What Counts as Evidence? Making Decisions for Instruction and Intervention Within a Multi-Tiered System of Support

Webinar QA

Question: How can I work with teachers to collect and use accurate data in a manageable way?

Answer: Developing a clear process and plan for data collection can help to ensure that data are collected accurately and that doing so is manageable for staff. In developing the plan and process, it is important to:

- *Review the types of data that you are asking staff to collect.* You want to ensure that you are not duplicating efforts and that staff have a clear understanding of the purpose of the data you are collecting. The National Center on Response to Intervention developed a series of modules, with one focused on understanding assessments, that could be helpful in talking to staff about the different types of assessments within a response to intervention (RTI) or multi-tiered system of support (MTSS) framework. View the learning module here.
- *Select assessments that can be delivered and scored in a manageable timeframe.* Most progress monitoring tools can be delivered in 1–5 minutes. You can learn about implementation requirements for different tools on the National Center on Intensive Intervention (NCII) and Center on RTI tools charts. View the Academic Progress Monitoring Tools Chart and Screening Tools Chart to learn more about the implementation requirements for different tools. When you are considering measures it is important to consider the timing and delivery of those assessments. You also may want to decide how you will be able to view the data that are collected. For example, many progress monitoring systems graph data or provide data in easily understandable output formats. Sometimes, that option will not be available or the system does not give you with the information needed; NCII is working on finalizing a tool that can help to graph progress monitoring data easily in Excel. We hope to post this soon!
- *Ensure staff delivering the assessments are trained and understand the importance of delivering the assessments with fidelity*. You can learn more about some potential challenges related to not collecting data consistently in this video from Dr. Devin Kearns.
- *Provide a clear structure for data meetings and clear decision rules*. Having clear decision rules that are documented in writing can help to facilitate data-based decisions. To ensure data meetings are efficient and provide actionable steps, the NCII offers data meeting tools that can be customized to meet your school needs. View the data meeting tools.

Question: Should districts use a single tool for progress monitoring?

Answer: To encourage resource sharing and common oversight, districts may find it helpful to use the same progress monitoring tool across schools. At the same time, it is more important that the progress monitoring tool that is implemented in a school or grade level be used consistently over time. Dr. Devin Kearns shares why consistency is so important in this Ask the Expert video.

Question: What evidence-based progress monitoring tools and interventions are available?

Answer: There are a number of resources available to review the research base and technical adequacy of interventions and tools.

NCII has developed four tools charts to assist educators and families in becoming informed consumers who can select academic and behavioral progress monitoring tools and interventions that best meet their individual needs.

- Academic Intervention chart http://www.intensiveintervention.org/chart/instructional-intervention-tools
- Behavioral Intervention chart http://www.intensiveintervention.org/chart/behavioral-intervention-chart
- Academic Progress Monitoring chart http://www.intensiveintervention.org/chart/progress-monitoring
- Behavioral Progress Monitoring chart http://www.intensiveintervention.org/chart/behavioral-progress-monitoring-tools

  Some additional sites that provide reviews of academic and behavioral interventions include:

- What Works Clearinghouse/IES Practice Guides: http://www.ies.ed.gov/ncee/wwc/Publications_Reviews.aspx?f=All%20Publication%20and%20Product%20Types,3;#pubsearch

- Best Evidence Encyclopedia: http://www.bestevidence.org/index.cfm

- IRIS Center: http://iris.peabody.vanderbilt.edu/ebp_summaries/

- EBI Network: http://ebi.missouri.edu/

NCSI, NCII, and Center for Collaboration for Effective Educator Development, Accountability and Reform (CEEDAR) do not endorse or promote any of the tools or interventions available through these reviews. In a 2015 review of the trustworthiness of available online repositories of evidence-based tools, Test and colleagues (2015) found that only 57 percent of the sites they reviewed met the criteria of trust or trust with caution. They also found variability in the criteria used for review for the repositories labeled trustworthy or trust with caution. Their findings highlight the importance of considering both the criteria used for review and the quality of the studies as well as the findings. For example, the NCII intervention tools charts provide separate ratings for study quality standards and study results. When reviewing tools on the chart, it is important to first consider the quality of the study before reviewing the findings when determining whether the intervention meets your needs.

To learn more about the study, view the citation:

- Test, D.W., Kemp-Inman, A., Diegelmann, K., Hitt, S.B., Bethune, L. (2015) Are online sources for identifying evidence-based practices trustworthy? An evaluation. *Exceptional Children, 82*(1). doi: 10.1177/0014402915585477

Question: What are the best ways to display the findings of progress monitoring data?

