

64TH CONFERENCE ON EXCEPTIONAL CHILDREN



WORKING TOGETHER

TO ACHIEVE STUDENT SUCCESS

Data-Based Individualization: Aligning Behavioral Intervention to Function

Laura Kuchle

National Center on Intensive Intervention
American Institutes for Research



Today's Presentation

- Rationale for intensive intervention and overview of the data-based individualization (DBI) process
- Considerations when developing intensive interventions
- Core concepts in behavior
- Determining the function and designing intensive behavioral plans
- Intervention strategies
- Wrapping up and resources

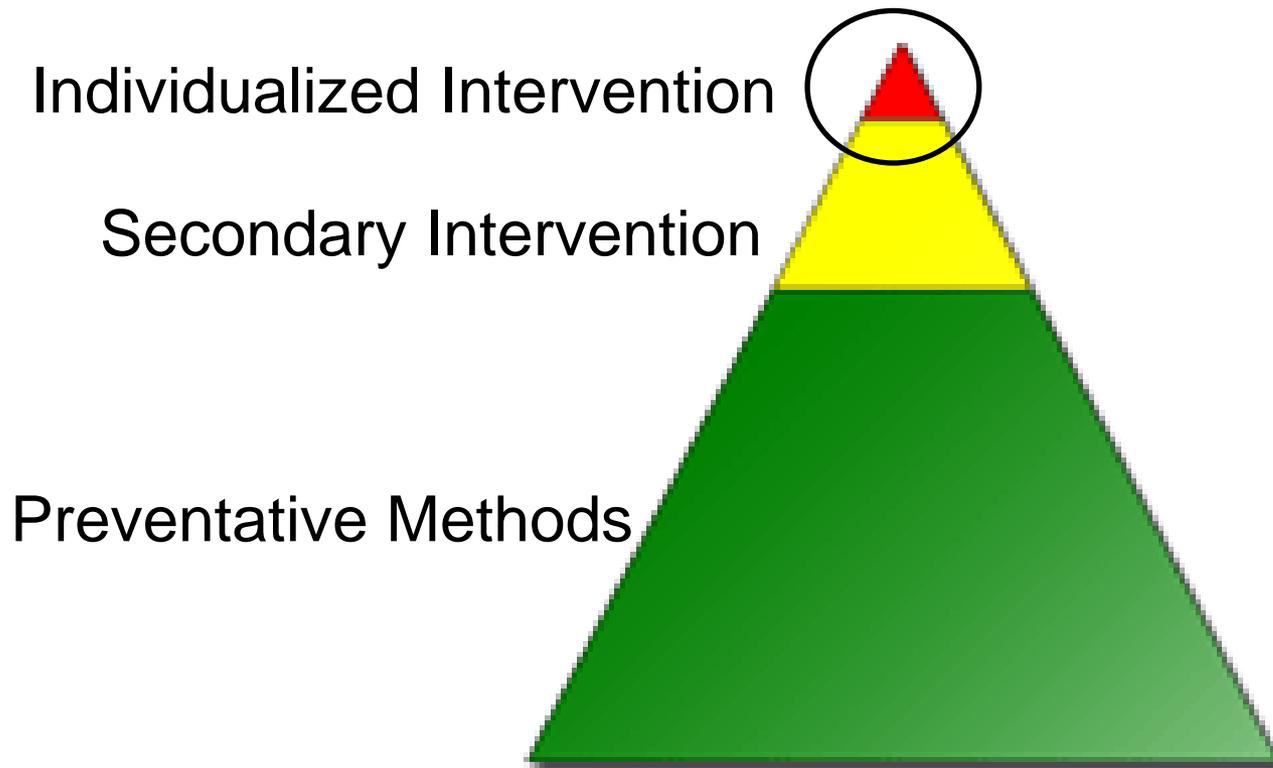
What is Intensive Intervention?



Intensive intervention addresses *severe and persistent* learning or behavior difficulties. Intensive intervention should be:

- Driven by data
- Characterized by increased intensity (e.g., smaller group, expanded time) and individualization of academic instruction and/or behavioral supports

Triangle Intervention Logic: Where Does DBI Fit?



What Intensive Intervention...

Is...

- Individualized based on student needs
- More intense, often with substantively different content AND pedagogy
- Comprised of more frequent and precise progress monitoring

Is Not...

- A single approach
- A manual
- A preset program
- More of the same Tier 1 instruction
- More of the same Tier 2 instruction

Why Do We Need Intensive Intervention?



Low academic achievement



Dropout rates



Arrest rates

For more information: Sanford et al., 2011; NAEP, 2013; Planty et al., 2008, Aud et al., 2012

Why Do We Need Intensive Intervention?

More Help



Validated programs are not universally effective programs; 3 to 5 percent of students need more help (Fuchs et al., 2008; NCII, 2013).

More Practice



Students with intensive needs often require 10–30 times more practice than peers to learn new information (Gersten et al., 2008).



Who Needs DBI?

- Students with disabilities who are not making adequate progress in their current instructional program
- Students who present with very low academic achievement and/or high-intensity or high-frequency behavior problems (typically those with disabilities)
- Students in a tiered intervention system who have not responded to secondary intervention programs delivered with fidelity

What is NCII's Approach to Intensive Intervention?



Data-Based Individualization (DBI): A systematic method for using data to determine *when and how* to provide more intensive intervention:

- Origins in data-based program modification/experimental teaching were first developed at the University of Minnesota (Deno & Mirkin, 1977).
- It is a process, not a single intervention program or strategy.
- It is not a one-time fix, but an ongoing process comprising intervention and assessment adjusted over time.

DBI Assumptions

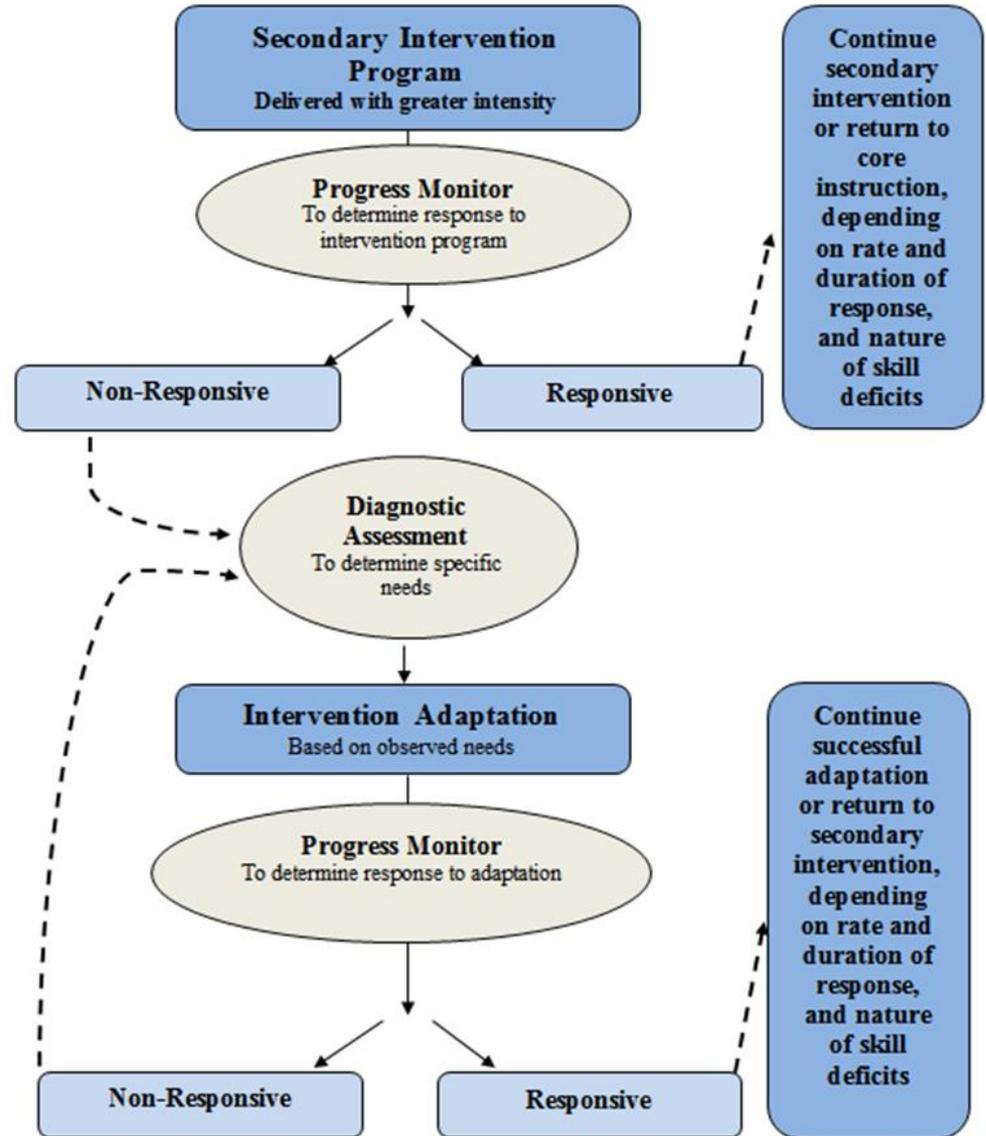
- ✓ Students with disabilities who require special education need specially designed instruction to progress toward standards.
- ✓ A data-driven, systematized approach can help educators develop programs likely to yield success for students with intensive needs.

DBI Assumptions

- ✓ DBI is a distinctively different and more intensive approach to intervention, compared to primary prevention's (Tier 1's) core program and secondary prevention's (Tier 2's) validated, supplementary programs (NCII, 2013).
- ✓ In a longstanding program of field-based randomized controlled trials, DBI has demonstrated improved reading, math, and spelling outcomes, compared with business-as-usual special education practice (e.g., Fuchs, Fuchs, & Hamlett, 1989).



A Bird's Eye View of DBI



Is DBI the Same as RTI? Special Education?



Many components of DBI are consistent with elements of special education and tiered service delivery systems.

