduct timely follow-up so they can see the results of their feedback.

To increase outreach and reduce the risk of overwhelming stakeholders, leverage existing communication mechanisms that are highly visible and valuable to the roles being targeted, including committees, standing meetings, listservs, social media, and newsletters.

Additionally, proactively engage stakeholders: the SLDS team should not just invite stakeholders to meetings, but also seek out and attend meetings held by stakeholder groups.

Stakeholder engagement is the most complex step of the Create phase, but involving stakeholders in the beginning, including the Plan phase, ensures that products and resources are designed for their use. It also builds the trust and commitment to continuous improvement that are required for data sharing.

Products/Resources
What types of products and resources will the SLDS generate?

Experienced SLDS teams recommend that stakeholders drive the specifications for products and resources. When designing data products, consider the SLDS users and uses identified in the Plan phase of the Data Use Framework, and ask users which types of data resources they need to support their work. Begin by creating resources on the data that are of highest need to users and that most directly support the intended goals for that user role. Each resource should be designed for the specific users and uses that were identified in the Plan phase.

Once resources are determined, begin to select tools that are appropriate for the users. For example, Business Intelligence tools may be beneficial for power users, but are likely to overwhelm other users. Revisit the users and ask for their input on the usability of the proposed products and whether the products will help them to make or influence key early childhood decisions. Considerations may include the user population size and technology skill level. To address the range of expertise among user groups, most states implement a limited suite of data reporting and analysis tools. By meeting stakeholders where they are, the SLDS team will create products that users are more likely to take advantage of and are therefore of higher value.

Delivery
How will you deliver data to key users?

When designing the delivery of the data use resources, consider the users' current work context as gathered from user interviews during the Plan phase and from other stakeholder engagement activities. Use this information to develop a rollout plan that helps ensure that the resources created from the SLDS are actually received by the intended users in a way that is low-burden and intuitive to them. An SLDS team can create products that meet user needs, but they will be ineffective if delivered in a way that is inaccessible and inconsiderate of the users' context.

The rollout plan should include a communications plan and be timed based on the users' calendar and work cycles, avoiding times when users are simply too busy to pay attention to the data. Conducting a pilot rollout is an underused and highly effective means of gauging how well the resources will meet the intended users' needs before going statewide. It is a way of soliciting targeted, valuable feedback that, if used well, greatly increases the success of the full implementation.

After the initial rollout, identify the hooks that prompt usage: assess what makes users first access the tools and what makes them continue to return to the tools. Consider conducting targeted feedback sessions with stakeholder groups to capture how they use the resources, then disseminate these use cases among their peers. Usage analytics are another valuable way to gauge uptake more broadly. This knowledge is essential for sustaining momentum, offering support, and making enhancements.

In order to reduce any fears around the release of data and reports, inform users of what resources will be arriving, how they will use them, and how they will receive them. When stakeholders are able to anticipate the data that will be arriving, they are less likely to be fearful of reports and data releases.

State Example: Mississippi

As SLDS efforts began in Mississippi, the SLDS team was already partnered with Head Start in a study on the program's impact through third grade. Building upon this partnership, the SLDS team focused its early childhood efforts on Head Start data and building resources to better answer the primary questions of the study.

In order to answer Head Start's questions, the team created two types of data resources: aggregate data and ad hoc reporting. The aggregate data show students' progress through the education system—including standardized test results and progress into college and through the workforce—and are available through an online portal. Along with use by researchers, the portal is also useful for practitioners and the general public. The ad hoc reporting is available for studies that are designed in collaboration with the SLDS. Resources that result from these studies are available to the public and include reports and peer-reviewed articles.

State Example: Minnesota

Like Mississippi, Minnesota began its SLDS by focusing on Head Start stakeholders, with the goals of understanding 1) what to measure, 2) how children make progress in early childhood, and 3) how progress can be sustained into formal education.

In order to answer these questions, Minnesota is creating a real-time data analysis tool to ensure that the data going into the system are useful and inform instruction. As a result, users will be able to answer immediate questions, in real time, about students currently enrolled—thus informing instruction—and answer research questions on children who have matriculated. In addition to real-time analysis tools, resources include a Head Start program report for statewide advocacy, allowing grantees to better understand how students are progressing and to compare Head Start programs across the state.

As Minnesota links early childhood data to the SLDS and the system builds, the data will be available to answer other questions; meanwhile, the SLDS team is in the process of collaborating with stakeholders to create a research agenda.

State Example: Kentucky

Kentucky first engaged early childhood stakeholders by holding focus groups for stakeholders to examine data and see how the data might drive their program decisions. Stakeholders also helped to develop the priority questions that the early childhood data products and resources would help to answer. In order to collect data, the SLDS team reached out to Head Start and the Kentucky Cabinet for Health and Family Services, and received a wide variety of data from each agency.

The first early childhood data deliverables were the 2013 Early Childhood County Profiles—two-page data summaries of each county. There are 120 versions of the report: one for each county and one for the state. The data are from 10 to 15 areas and include non-academic indicators such as cognitive, language and communication, self-help, and other holistic factors. The reports include a variety of statistics on demographics and socioeconomic status for each county and were delivered as a web-based tool. The team also had access to district-level data, but chose to focus its first deliverable on county-level reports.

	Mississippi	Minnesota	Kentucky
Example Primary Audience	Focused on Head Start	Focused on Head Start	Communities for planning/funding
Stakeholder Engagement	Head Start was a partner in the study of the "fade out effect" of the assistance they provide	Head Start grantees conceptualized and carried out the project	Focus groups
Products	Analysis Report on Child Outcomes from PreK-3	Head Start Program Report	Community Profile
Delivery	National conference, research article	Real-time analysis for grantee use as well as reports for statewide advocacy	Share as a web-based tool

Figure 2. State Examples of Early Childhood Data Use

Additional Resources

Kentucky Center for Education and Workforce Statistics 2013 Early Childhood Profile.
http://kcews.ky.gov/Reports/EarlyChildhoodProfile/default.aspx

Minnesota Head Start's Experience: Developing a Child Outcomes Database. 2012.
http://www.mnheadstart.org/PDF/Demonstrating Results 82112.pdf

Mississippi's Approach to Building a P-20W Data Model: SLDS Spotlight. January 2012.
http://nces.ed.gov/programs/slds/pdf/msp20.pdf

Planning for Early Childhood Data Use. March 2013.
http://nces.ed.gov/programs/slds/pdf/webinar_summary_early_childhood_data_use.pdf

Stakeholder Engagement Toolkit: Traversing 'Stakeholder Land.' April 2013.
http://nces.ed.gov/programs/slds/pdf/target_team_stakeholderland.pdf