Answer: Graphing data is a very important step in reviewing data and displaying findings. Progress monitoring graphs are vital for teachers and school staff because they provide a clear picture of a student's growth, enabling school staff to make decisions about the appropriateness of the student's short- and long-term goals, adequacy of progress, and value of the instruction. When parents can hear about and see a visual representation of their child's progress (or lack of progress), they may more easily understand how their child is responding to instruction and whether the child is on track to reach the targeted goals. To maximize benefit to school teams, teachers, parents, and students, progress monitoring graphs should consist of several elements. In addition to a student's scores, a graph should include a goal, a goal line, and phase changes. For more information, view the following briefs from the National Center on Response to Intervention [Common Progress Monitoring Graph Omissions: Missing Goal and Goal Line](#) and [Common Progress Monitoring Graph Omissions: Making Instructional Decisions](#)

Question: What does data-based individualization (DBI) look like when implemented in schools, and what personnel need to be involved?

Answer: Data-based individualization is a systematic approach to intensive intervention. It is an iterative, multi-step process that involves (1) collecting frequent (usually weekly) progress monitoring data; (2) analyzing these data according to standard decision rules to determine when an increase to the student's goal is needed (in the case of strong progress) or a revision to the intervention program is needed (in the case of inadequate progress); (3) introducing a change to the intervention program when progress is inadequate, which is designed to improve the rate of learning; and (4) continuing to use Steps 1–3 on an ongoing basis to develop an individualized program that meets the student's needs. NCII collaborated with partners in Rhode Island to develop a webinar that detailed what they learned from implementing DBI. Presenters discussed lessons learned about critical infrastructure elements and practices that were identified through NCII's work with school sites. The webinar can be found [here](#). NCII has developed a module, [Getting Ready to Implement Intensive Intervention Infrastructure for Data-Based Individualization](#), designed for teams considering DBI implementation. This module outlines some of the key infrastructure elements necessary for implementation and guides teams through initial action planning.

Within the DBI process, many staff may be involved. Schools often use teams to support the development and implementation of a plan for intensive intervention. These teams may include a representative group of staff who know and work with the student (e.g., school psychologist, social worker, interventionist, special educator). The team may collaborate to develop an individualized student plan to be delivered by a specific team member. The team would then meet regularly to review the student's data and suggest potential adaptations to the developed plan based on the student's rate of progress. NCII recommends that the delivery of instruction and interventions be performed by the most qualified staff. Regardless of role (e.g., school psychologist, general educator, special educator, reading specialist), individuals who provide

intensive intervention must have adequate training and experience. To deliver intensive intervention as intended, individuals require a unique set of skills that equips them to individualize intervention, based on student data, to align with student skill deficits. This skill set includes the capacity to use data to adapt interventions to meet students' individual needs and to monitor student progress within the intervention.

Question: How long should students stay in the different tiers? Do they need to be screened into a tier or can they just be placed there?

Answer: It is important to use a systematic process that relies on data when moving students between tiers. This may include multiple data sources such as screening and progress monitoring data. You may use screening data to identify students who are at risk of poor learning outcomes and need additional intervention or support in a more intensive tier; however, we would recommend that you not simply rely on the one data point but verify the screening data using second-stage screening to improve the classification accuracy (see here for additional information about the benefits of a two-level screening approach and here for additional resources related to screening). You also may use additional data sources (e.g., previous performance, previous progress monitoring) to supplement the screening data to make decisions about student placement. Once a student is in an intervention, for academic subjects, we recommend that you collect data for approximately four to six weeks prior to making decisions about whether a student is making progress in the current intervention or tier of instruction. In the area of behavior, guidance may be more variable depending on the context and nature of the behavior. In this Ask the Expert video, Dr. Joe Wehby addresses the following question: "For students with intensive behavior needs, how many data points are needed to make decisions?"

To learn more about looking at data to understand students' response to interventions and movement between tiers, view our past webinars on academic progress monitoring, behavioral progress monitoring and using progress monitoring data to guide instructional decisions.

While there is no "one size fits all" guidance for length of stay within a certain tier, it is important to remember that movement across tiers is bidirectional. A student may need to move into a more intensive tier or into a less intensive tier. In addition, data-based individualization, a process for intensive intervention defined by NCII, includes an iterative process of data collection and adaptation based on student need. Therefore, a student may stay within the most intensive tier through multiple intervention adaptations.

Question: Can you define direct instruction and explicit instruction?

Answer: As highlighted in the recently released IRIS module developed in collaboration with NCII and CEEDAR, explicit (or direct) instruction involves teaching a specific skill or concept in a highly structured manner. It often is used for teaching new skills or teaching students to generalize knowledge to novel settings. During explicit instruction, the teacher:

- Clearly identifies the expectations for learning
- Highlights important details of the concept or skill
- Gives precise instructions
- Models concepts or procedures

- Connects new learning to previously learned material

For additional information about the steps in an explicit or direct instruction lesson, view the IRIS module.