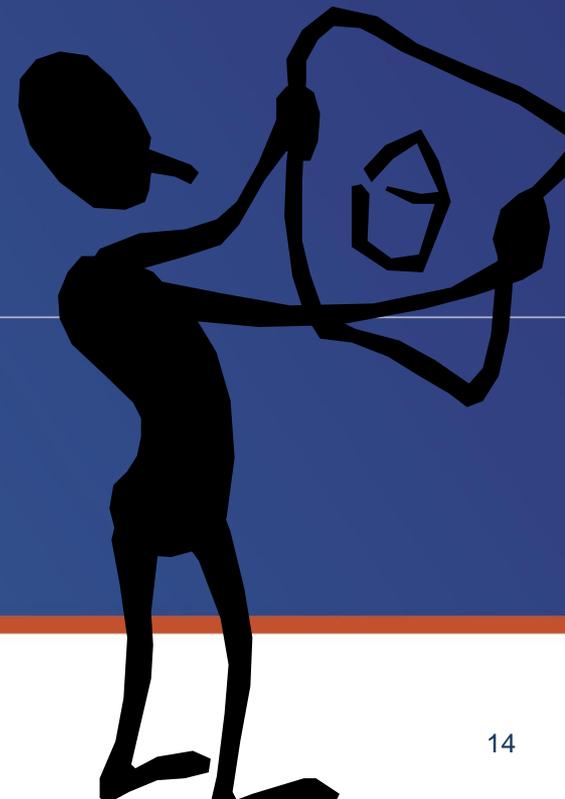
Tiered Interventions (RTI, MTSS, PBIS)

- Universal, secondary, and tertiary interventions
- Progress monitoring
- Team-based decisions based on data

Special Education

- Individualized program
- Progress monitoring
- Team-based decisions based on data

Considerations When Developing Intensive Interventions



DBI Uses a Team-Based Approach

For behavior, a representative team might include

- Staff who work with the student, including the student's teacher(s) and intervention provider(s)
- Administrator(s)
- Behavior specialists (e.g., behavior analyst, school psychologist, social worker, counselor)
- Family
- Student



Five Things Intensive Intervention Plans Should Include

1. Intervention steps or procedures
2. Existing or needed materials and resources
3. Roles and responsibilities related to intervention implementation
4. The intervention schedule and context
5. A method to monitor outcomes and analyze data

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

Monitor Outcomes for Data-Based Decisions

- Were the goals of the support plan achieved?
- Was implementation done consistently and with integrity?
- Is more assessment needed?
- How should the plan be modified?



What Does This Mean For Behavior?

Core Concepts in Behavior



Core Concepts in Behavior

Basic assumption:

- Behavior always serves a purpose.
- It is performed to obtain a desired outcome or goal.



Photo Credit: <http://www.flickr.com/photos/73645804@N00/1384954600/> woodleywonderworks via <http://compfight.com> Compfight <http://creativecommons.org/licenses/by/2.0/> cc



Defining A-B-C's of Behavior

- **Antecedent:** Any event that happens *before* a behavior.
 - Slow triggers (setting events)
 - Fast triggers

- **Behavior:** Anything that an individual *does*. Can be *seen* or *heard* and is *measurable*.

- **Consequence:** Any event that happens *after* a behavior occurs
 - Makes behavior more or less likely to occur in the future

Most Common Functions of Behavior

To Obtain/Get:

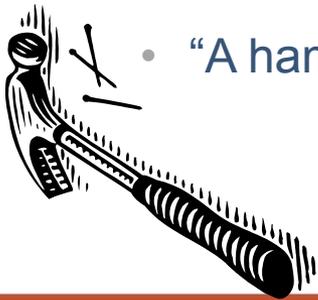
- Peer attention
- Adult attention
- Desired activity
- Desired object/ items
- Sensory stimulation (e.g., auditory, tactile)

Avoid/Escape:

- Difficult task
- Boring task
- Easy task
- Physical demand
- Non-preferred activity
- Peer
- Staff
- Reprimands

Why Function Is Important

- **Existing strategies may unknowingly reinforce a problem.**
 - “Insanity is doing the same thing over and over again and expecting different results.” ~Albert Einstein
- **Designing interventions that relate to the function of a behavior tend to be more effective at reducing the occurrence of problem behavior.**
 - “A hammer is an effective tool but not with a screw.”



Example

- Jason is nine and cries when asked to do difficult tasks. The crying is maintained by avoiding or escaping difficult tasks.

Start with the function

- Possible behavioral interventions:

- ~~Planned ignoring Jason when he cries~~
- ★ Breaking down objectives into smaller parts; asking for help
- ~~Stopping the activity~~
- ~~Time out from reinforcement~~
- ~~Increasing his schedule of reinforcement (e.g. giving him access to preferred activities more often)~~

Which one will address the *function* of the problem?

Determining the Function and Designing Intensive Behavioral Plans

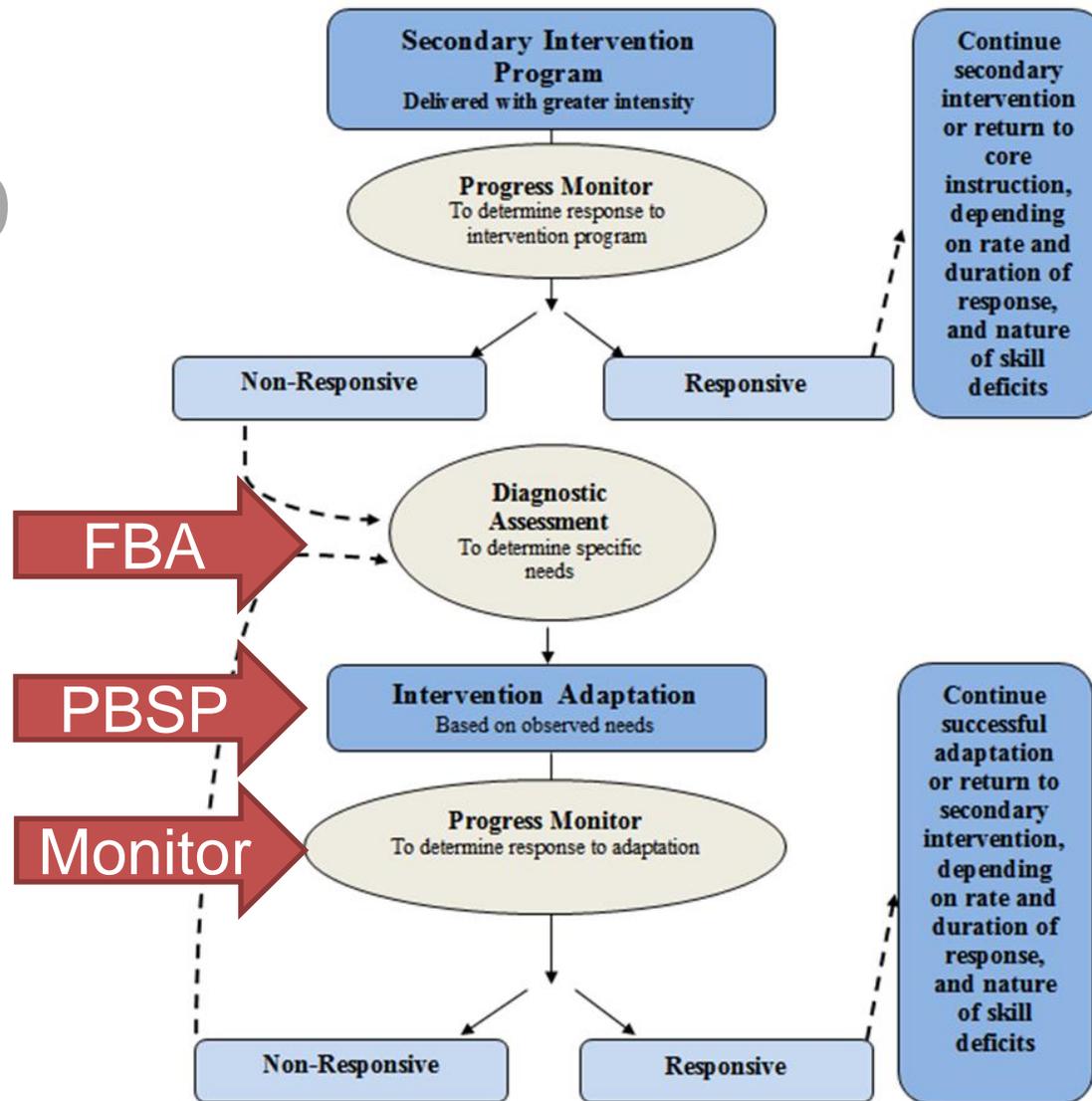
Handout: Planning Intensive (Tier 3) Function-Based Interventions

1. Gather indirect and direct data
2. Analyze the data
3. Formulate a hypothesis about the function of the behavior
4. Develop a Positive Behavioral Support Plan (PBSP)
5. Monitor and adjust the plan as needed



Functional
Behavior
Assessment
(FBA)

DBI in Relationship to Behavior



Collecting Data for a FBA



■ Indirect Data

- Gather information from individuals who know the student well (including the student, if appropriate).
- You can use rating scales and structured interviews.

