

Data Use *Multi-State* Spotlight: Using Data Fidelity Tools to Improve Data Quality

Challenge: How can states use fidelity tools to improve data quality?

To evaluate interim progress toward the State-identified Measurable Result (SIMR), states require access to high-quality data from local education agencies (LEAs) and early intervention service providers. In a review of 2017 Phase III State Systemic Improvement Plans (SSIP), 43 [Part C](#) states noted limitations or concerns related to data and specifically data quality. Meanwhile, 36 [Part B](#) states reported efforts to address fidelity by providing a method for collection and use of data regarding practice implementation. In turn, concerns about the quality of local data create barriers to effectively evaluating the implementation of the SSIP and progress toward the SIMR. Increasing fidelity to the data collection process can improve data quality. This spotlight shares how three states used three different approaches to data fidelity tools to improve data quality. It concludes with recommendations for states facing similar challenges.



Use publisher fidelity tools built into the statewide assessment system.

The Iowa Department of Education (IDE) aimed to increase adoption and use of a state-provided literacy screening and progress monitoring tool by LEAs to scale up Iowa's multi-tiered system of supports. Iowa selected the Formative Assessment System for Teachers (FAST™; www.fastbridge.org) as their state-identified assessment tool and provided it at no cost to LEAs who chose to use FAST. Although IDE does not require LEAs or school staff to follow specific fidelity procedures, the state selected an assessment system that provided fidelity tools for each of the measures and built in certification procedures for each measure. Staff can complete certification quizzes prior to

administering assessments and as a refresher from year to year. In addition to the publisher-provided materials, IDE provides large-scale, in-person trainings each summer. These trainings emphasized that obtaining reliable and valid student data is a critical component for making intervention decisions about students.



Use existing fidelity tools from national technical assistance centers.

The Wyoming Department of Education (WDE) is implementing data-based individualization (DBI) as one of its coherent improvement strategies to improve literacy outcomes of students with disabilities. The National Center on Intensive Intervention (NCII; www.intensiveintervention.org) has identified DBI as a research-based process for individualizing and intensifying interventions through the systematic use of assessment data, validated interventions, and research-based adaptation strategies. WDE adopted the data fidelity tools published by NCII to increase data quality at all levels evaluation, including implementation and impact on student performance. Ongoing professional development and coaching are provided to teachers to ensure data are entered accurately and on time during initial implementation. Descriptions of each data collection tool and its use are given next.

- NCII DBI Implementation Rubric and Interview.* Schools complete an adaptation of the 5-point scale rubric under the guidance of a trained DBI coach. The data are used by the coach to guide professional development and coaching supports for the teacher and are submitted directly to the state’s external evaluator to monitor changes in implementation.
- NCII DBI Implementation Log: Daily and Weekly Intervention Review.* Teachers complete the electronic log each day of intervention delivery. At the end of each week, the DBI coach and the participating teachers use the data to problem solve around challenges with fidelity of implementation and student progress. While intended to guide decisions about student-level instruction and intervention adaptations, the progress monitoring data are aggregated at the state level to document impact of DBI on student growth.

Have a data use question?

The data use team responds to technical assistance (TA) requests that states submit to their [TA provider](#).



Create a new data quality tool.

The Colorado Office of Early Childhood (OEC) aimed to improve the quality of information included in Individual Family Service Plans (IFSPs). With this goal in mind, the OEC created a comprehensive tool to standardize the process for reviewing IFSPs to improve family and child outcomes and to improve evaluation outcomes. Colorado used the following strategies to develop a tool and process for conducting standardized reviews of IFSPs:

- *Created a web-based data system.* The state created a new web-based data system that collected not only compliance data but also all the information contained in the IFSP.
- *Developed a customized data quality measurement tool.* Colorado adapted the Kansas Infant-Toddler Services Quality Indicator Rubric to develop the Quality IFSP Outcome (QIO) tool. The state customized the QIO tool to match the information captured in the Colorado IFSP documents.
- *Gathered feedback.* OEC engaged key stakeholders in an iterative feedback loop during development. OEC also conducted internal testing and piloted scoring of the QIO tool.
- *Provided technical assistance (TA).* OEC provided TA to pilot sites through monthly phone calls, webinars, and a QIO User Manual.

Each month, providers conduct approximately 110 self-assessments and OEC staff verify approximately 85 self-assessments using the QIO tool. Preliminary findings suggest that using the QIO tool has positively impacted the SSIP implementation. For example, high ratings on the QIO tool suggest increased collaboration between family members and service providers. Increased collaboration may lead to gathering richer information about the child’s needs, which in turn, can generate better results for families. In addition, the QIO also provides information on the fidelity of desired practices and impact on the improvement in child outcomes.

IOWA	WYOMING	COLORADO
Want to read more about Iowa’s use of a statewide assessment system? Click here .	Click here to learn more about Project WIN and view Wyoming’s adapted resources and tools.	Interested in learning more about the QIO Tool? Click here for more information.

Recommendations for States Facing Similar Challenges

- Communicate a clear and consistent message to LEAs and service providers regarding the importance of collecting high-quality and reliable data.
- Review preexisting data quality measurement tools that may be adapted to create a tool that meets the needs of the local context and data source.
- Engage stakeholders in the data quality tool selection or development. This promotes buy-in from the communities that will utilize the tool.
- Capitalize on widely available resources through national TA centers.
- Leverage fidelity tools and certification available through a publisher when using an assessment system.
- Regularly share data on quality with internal and external stakeholders.

Available Resources

- National Center for Systemic Improvement (NCSI), Technical Assistance State Facilitators (Find your state on the [map](#).)
- NCSI Data Use Team Technical Assistance Support (Contact: Kristin Ruedel at kruedel@air.org)
- The Center for IDEA Early Childhood Data Systems, *Collecting High-Quality Child Outcome Data for Program Improvement* [Presentation](#)
- National Center on Intensive Intervention Fidelity [Resources](#)

About this resource: This resource was developed by members of the NCSI Data Use Service Area Team, including Kristin Ruedel (AIR), Gena Nelson (AIR), and Tessie Bailey (AIR), and in collaboration with Christy Scott, Early Intervention Program Director, Colorado OCE; Greg Feldmann, Educational Program Consultant, IDE; and Nick Whynott, Early Childhood Supervisor, WDE. The content was developed under cooperative agreement number #H326R140006 (NCSI) from the Office of Special Education Programs, U.S. Department of Education. Opinions expressed herein do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government. Project Officers: Perry Williams and Shedeh Hajghassemali.