For more information on how to incorporate explicit instruction into intensive interventions, visit Module 7 of the NCII DBI training series.

Question: What strategies should be used for students who are habitually absent from school?

Answer: Identifying the root cause for why the student is absent is an important first step. Are they avoiding being in an environment where they feel uncomfortable or unwanted? Are they avoiding academic challenges? Are there challenges at home that make it difficult to attend school? Understanding function or the reason the student is absent can help you to align strategies and supports to meet their needs. Attendance Works, a national and state initiative to promote the importance of school attendance in academic success, provides a range of resources and strategies related to promoting attendance. Visit http://www.attendanceworks.org/ for more information.

Question: What is good pedagogy for implementing evidence-based practices?

Answer: Similar to the levels of evidence for practice across the continuum of an MTSS framework, the pedagogy for implementing evidence-based practices may vary across the tiers and there is no "one-size-fits-all" approach. For evidence-based practices being delivered at Tier 2, it is important to implement the practice as it was outlined by the developer. When you move to more intensive intervention you may adapt your pedagogical approach to better meet the students' needs. This may include providing more explicit and systematic instruction, increased opportunities for students to respond, specific feedback, and error correction. Learn more about instructional changes that might occur at the intensive level in the NCII Module, Designing and Delivering Intervention for Students with Severe and Persistent Academic Needs.

Question: Does ESSA impact the requirements for evidence of effectiveness?

Answer: As noted by Dr. Gandhi in the webinar, the Every Student Succeeds Act (ESSA) requires use of "evidence-based interventions" in low-performing schools. ESSA defines four categories of evidence and notes that school improvement interventions must be supported by categories 1–3:

1. *Strong evidence*: supported by at least one randomized study

2. *Moderate evidence*: supported by at least one quasi-experimental study

3. *Promising evidence*: supported by at least one correlational study with pretests as covariates

4. Programs with a rationale based on high-quality research or a positive evaluation that are likely to improve student or other relevant outcomes

Question: Why are evidence-based practices being underused?

Answer: A number of challenges in the implementation and use of evidence-based practices were discussed in the Webinar. Presenters noted the lack of a common definition when talking about evidence-based practices, a potential lack of alignment with the needs of students, and issues of time and complexity for implementing evidence-based practices, among others. Studies have reported that educators may conceptually support and advocate the use of evidence-based practices, but are either unlikely or unable to implement them (Jones, 2009):

- Jones, M. L. (2009). A study of novice special educators' views of evidence-based practices. *Teacher Education and Special Education*, 32, 101–120. doi:10.1177/0888406409333777

The diversity of terms such as research based, evidence based, and recommended practice can be confusing to educators. Even when teachers report interest in learning more about evidence-based practices, they acknowledged the challenge of finding information (Greenway, McCollow, Hudson, Peck, & Davis, 2013):

- Greenway, R., McCollow, M., Hudson, R.F., Peck, C., Davis, C.A. (2013) Autonomy and accountability: Teacher perspectives on evidence-based practices and decision-making for students with intellectual and developmental disabilities. *Education and Training in Autism and Developmental Disabilities 48*(4) 456-468. Retrieved from http://www.jstor.org/stable/24232503

Test and colleagues (2015) highlight another challenge that many educators face when trying to identify evidence-based practices. In their review of websites that provided information about evidence-based practices, they found that many of the sites did not meet their criteria for trustworthy or trust with caution. Their findings indicated 43 percent of websites claiming to share evidence-based practices were identified as "do not trust." It is difficult for educators to decipher what has a backing of high-quality research that indicates it is an evidence-based practice when information about the quality of the evidence is not presented. Therefore, educators must have the knowledge and skill to review the information provided.

- Test, D.W., Kemp-Inman, A., Diegelmann, K., Hitt, S.B., Bethune, L. (2015) Are online sources for identifying evidence-based practices trustworthy? An evaluation. *Exceptional Children (82)1* doi: 10.1177/0014402915585477

Question: How could you develop a behavior contract for a small group of 3 to 4 students?

Answer: When implementing behavior contracts, students and teachers agree on a common goal for addressing a problem behavior and develop a written agreement. The agreement (also called a contract) should be written positively, stating what the student is expected to achieve. The contract should be easy to understand by teachers, parents, and students and should be for a short duration and be achievable in that timeframe. NCII provides a description of behavior contracts, considerations for implementing them, examples of contracts, and potential intensification strategies. View the behavior contracts strategy description at

http://www.intensiveintervention.org/sites/default/files/Behavior_Contracts_508.pdf, and find other behavioral strategies to support students with academic and behavioral needs at http://www.intensiveintervention.org/behavior-strategies-and-sample-resources.