■ Direct Data

- Direct observation of student behavior (more time consuming and may require more training)
- Can be event-based (e.g., frequency) or time-based (e.g., latency or duration)



Resources for Conducting a FBA

In your handout

- **Sample “Functional Assessment Interview”**
 - Structured interview and team planning form for analyzing data and creating a functional hypothesis
- **A-B-C Report Form**
 - Identify typical antecedents and consequences for a given behavior based on direct observations

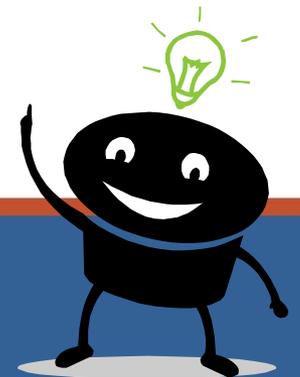
Analyze Data to Formulate a Functional Hypothesis

Given the circumstances when (slow triggers)

and when (fast triggers)

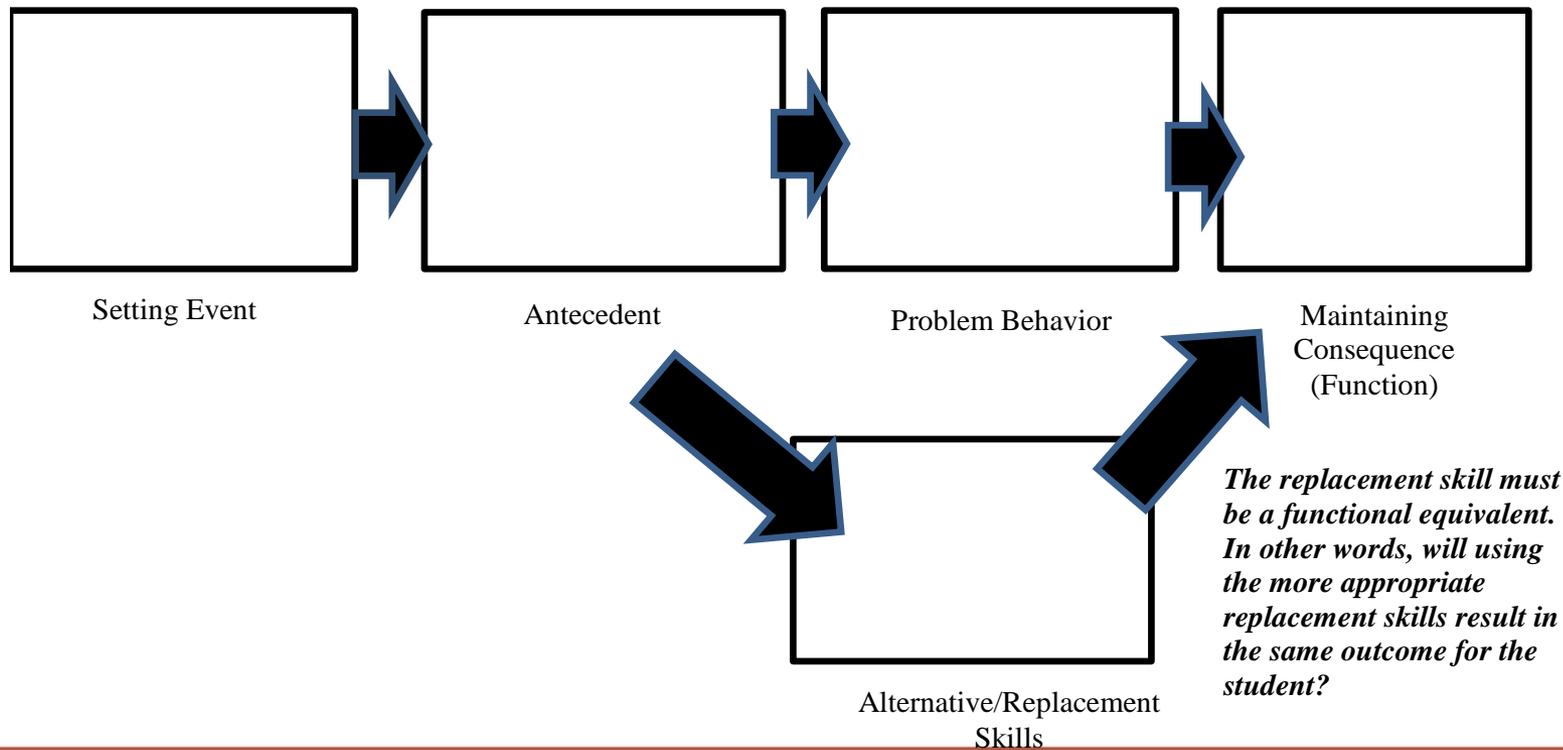
occur, the student does (problem behavior)

in order to (maintaining function)

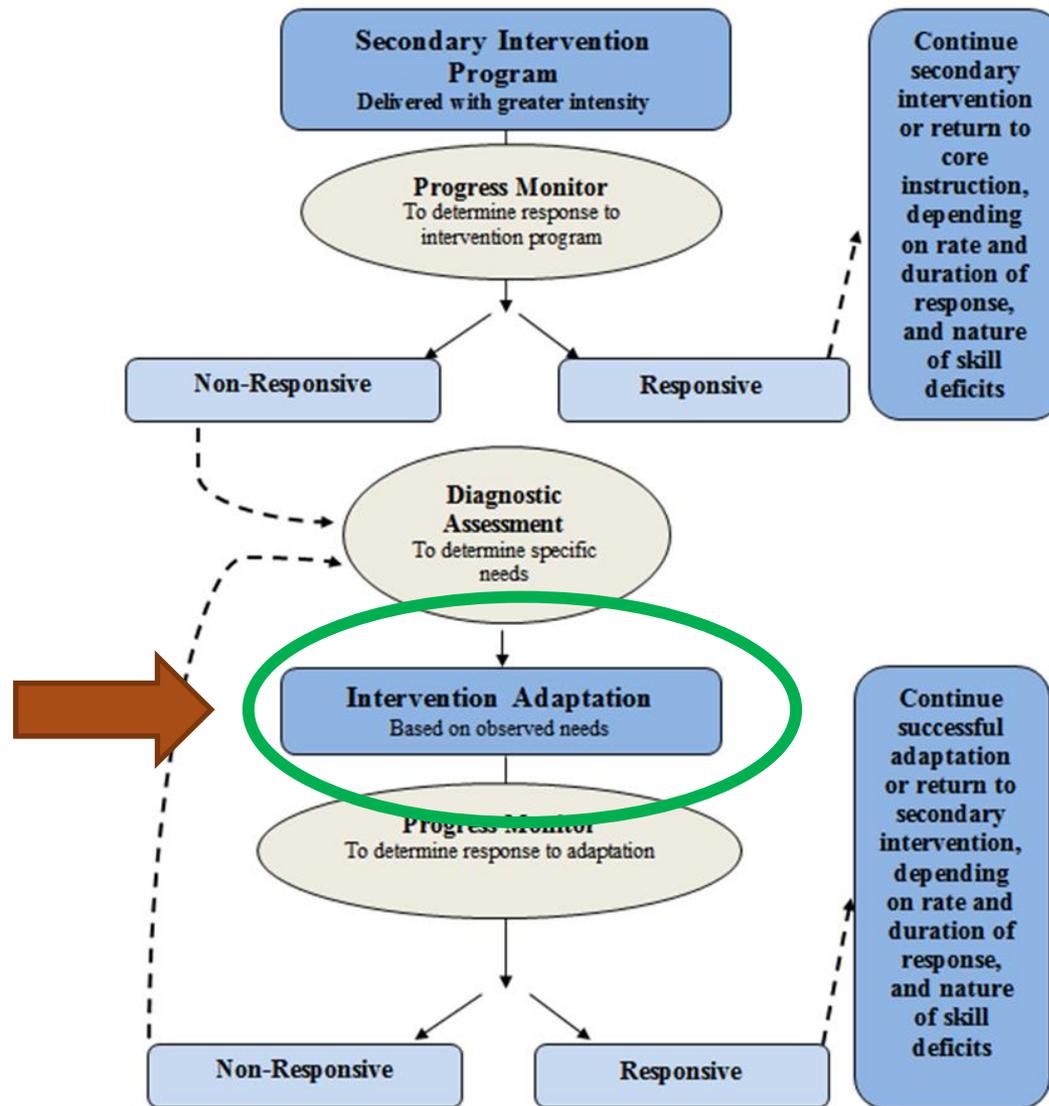


Function-Based Planning

Based on the data review and analysis, summarize the results of the assessment:



DBI in Relationship to Behavior



Develop a Positive Behavioral Support Plan (PBSP)

The plan should directly address the function that was identified by the FBA process and include strategies adults will implement that:

- a) address **antecedents** for problem behavior,
- b) teach new skills and replacement **behaviors**, and
- c) allow the student to access the **consequences** that are maintaining the problem behavior in a more appropriate way.

Handout: Function-Based Intervention and PBSP Worksheet

Consider classroom environment, curriculum, and functional hypothesis to create a PBSP that addresses

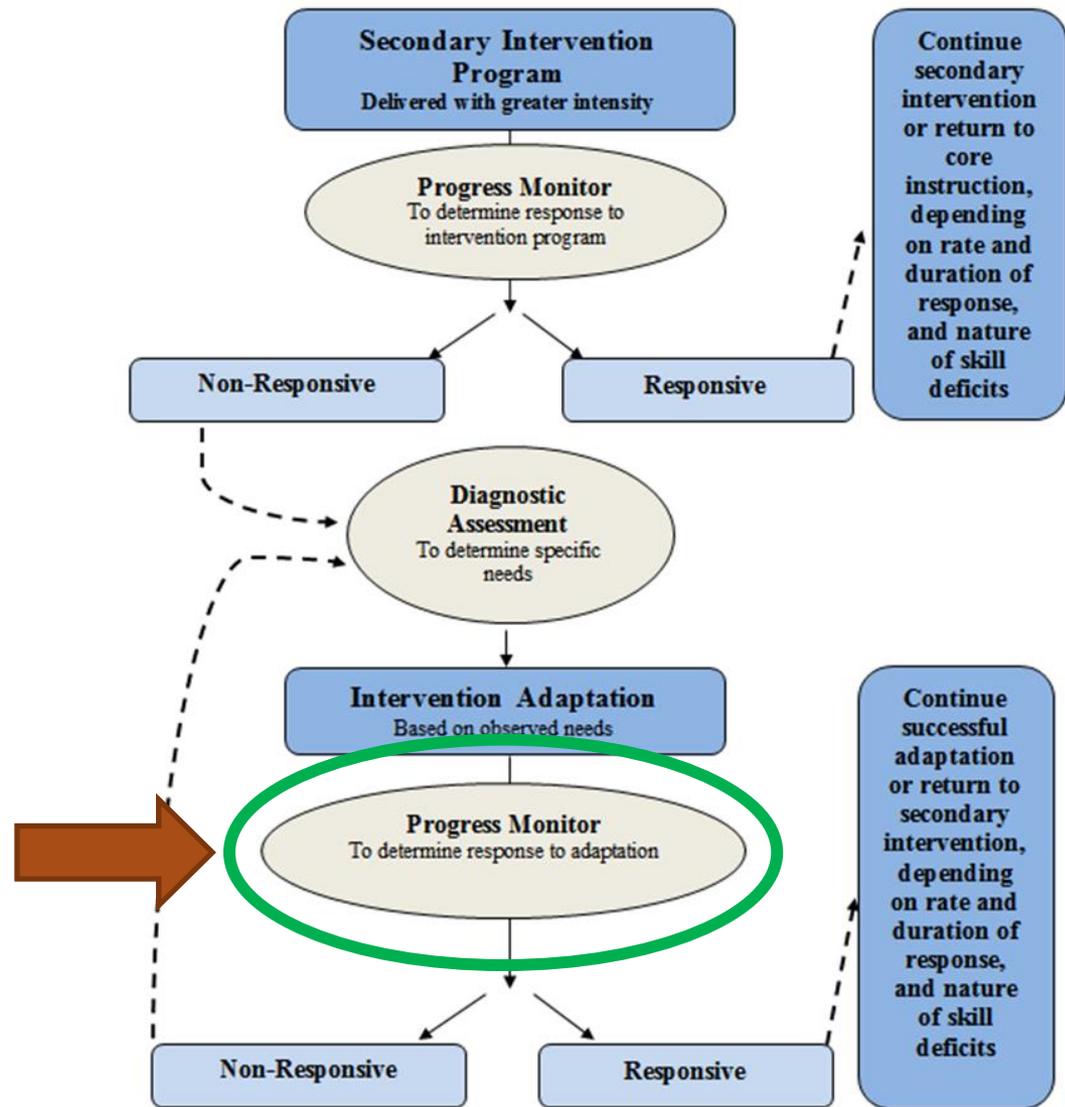
- Antecedents
- Skill deficits
- Maintaining consequences
- Crisis management procedures
- Monitoring plan

Handout: Function-Related Interventions

Strategies for behaviors with the following functions:

- Gain attention
- Escape task or environment
- Tangible reinforcement
- Sensory reinforcement

DBI in Relationship to Behavior



Monitor the PBSP as Needed

- Target behaviors are monitored on an ongoing basis to track the effectiveness of the intervention.
- Consider:
 - How will progress be monitored?
 - How will data be collected?
 - Who is responsible?
- Also monitor implementation of the plan



Monitor and Adjust the PBSP as Needed

- Evaluate the effects of interventions, comparing baseline data to data during intervention.
- If your plan is not working, consider some reasons why it might not be working.
- If your plan is working, consider what you will do next.
- If you stop providing intervention, continue to collect data to determine whether any positive effects are maintained following plan termination.

Example Intervention Strategies

Examples of Evidence-Based Interventions

- Non-contingent reinforcement (NCR): attention seeking
- Antecedent modification: escape
- Addressing instructional mismatch: prerequisite skill or ability



Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

What Is Non-contingent Reinforcement?

NCR is a powerful method to reduce attention-seeking problem behavior. NCR involves giving a student access to a reinforcer frequently enough so that he or she is no longer motivated to exhibit disruptive behavior to obtain that same reinforcer (e.g., saturate the environment with the reinforcer **before** the behavior occurs).

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

An Example of Non-contingent Reinforcement

- **Scenario:** A student wants teacher attention and calls out or engages in disruptive behaviors to get attention consistently during a group activity, such as art or story time.
- **Possible solution:** The teacher will provide appropriate attention prior to the student “asking” for attention with the “problem behavior” (e.g., have the student sit with the teacher while she is reading a book to the class).

Critical Components for Success

- You need to **identify the reinforcer** for the problem behavior. NCR will not work if you do not know the function of the disruptive behavior.
- You need a **schedule for NCR delivery** that minimizes problem behavior.
- You must **ignore problem behavior** after the schedule is initiated.
- You should **fade the process** as problem behavior declines but make sure the student does not reengage in behavior by fading too quickly.

What Is Antecedent Modification?

- The student does not have to do something when he or she exhibits the problem behavior.
- The problem behavior is “working” for the student by allowing him or her to **escape** something that he or she does not want to do.

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

An Example of Antecedent Modification

- **Scenario:** A student wants to escape a non-preferred activity, such as mathematics or physical education. Every time the teacher announces the start of a specific activity, the student starts engaging in disruptive behaviors (e.g., runs away, shouts out, pretends to sleep).
- **Possible solutions:**
 - Minimize the need for the escape by making the target activity less punishing!
 - Alter antecedents to increase task engagement, appropriate behaviors, and general success (e.g., preteaching, offering choice, and modeling).

Critical Components for Success

- Positive reinforcement (e.g., praise) for engaging in the activity
- Reinforce appropriate behaviors in shorter intervals initially (e.g., change the schedule of reinforcement or task demand)

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

Addressing Instructional Mismatch



Photo credit: <http://www.flickr.com/photos/charlottel/154443920/>;
<http://www.flickr.com/photos/dno1967b/8703319368/>; <http://creativecommons.org/licenses/by/2.0/>

Instructional Mismatch?

- **Problem:** The assessment of a student's current instructional level is **inaccurate** in some way (e.g., knowledge, difficulty, pace, and/or level).
 - In other words, there is a mismatch between the student's skill/ability and the level or difficulty of the task.
- **Result:** Students who are ***failing academically*** are frustrated and often ***act out!***

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

Quick Example #1

Instructional Issue:

- Doing addition problems without being able to count

Possible Solution:

- Preteach content or skill—teach student number skills before introducing addition.



Quick Example #2

Instructional Issue:

- Journal writing without being able to form two- or three-word sentences

Possible Solution:

- Reduce the difficulty of the task—as opposed to writing sentences independently, you could have the student draw a picture and fill in the blank/guided writing.



Critical Components for Success

- Must be able to accurately assess a student's **current** skill level **and** implement a curriculum and teaching materials that are appropriate to the student's instructional level.
- Must **match** task demands with current skill levels to ensure success.
- Must differentiate instruction whenever possible and appropriate.

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

Summary

- **Identify the hypothesized function** of behavior and then select the intervention.
- **Use data to evaluate the effectiveness** and make adaptations as necessary.
 - Implementation integrity
- Function-based interventions are likely effective, **not definitely effective.**

Source: Evidence Based Intervention Network (<http://ebi.missouri.edu>)

Resources

Handout: Find Out What the National Center on Intensive Intervention (NCII) Has to Offer

National Center on **INTENSIVE INTERVENTION**

at American Institutes for Research ■

Signup for our newsletter and updates!

[Advanced Search](#)

[Resources](#)

[Tools Charts](#)

[Implementation Support](#)

[About Us](#)

How can schools help students with severe and persistent learning or behavioral needs? Intensive intervention (both academic interventions and behavior interventions) is intended to help these students. The Center's approach to intensive interventions is data-based individualization (DBI). DBI use data to individualize instruction, increase engagement, and provide opportunities to practice new skills. Within multi-tiered systems of supports such as RTI or PBIS, this is often considered Tier III. Learn more about the **DBI Framework**, meet **Center Staff**, visit the **Tools Charts** to find evidence-based progress monitoring tools or interventions, and view the **DBI Training Series** to find professional development materials to support the **Implementation of DBI** in schools and districts.

Learn the Language of Intensive Intervention

Data-Based Individualization

Intensive Intervention

Intervention Adaptation

Intervention Platform

Multi-Tiered System of Support

Positive Behavioral Interventions and Supports

Progress Monitoring

Response to Intervention

Tier 3

Data-Based Individualization (DBI)

Data-based individualization (DBI) 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 those 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. For additional information, view NCII's **DBI Framework** and **DBI Training Series**.

Ask the Expert

How can we support students

Recent Resources

Informal Academic Diagnostic

Call for Behavioral Tools

www.intensiveintervention.org

National Center on
INTENSIVE INTERVENTION

at American Institutes for Research ■

Tools Charts

Academic Intervention

This tools chart presents information about studies that have been conducted about academic intervention programs. The first tab, *Study Quality*, includes ratings from our TRC members on the technical rigor of the study design. The second tab, *Effect Size*, includes information about the results of the studies. The third tab, *Intensity*, provides information related to the implementation of the program as an intensive intervention. The fourth tab, *Additional Research*, provides information about other studies and reviews that have been conducted on the intervention. **Additional information** is provided below the chart.

Grade Level Subject

Study Quality | Effect Size | Intensity | Additional Research

Title	Study	Participants	Design	Fidelity of Implementation	Measures Targeted	Measures Broader
	Forlaković (2011)	●	●	○	●	●
	Fiedorowicz & Trites (1987)	●	●	○	●	●
	Forlaković (2011)	●	●	○	●	●
	Dubal, Hamly, Pavlov, Richards, Yambo, et al. (2012)	○	○	○	●	○
	Nelson, Vadasy, & Sanders (2011)	●	●	●	●	●
	Smith, Nelson-Walker, Fien, Smolkowski & Baker (2013)	●	●	●	●	●
	Torgesen, Myers, Schirm, Stuart, Vartivarian, et al. (2006)	●	●	●	●	●
	Slattery (2003)	○	●	●	●	●
	Miller, Merzenich, Tallal, DeVivo, Linn, et al. (1999)	●	●	○	●	●

Academic Progress Monitoring
<http://www.intensiveintervention.org/chart/progress-monitoring>

Academic Intervention
<http://www.intensiveintervention.org/chart/instructional-intervention-tools>

Behavioral Progress Monitoring
<http://www.intensiveintervention.org/chart/behavioral-progress-monitoring-tools>

Behavioral Intervention
<http://www.intensiveintervention.org/chart/behavioral-intervention-chart>

Handout: DBI Training Series

- Eight training modules focusing on components of DBI for academics and behavior
- Include—
 - Slides and speaker notes
 - Activities
 - Coaching guides

DBI Training Series

This series of training modules developed by the National Center on Intensive Intervention (NCII) is aimed at district or school teams involved in initial planning or implementation of data-based individualization (DBI) as a framework for providing intensive intervention in academics and behavior. The modules listed below provide an overview of the DBI process and more in-depth exploration of the various components of DBI. Each module is intended as a component of comprehensive professional development that includes supplemental coaching and ongoing support. The modules should be delivered by a trained, knowledgeable professional. Presentation slides or videos, handouts, and a coaching guide with suggested coaching activities are provided.

1) Introduction to Data-Based Individualization (DBI): Considerations for Implementation in Academics and Behavior

This module provides a rationale for intensive intervention and an overview of DBI, NCII's approach to intensive intervention. DBI is a research-based process for individualizing validated interventions through the systematic use of assessment data to determine when and how to intensify intervention. Two case studies, one academic and one behavioral, are used to illustrate the process, highlighting considerations for implementation.

<http://www.intensiveintervention.org/content/dbi-training-series>

Webinars

View archived webinars and look for announcements about the next live webinar: www.intensiveintervention.org

Webinars

A webinar (Web + Seminar) is a short presentation that you can view from our site and watch at a time that works best for you. Our webinars are presented by experts in the field of special education and data-based individualization in academics and behavior. To search through all of our resources by keyword, use the [Advanced Search](#).

Data Rich, Information Poor? Making Sense of Progress Monitoring Data to Guide Intervention Decisions — February 2014 (1:11:34)

Developed By: National Center on Intensive Intervention

This webinar, led by Drs. Lynn Fuchs and Lee Kern of Lehigh University addresses a challenge faced by many teachers: feeling inundated by data while struggling to find useful information to guide intervention decision-making

Bringing Families to the Table: Family Engagement for Struggling Students — October 2013 (59:26)

Developed By: National Center on Intensive Intervention

This webinar, presented by Kate Augustyn, Debra Jennings, and Kelly Orginski, discusses the importance of family engagement and provides examples of ways to engage families to support students.

Using Secondary Interventions to Set the Foundation for Effective Intensive Intervention — June 2013 (30:38)

Developed By: National Center on Intensive Intervention

This webinar, presented by **Laura Magnuson**, a technical assistance provider for NCII, provides an overview of the rationale and purpose for secondary or Tier II interventions.

Selecting Evidence-Based Tools for Implementing Intensive Intervention — May 2013 (37:11)

Developed By: National Center on Intensive Intervention

This webinar presented by **Dr. Allison Gruner Gandhi**, reviews the NCII tools chart on academic interventions, and how practitioners can use these charts to gather information about, and ultimately select, interventions that meet their needs.

Monitoring Student Progress for Behavioral Interventions — April 2013 (1:10:53)

Developed By: National Center on Intensive Intervention

This webinar presented by Dr. Daniel Maggin, shares methods for collecting behavioral data, procedures for examining behavioral data, and discusses using behavioral progress monitoring to make programming decisions.

Connect to NCII

- Sign up on our website to receive our newsletter and announcements
- Follow us on YouTube and Twitter
 - YouTube Channel: [National Center on Intensive Intervention](#)
 - Twitter handle: [@TheNCII](#)

The NCII Newsletter

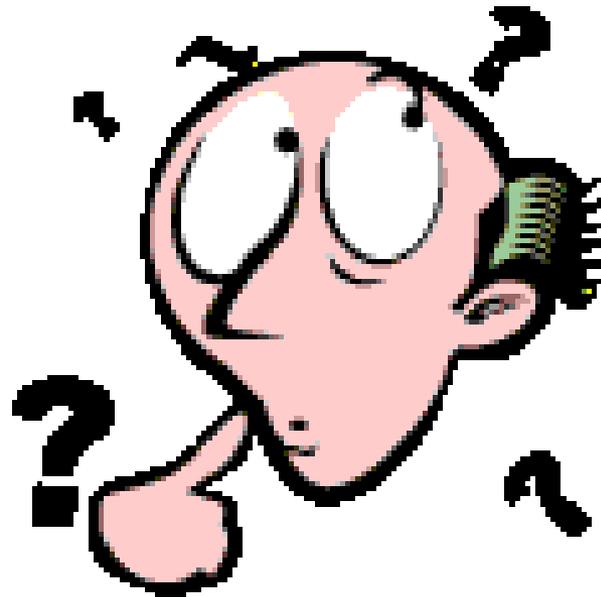
Signup for our newsletter and updates!

Subscribe

See us on:



Questions?



Disclaimer

This presentation was produced under the U.S. Department of Education, Office of Special Education Programs, Award No. H326Q110005. Celia Rosenquist serves as the project officer.

The views expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this website is intended or should be inferred.

References

- Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., Wang, X., & Zhang, J. (2012). *The condition of education 2012* (NCES 2012-045). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2012/2012045.pdf>
- Deno, S. L., & Mirkin, P. K. (1977). *Data-based program modification: A manual*. Minneapolis, MN: Leadership Training Institute for Special Education.
- Fuchs, L. S., Fuchs, D., & Hamlett, C. L. (1989). Effects of instrumental use of curriculum-based measurement to enhance instructional programs. *Remedial and Special Education, 10*, 43–52.
- Fuchs, L.S., Fuchs, D., Powell, S. R., Seethaler, P. M., Cirino, P. T., & Fletcher, J. M. (2008). Intensive intervention for students with mathematics disabilities: Seven principles of effective practice. *Learning Disability Quarterly, 31*, 79–92.
- Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2008). *Assisting students struggling with reading: Response to intervention and multi-tier intervention for reading in the primary grades. A practice guide* (NCEE 2009-4045). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from <http://ies.ed.gov/ncee/wwc/PracticeGuide.aspx?sid=3>

References

- National Center on Intensive Intervention. (2013). *Data-based individualization: A framework for intensive intervention*. Washington, DC: U.S. Department of Education, Office of Special Education.
- Newcomer, L. (2012). *Brief functional assessment and behavior support plans*. Paper presented at Montana Behavior Initiative Summer Institute, Bozeman, MT.
- Planty, M., Hussar, W., Snyder, T., Provasnik, S., Kena, G., Dinkes, R., KewalRamani, A., & Kemp, J. (2008). *The condition of education 2008* (NCES 2008-031). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2008/2008031.pdf>
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A.-M., & Shaver, D. (2011). *The post-high school outcomes of young adults with disabilities up to 6 years after high school. Key findings from the National Longitudinal Transition Study-2 (NLTS2)* (NCSE 2011-3004). Menlo Park, CA: SRI International. Retrieved from <http://www.ies.ed.gov/ncser/pubs/20113004/pdf/20113004.pdf>

National Center on Intensive Intervention
1000 Thomas Jefferson Street NW
Washington, DC 20007-3835

866-577-5787

www.intensiveintervention.org

Email: ncii@air.org



WORKING TOGETHER TO ACHIEVE STUDENT SUCCESS

64TH CONFERENCE ON EXCEPTIONAL CHILDREN

Handout packet for

Data-Based Individualization: Aligning Behavioral Intervention to Function

Session #49- Monday, November 3, 3:00-4:30
Session #84- Tuesday, November 4, 10:45-12:15

Laura Kuchle
National Center on Intensive Intervention
American Institutes for Research

Handouts Included:

- Planning Intensive (Tier 3) Function-Based Interventions
 - CEC 2014 Strand I, Session 3 Handout
<http://www.intensiveintervention.org/resource/cec-2014-strand-i-presentations-using-intensive-intervention-meet-academic-and-behavior>
- Find Out What the National Center on Intensive Intervention has to Offer
- DBI Training Series



Planning Intensive (Tier 3) Function-Based Interventions

In the school setting, a functional behavior assessment (FBA) is conducted when teachers are faced with serious and/or chronic challenging behavior. A basic assumption of an FBA is that behavior serves a purpose: It is performed to obtain a desired outcome or goal. The outcome could be access to attention, tangibles, a preferred activity, or sensory stimulation (positive reinforcement), or to avoid a task, specific environment or situation, social interaction, or unpleasant sensory stimulation.

FBA is a process of identifying the environmental events that predict and maintain patterns of problem behavior in order to alter those variables that promote skills that are more adaptive and acceptable to access desired outcomes.

Many tools and protocols exist to guide the process of conducting an FBA. The process is comprised of five steps:

1. Gather indirect and direct data
2. Analyze the data
3. Formulate a hypothesis about the function of the behavior
4. Develop a Positive Behavioral Support Plan (PBSP)
5. Monitor and adjust the plan as needed

The intention of this document is to provide information and tools that can be used by collaborative student behavior support teams as a resource to supplement your existing process, or in its entirety to complete an FBA. The document is divided into the following four components.

Part 1: The FBA Process. This section provides information on the basic steps to complete an FBA. In addition, there are questions that can be used to evaluate your current FBA process.

Part 2: Functional Assessment Interview. The National Center on Intensive Intervention (NCII) Functional Assessment Interview (FAI) can be used to conduct indirect informant interviews (i.e., with teachers, school personnel) and develop a hypothesis regarding the function of behavior. The FAI also includes information on conducting a direct observation and the development of a function-based PBSP.

Part 3: Function-Based Positive Behavior Support Plan Worksheet. This worksheet is designed to be used by the Behavior Support Team as a way to link the components of the PBSP to the information derived through the FBA process.

Part 4: Function-Based Interventions. This chart provides evidence-based intervention strategies that can be integrated into a support plan based on the identified function of the problem behavior.

The Functional Behavior Assessment Process

The FBA process can be broken into five basic steps:

1. Gather indirect and direct data
2. Analyze the data
3. Formulate a hypothesis about the function of the behavior
4. Develop a Positive Behavior Support Plan (PBSP)
5. Monitor and adjust the plan as needed

The following provides a brief outline of the process. The questions provided in the boxes can be used by the collaborative Behavior Support Team to determine if the process currently in use should be supplemented by additional procedures or tools.

Step 1: Gather Indirect and Direct Data

The purpose of gathering information is to identify any contextual setting events, antecedents, and consequences that influence the occurrence of behavior. Two methods are used to gather relevant information about the student and the behavior; (1) direct observation strategies and (2) indirect informant assessment.

Indirect assessment procedures are used to gather information from individuals who know the student well or who work with the student. Rating scales and structured interviews are frequently used for indirect informant assessment.

Does your Behavior Support Team currently have a structured informant interview that is used to identify:

- The challenging behavior?
- The frequency and intensity of the behavior?
- Possible setting events that contribute to the behavior?
- Antecedents that predict when the behavior will occur?
- Maintaining consequences and perceived function of the behavior?

- If No, use Parts A, B, C, and D of the Functional Assessment Interview, pages 7–11.

The challenging behavior should be operationally defined so that it is observable and measurable. The interview also should obtain information about how often the behavior occurs (frequency) and the intensity (e.g., description of severity of self-injury), when possible. It also should identify events that occur at an earlier time and influence the occurrence of problem behavior (e.g., hunger, difficulty sleeping). In addition, the interview should solicit information about events that occur immediately prior to the behavior (antecedents) and immediately after (consequences), and the assumed function of the behavior problem.

Direct data collection involves observing the student in situations and settings associated with occurrences of challenging behaviors, and is a critical component of functional assessment. Information gathered from the interviews can guide decisions on the best times to conduct observations. Observation data are used to determine the conditions under which the behaviors do and do not occur. Many formats for structuring observations exist. Two frequently used methods are the A-B-C Descriptive Reporting Format and the scatterplot.

Does your Behavior Support Team currently use a structured observation format that can place behavior within the context (e.g., what happens just before the behavior and what happens just after the behavior) as part of the FBA process?

- Yes
- If No, use the A-B-C Report Form, as explained in Part E of the Functional Assessment Interview, pages 11 and 14.

Step 2: Analyze the Data

The next step is to analyze all data (indirect and direct methods) to identify consistent patterns of when problem behaviors occur (antecedents and/or setting events for behaviors) and consequences that follow the behaviors (indicating functions of behavior). First, review the indirect data sources (interviews and checklists) to identify any common responses or observations. Second, review all direct data sources (observations) to identify patterns in how the student responds to different antecedents, and what happens after each occurrence of inappropriate behavior as well as appropriate behavior. Look for patterns in ways the adults and peers in the environment respond. Also, look for similar patterns in antecedents and consequences across observations. Third, compare direct observation data with indirect data assessments. When the information is in agreement, the data suggest a strong explanation for the student's behavior. If the observations do not corroborate the information gathered through indirect assessments, further observations under targeted conditions should be conducted.

Step 3: Formulate a Hypothesis About the Function of the Behavior

The team develops a four-part summary statement (hypothesis) based on the results from the FBA. These parts are: (1) setting events (slow triggers) relevant to the occurrence of problem behaviors (2) predictor events (antecedents/fast triggers) for problem behaviors, (3) the problem behavior, and (4) maintaining consequences (perceived function) of the problem behavior.

Upon completing an FBA, can your team consistently develop a specific hypothesis statement using the following format: *Given the circumstances when (fill in setting events / slow trigger), and when (fill in antecedents/fast triggers) occurs, the student does (fill in problem behaviors) in order to (fill in perceived function).*

- Yes
- If no, use the Functional Assessment Interview to conduct the functional assessment (pages 7–11).

Step 4: Develop a PBSP

The hypothesis statement is used to guide the development of the PBSP. The plan should directly address the function that was identified by the FBA process and include strategies adults will implement that (a) address antecedents for problem behavior, (b) teach new skills and

replacement behaviors, and (c) allow the student to access the consequences that are maintaining the problem behavior in a more appropriate way.

- Use the Function-Based Intervention and Positive Behavior Support Plan Worksheet (pages 15–18) to guide the development of a plan that adequately and accurately addresses the identified function of the behavior.
- Use the Function Related Interventions Chart (pages 19–20) to identify evidence-based strategies that can be used to manipulate antecedent conditions or maintain desired behaviors based on the identified function of the behavior.

A support plan should contain the following components:

- a. Clearly defined target and replacement behaviors
- b. Function of the behavior taken directly from the work completed during the FBA
- c. Strategies for prevention, including antecedent strategies and modifications that will be made to the environment, curriculum, instructional delivery, schedule, and other modifications to reduce the probability that the target behavior will occur. Antecedent conditions should represent effective practice (e.g., established and taught classroom rules, clear transition routines, high rates of opportunity to respond) and be directly linked to the assessment information.
- d. Instructional strategies that teach functional replacement behaviors and adaptive skills, and build general competencies. These should serve the same purpose as problem behavior.
- e. Extinction strategies that ensure the target behavior is no longer reinforced. In other words, what must happen so that the target behavior is no longer an effective means to access the desired reinforcer? Also, identify any reductive procedures, based on the function of the behavior, which will reduce the occurrence of the target behavior.
- f. Fading and generalization procedures
- g. Data to be collected and the frequency with which the measures will be collected
- h. Program review date to determine effectiveness
- i. Personnel and roles for implementing and evaluating the plan
- j. Crisis management procedures, if needed

Step 5: Monitor and Adjust the PBSP as Needed

Target behaviors are monitored on an ongoing basis to track the effectiveness of the intervention. Methods of measurement can be grouped into uniform (event-based) or non-uniform (time-based) behaviors. Uniform behaviors are those in which every performance takes about the same length of time as every other (e.g., hitting) and are usually measured by event-based methods. Non-uniform behaviors are those that vary in length (e.g., off-task) and are usually measured by time-based methods.

To determine which data collection system is appropriate for a particular target behavior, ask yourself a series of questions:

1. Is the target behavior uniform or non-uniform?
2. If it is uniform:
 - a. Is it discrete or continuous?
 - b. Is the behavior expected to occur at a high, moderate, or low frequency?
 - c. Will you be able to collect the data during intervention or instruction, or will you need a third party to collect the data?
3. If it is non-uniform, do you want to measure the time before initiation of the behavior or the time elapsed during performance of the behavior?

There are five observational recording systems that can be used:

1. *Event Recording* (Behavior Count) involves observing for a predetermined amount of time and recording each time the behavior of interest occurs. At the end of the observation period, the number of times that the behavior occurred during the observation is totaled. In order to be able to record each time that the behavior occurs, you need to be able to tell exactly when the behavior begins and when it ends. In addition, this behavior should not occur at such a high rate that it is too difficult to keep count of it.
2. *Interval Recording* involves dividing your observation time into intervals and recording if the behavior did or did not occur during each interval. At the end of the observation period, the number of intervals in which the behavior occurred is totaled. Interval recording is usually used when it is difficult to tell when the behavior begins or ends and/or it occurs at a very high rate.
3. *Momentary Time Sampling* allows for only one observation per interval. Similar to interval recording, the observer selects a time period in which to observe the behavior and divides this period into equal intervals; however, intervals for time sampling are usually minutes rather than seconds. The observer notes whether or not the behavior was occurring at the end of each interval. When using time sampling, the data collector observes the student only at the end of the interval and records whether or not the behavior is occurring at that particular time.
4. *Duration Recording* is used when the primary concern is the length of time that a student engages in a particular behavior. It is suitable for behaviors that have a discrete beginning and end. Duration can be recorded as either average duration or total duration. Average duration is used when the student performs the behavior with some regularity. Total duration recording measures how long a student engages in a behavior in a limited time period, such as being “on-task” during a 20-minute interval. An advantage of time sampling is that it can measure behaviors that occur at extremely high rates and/or extended periods of time.
5. *Latency Recording* (Time to Respond) is used when the time that it takes from the onset of an instruction to the time when the behavior occurs is important. Latency recording involves

observing each time that the behavior is expected, recording the time when the instruction to engage in this behavior is given, and recording the time when the behavior actually begins. At the end of the observation, the time that it took for the behavior to actually begin is calculated.

Graphing Data

In addition to measuring the behavior, it is important to graph the measurements as this you to have a visual image of the status of the behavior at any point in time. A graph allows you to determine, on average, how often the behavior occurs, times when the behavior is lower, and times when the behavior is higher. By looking at a graph, you can tell if the behavior is increasing or decreasing. The information can be used to assess the adequacy and effectiveness of the support plan.

Functional Assessment Interview

Student Name: _____ Date: _____

School: _____ Grade: _____ DOB: _____

Person(s) Completing Assessment _____

Tertiary Prevention interventions are implemented through a flexible, but systematic, process of functional behavior assessment and behavioral intervention and support planning. This worksheet presents the general steps of the process. The following sections are to be completed by the Behavior Support Team to guide the Functional Behavior Assessment and Positive Behavior Support planning process. Parts A through D can be completed by the team or used to interview teachers and other school personnel who work with and have knowledge about the student.

Part A: Identify goals and desired outcomes.

1. What skills and/or strengths does the student display?

2. What are the goals or desired outcomes of the intervention?

Part B: Operationally define the typical target behavior(s).

	Behavior #1	Behavior #2
What does the behavior look and sound like?		
How frequently does the behavior occur?		
How long does the behavior last?		
How intense/dangerous is the behavior?		
What typically brings an end to the behavior?		

Part C: Identify typical antecedent and consequent events. Answer each of the following questions. For each “Yes” response, provide a full description or additional information that is important.

Identify Antecedents: Setting events (slow triggers)

1. Are there any life stressors that could be contributing to the problem?
 No

Yes _____

2. Are there any health or physical conditions that could be contributing to the problem?

No
 Yes _____

Triggering Antecedents (fast triggers)

1. Are there times when the behavior ALWAYS occurs?

No
 Yes _____

2. Are there times when the behavior NEVER occurs?

No
 Yes _____

3. Does the behavior occur more predictability during particular activities or academic subjects?

No
 Yes _____

4. Does the behavior occur more predictably around a specific adult, peer, or a group of specific peers?

No
 Yes _____

5. Are there problems with transitions?

No
 Yes _____

6. Does the student have any skill deficits that could contribute to the occurrence of the problem behavior?

- No
- Academic Skills:* Task requirements as presented are not at the student's instructional level in the core areas of reading, math, or writing.
- Participation Skills:* The student has difficulty with participating in non-directed, semi-directed, teacher-directed, or peer-directed activities. The student has difficulty in small- or large-group instruction.
- Social Skills:* The student has difficulty acquiring and/or maintaining peer friendships. The student often withdraws from social interaction. The student is often verbally and/or physically aggressive in social interactions.
- Communication Skills:* The student has difficulty requesting what he/she needs, including items, activities, attention, information, changes in the environment, or help. He/she has difficulties with conversational skills and answering questions, understanding non-verbal or verbal language, or following directions.
- Organizational Skills:* The student has difficulty organizing school supplies, study area, time, projects, or class notes, or dividing assignments into tasks.

- Self-Regulation Skills:* The student has difficulties staying on task; completing work assignments; handling stressful situations; calming self when agitated; following rules; or transitioning between activities, places, or people. The student has difficulty with problem solving.
- Study Skills:* The student has difficulty studying for tests, taking tests, taking notes on lectures, or using studying techniques.

Identify Consequences of Problem Behaviors:

1. What do you do when the problem behavior occurs?
2. What happens immediately after the problem behavior occurs?
3. What else has been done to the student as a result of doing the problem behavior?

Identifying the Perceived Function:

<u>Typical Perceived Functions:</u>	
<i>To obtain:</i>	<i>To avoid:</i>
<ul style="list-style-type: none"> o Attention (peer or adult) o Desired objects/activities o Sensory stimulation 	<ul style="list-style-type: none"> o Attention or interactions o Tasks or activities o Physical discomfort

1. What do you think the student gets or avoids by doing the problem behavior?
2. What do you think student gets or avoids by doing the problem behavior that is so important to him/her that he/she is willing to pay these consequences in order to have it?
3. What does the student get out of or avoid?
4. Is there anything else does the student gets or avoids?

Part D: Conduct schedule review.

List the student’s daily schedule and the academic area or activity presented during that time. Then, rate the probability that the behavior will occur during the indicated time or activity.

Time, Period and Activity	Typical Problem Behavior(s) (#1 or# 2 from above)	Typical Triggering Antecedent(s)	Typical Maintaining Consequence(s)	Probability of Problem Behavior (low [L], medium [M], high [H])
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H

Summary: Complete the chart below by transferring information gathered in parts A, B, C, and D.

Setting Events (Slow Triggers)	
Antecedents (Fast Triggers)	
Problem Behavior	
Maintaining Consequence(s) (Function)	



Specific hypothesis formation: Use the information above to answer the questions below to develop a specific hypothesis about the function of the behavior:

Given the circumstances when (slow triggers) _____ and when (fast triggers) _____ occur, the student does (problem behavior) _____ in order to (maintaining function)_____.

How confident are you that you have accurately identified the setting events, antecedents, and function of the problem behavior?

Not very confident

1

2

3

4

Very Confident

5

Part E: Conduct an observation.

Conduct an observation in the classroom or an environment where a student experiences the most problems, using an A-B-C anecdotal report form (page 14). An anecdotal report is a simple data recording method in which the observer maintains a written description of events during an observation period using an antecedent-behavior-consequence (A-B-C) format. The report provides a written description of everything that happens concerning the student during a specific period. When completing the form, the A column is used to record the antecedents observed, the B column is used to record the target student’s observable behaviors, and the C column is used to record the consequences, or events, that follow the behavior. It is generally recommended that a minimum of three observations be conducted, with an opportunity to observe 15–20 occurrences of the behavior.

Part F: Summarize the information.

After conducting an observation, analyze all data (interviews and observations), looking for consistent patterns in terms of when problem behaviors occur and consequences that follow the behaviors that may indicate function.

Data Review and Analysis

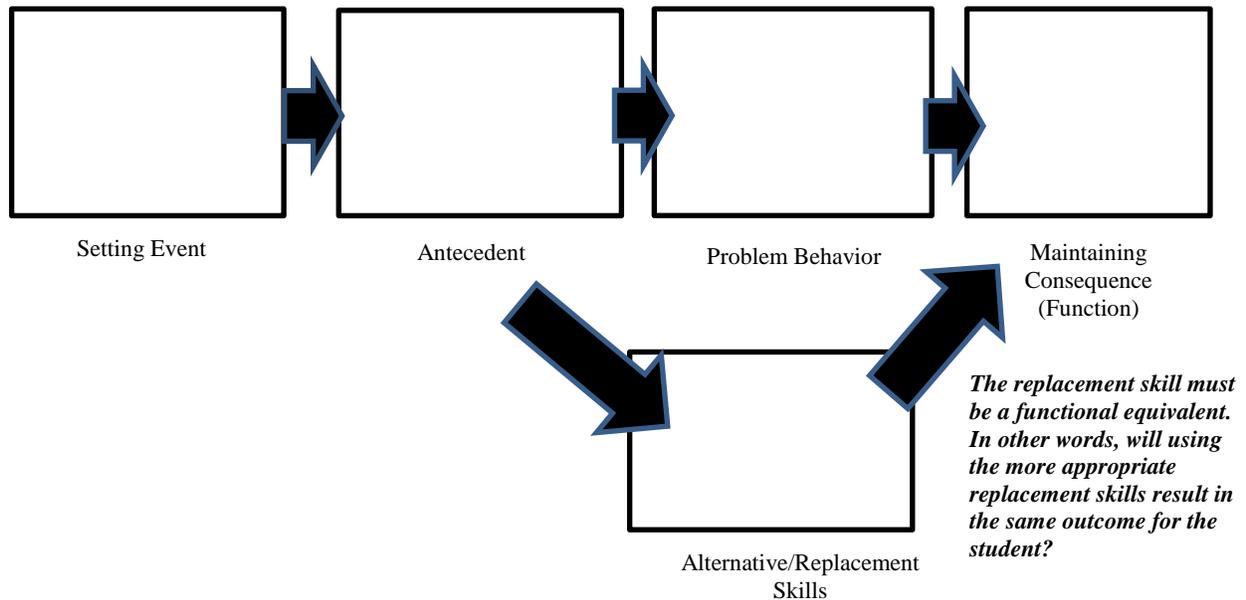
Summary Notes:

- Review the indirect data sources (interviews) to identify any common responses or observations. Agreement across different sources is an indication of valid data.
- Review the observation data to identify patterns in how the student responds to different antecedents and what happens after each occurrence of inappropriate behavior as well as appropriate behavior.
- Look for patterns in ways that the adults and peers in the environment respond to the behavior.
- Look for similar patterns in antecedents and consequences across observations.
- Compare direct observation data with indirect data assessments. Do data from the observations support the information gathered through the indirect assessments?



When the information is in agreement, the data suggests a strong explanation for the student’s behavior. If the observations do not corroborate the information gathered through indirect assessments, further observations under targeted conditions should be conducted.

Based on the data review and analysis, summarize the results of the assessment:



Part G: Generate a function-based behavioral support plan.

Develop a function-based plan, based on the hypothesis statements, to address the behavioral concerns and fit within the environments in which it will be used. The Positive Behavior Support Plan includes:

- A. Confirmation that the environment represents best practice (e.g., classroom structure, instructional management, behavior management, classroom climate).
- B. Strategies for prevention: Identify adjustments to the environment that reduce the likelihood of problem behaviors by decreasing the effectiveness of antecedent events that trigger problem behaviors and increasing the effectiveness of antecedent events that trigger replacement behaviors (e.g., modify activity schedule, adapt curriculum, modify design of instruction, adapt instructional procedures, provide prompts for appropriate behavior, provide precorrects). These adjustments should be directly linked to the assessment information.
- C. Instructional strategies: Teach functional replacement/acceptable alternative behaviors, demonstrate adaptive social skills, and build general competencies.
- D. Extinction strategies: Deter problem behaviors by minimizing positive and negative reinforcement that is maintaining problem behaviors.
- E. Reinforcement strategies: Increase the effectiveness of appropriate behaviors by delivering a rich range of effective reinforcement.
- F. Crisis management (if needed)

** Use the **Function-Based Intervention and Positive Behavior Worksheet** (pp. 15–18) and the **Function Related Interventions Chart** (pp. 19–20) to develop the support plan.*

A-B-C Report Form

Name _____ Date/time of observation _____
Place observation occurred _____ Environmental conditions (e.g., number of students,
arrangement, number of adults) _____
Activities observed during observation _____
Unusual or potentially influential conditions _____

Time	Antecedent	Behavior	Consequence

Function-Based Intervention and Positive Behavior Support Plan Worksheet

The functional assessment serves as the basis for the development of a Positive Behavior Support Plan (PBSP) that changes environmental conditions (i.e., antecedents and consequences) while providing instruction in the acquisition of new, more appropriate behaviors. Complete each section of the PBSP Worksheet using the information gathered through the functional assessment.

1. Does the classroom environment represent best practice in the areas of classroom structure, instructional management, behavior management, and classroom climate?

If yes, go to item 2.

If no, develop a plan to improve the classroom environment.

2. Is the curriculum appropriate?

If yes, go to item 3.

If no, develop a plan for curriculum and instructional revisions.

3. Write the hypothesis you developed as a result of the FBA.

Given the circumstances when (slow triggers) _____

and/or when (fast triggers) _____

_____ occur, the student does (problem behavior) _____ in _____

order to (maintaining function): _____

4. **Based on the function** listed in item 3, what can you change (antecedent manipulation) that will make it less likely that the behavior will occur? *Review Appendix A for function-related interventions.*

<i>Antecedent Manipulation</i>	<i>Implementation Steps</i> <i>(list specific steps to be taken to implement intervention in the environment)</i>	<i>Person(s) Responsible</i>

5. **Based on the identified skill deficit(s),** what instruction will take place to teach the appropriate skills?

<i>Skill</i>	<i>Instructional Procedures</i> <i>(list specific steps to be taken to teach the new skills and generalization procedures)</i>	<i>Person(s) Responsible</i>

6. Based on the function, how will you provide appropriate reinforcement (maintaining consequence) for the replacement behavior/skill?	<i>Reinforcement Procedures</i>	<i>Person(s) Responsible</i>

7. Based on the function, how will you prevent the target behavior from being reinforced?	<i>Procedures to Withhold Reinforcement</i>	<i>Person(s) Responsible</i>

8. Crisis management procedures provide a script for what adults will do when a behavior is potentially dangerous to oneself or others. These procedures are strategies that keep students' safe; they do not change behavior.	<i>Crisis Management Procedures</i>	<i>Person Responsible</i>

9. How will you monitor progress and effectiveness of the plan?

<i>Data Collection</i>	<i>Person Responsible</i>
<p>How will progress be monitored?</p> <p>How will data be collected?</p>	

Appendix A. Function-Related Interventions

The chart below provides possible intervention strategies to incorporate into a comprehensive behavior intervention plan based on the function of the problem behavior.

Function	Intervention Strategy	Example
Gain Attention	Schedule adult attention	<ul style="list-style-type: none"> • Have adult work with student • Have adult periodically provide attention • Increase positive interactions with student • Provide increased specific praise for appropriate behavior
	Schedule peer attention	<ul style="list-style-type: none"> • Pair student with a peer • Use peer tutoring
	Increase proximity to student	<ul style="list-style-type: none"> • Move seating arrangement • Periodically move about classroom
	Provide preferred activity	<ul style="list-style-type: none"> • When adult is occupied and unable to provide attention, assign a more preferred activity
Escape Task or Environment	Adjust demand difficulty	<ul style="list-style-type: none"> • Provide easier work • Decrease amount of work
	Offer choice	<ul style="list-style-type: none"> • Allow student to choose: <ul style="list-style-type: none"> ○ Task to complete ○ Sequence of tasks to be completed ○ Materials to use ○ Where to complete task ○ When to complete task ○ With whom to complete task

Function	Intervention Strategy	Example
	Increase student preference/interest in activity	<ul style="list-style-type: none"> • Incorporate student hobbies/interests into activities
	Assure that activities have function or relevance for the student	<ul style="list-style-type: none"> • Provide activities with valued outcome
	Alter length of task	<ul style="list-style-type: none"> • Shorten activity • Provide frequent breaks
	Modify mode of task completion	<ul style="list-style-type: none"> • Change medium/materials • Replace pencil and paper with computer
Escape Task or Environment	Use behavioral momentum, task dispersal	<ul style="list-style-type: none"> • Present easy requests prior to difficult request
	Increase predictability	<ul style="list-style-type: none"> • Provide cues for upcoming or change in activities (e.g., instructional, visual, auditory)
	Modify instructional delivery	<ul style="list-style-type: none"> • Use pleasant tone of voice
	Differential negative reinforcement of alternative behavior (DNRA)	<ul style="list-style-type: none"> • Allow a break from instruction based on an alternative appropriate response (e.g., compliance) while placing problem behavior on extinction
	Differential negative reinforcement of zero rates of responding (DNRO)	<ul style="list-style-type: none"> • Allow a break when the problem behavior has not occurred for a specific period of time and place the problem behavior on extinction
	Extinction	<ul style="list-style-type: none"> • Ignore problem behavior and continue presenting the task regardless of problem behavior
	Non-contingent escape (NCE)	<ul style="list-style-type: none"> • Provide breaks from work on a time-based schedule, irrespective of problem behavior
Tangible	Provide a warning	<ul style="list-style-type: none"> • Indicate that activity is about to end
	Schedule a transitional activity	<ul style="list-style-type: none"> • Schedule a moderately preferred activity between highly preferred and highly non-preferred activities
	Increase accessibility	<ul style="list-style-type: none"> • Put highly preferred items within students' reach
Sensory	Provide alternative sensory reinforcement	<ul style="list-style-type: none"> • Offer a radio to a student seeking auditory reinforcement or visual stimuli to a student seeking visual reinforcement

Function	Intervention Strategy	Example
	Enrich environment	<ul style="list-style-type: none">• Fill environment with interesting and stimulating activities

Resources

- Bambara, L. M., & Kern, L. (2005). *Individualized supports for students with problem behaviors*. New York, NY: Guildford Press.
- Geiger, K. B., Carr, J. E., & LeBlanc, L. (2010). Function-based treatments for escape-maintained problem behavior: A treatment selection model for practicing behavior analysts. *Behavior Analysis in Practice*, 3(1), 22–32.
- Knoster, T., & Llewelly, G. (2007). *Screening for understanding of student problem behavior: An initial line of inquiry* (3rd Ed.). Bloomsburg, PA: Association for Positive Behavior Support. Retrieved from http://www.apbs.org/membersArea/files/ILI_Publisher_Edition.pdf
- March, R. E., Horner, R. H., Lewis-Palmer, T., Brown, D., Crone, D., Todd, A. W. et al. (2000). *Functional Assessment Checklist for Teachers and Staff (FACTS)*. Eugene, OR: Educational and Community Supports. Retrieved from <https://coe.uoregon.edu/ipbs/wp-content/uploads/2012/02/FACTS-R-Efficient-FBA.pdf>
- O'Neill, R. E., Horner, R. H., Albin, R. W., Storey, K., & Sprague, J. R. (1990). *Functional analysis of problem behavior: A practical assessment guide*. Sycamore, IL: Sycamore Publishing Company.

Find Out What the National Center on Intensive Intervention (NCII) Has to Offer

NCII’s mission is to build district and school capacity to support implementation of data-based individualization in reading, mathematics, and behavior for students with severe and persistent learning and behavioral needs. NCII has a growing number of resources to help support the field.

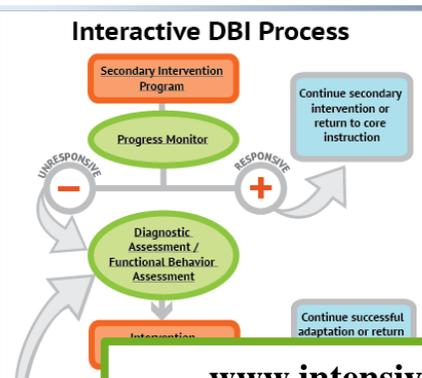
National Center on
INTENSIVE INTERVENTION
at American Institutes for Research ■

Sign Up for the NCII Newsletter and Email Updates and follow us on Twitter: @TheNCII & our YouTube Channel at National Center on Intensive Intervention

Resources Tools Charts Implementation Support About Us

Intensive intervention is intended to help students with severe and persistent learning or behavioral needs. The Center’s approach to intensive intervention is data-based individualization (DBI).

What is DBI?
DBI is a research-based process for individualizing and



The NCII Newsletter
Signup for our newsletter and updates!

See us on:

Spotlight on Example Lessons & Activities
Find lessons and activities to support students struggling with computation of fractions.

www.intensiveintervention.org

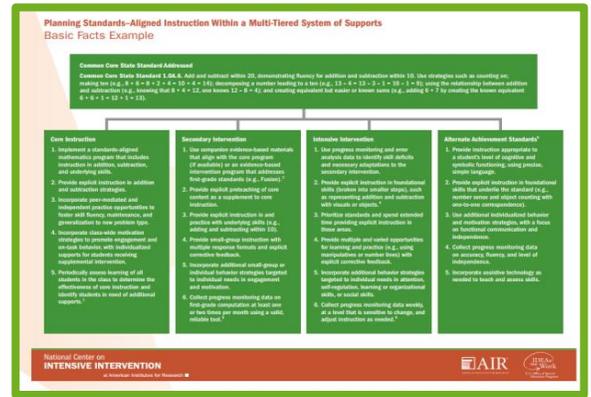
- Find *Sample Lessons & Activities* intended to assist special education teachers, interventionists, and others working with students with intensive needs at <http://www.intensiveintervention.org/sample-lessons-activities>.

- Find training materials to support district or school teams involved in initial planning or implementation of data-based individualization (DBI) as a framework for providing intensive intervention in academics and behavior including PowerPoint slides with speaker notes, activities, handouts, and coaching guides by viewing the *Data-Based Individualization (DBI) Training Series*, at <http://www.intensiveintervention.org/content/dbi-training-series>

	Computation of Fractions	Fractions as Numbers	Whole Number Computation
Illustration of tiered instruction*	Download Example	Download Example	Coming Soon
Considerations for Instruction	Download Considerations	Download Considerations	Coming Soon
Sample Activities	Download Activities	Download Activities	Coming Soon
Sample Worksheets	Download Worksheets	Download Worksheets	Coming Soon
Supplemental Materials	Download Supplemental Materials	Download Supplemental Materials	Coming Soon
Combined Document	Download Full Document	Download Full Document	Coming Soon

*These documents provide examples of how to apply standards relevant instruction across tiers of a multi-tiered system of support, including for students with significant cognitive challenges.

- Support planning of standards aligned instruction and see examples of how to apply standards relevant instruction across the multi-tiered system of support. <http://www.intensiveintervention.org/illustration-standards-relevant-instruction-across-levels-tiered-system>
- Register for upcoming webinars and find archived webinars at <http://www.intensiveintervention.org/resources/webinars>.



- Analyze and select evidence-based tools from the NCII Tools Charts and learn about the Technical Review Committee

Grade Level	Subject	Area	Reliability of Performance Level Score	Reliability of Slope	Validity of Performance Level Score	Predictive Validity of Slope Improvement
- Any -	Reading	Apply				
Psychometric Standards Progress Monitoring Standards Data-based Individualization Standards						
AIMSweb	Oral Reading Fluency (R-CBM)		●	●	●	●
AIMSweb	Test of Early Literacy - Letter Naming Fluency		●	●	●	●
AIMSweb	Test of Early Literacy - Letter Sound Fluency		●	●	●	●
AIMSweb	Test of Early Literacy - Nonsense Word Fluency		●	●	●	●
AIMSweb	Test of Early Literacy - Phonemic Segmentation Fluency		●	●	●	●
Curriculum-Based Measurement in Reading (CBM-R)	Letter Sound Fluency		●	●	●	●
Curriculum-Based Measurement in Reading (CBM-R)	Maze Fluency		●	●	●	●
Curriculum-Based Measurement in Reading (CBM-R)	Word Identification Fluency		●	●	●	●

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

- Find products and resources that will help you learn about data-based individualization and intensive intervention including:
 - Data-Based Individualization: A Framework for Intensive Intervention* at <http://www.intensiveintervention.org/resource/data-based-individualization-framework-intensive-intervention>.
 - Synthesis Reports on Intensive Academic and Behavioral Intervention: Annotated Bibliography* <http://www.intensiveintervention.org/resource/synthesis-reports-intensive-academic-and-behavioral-intervention-annotated-bibliography>
 - Implementing Intensive Intervention: Lessons Learned from the Field* at <http://www.intensiveintervention.org/resource/implementing-intensive-intervention-lessons-learned-field>.
 - Ask the Expert* videos at <http://www.intensiveintervention.org/resources/ask-the-expert>.
 - NCII Glossary of Terms* <http://www.intensiveintervention.org/ncii-glossary-terms>
- Contact NCII online at <http://www.intensiveintervention.org/about-us/contact> by email NCII@air.org with questions, comments, or suggestions.

Data-Based Individualization Training Series

This series of training modules developed by the National Center on Intensive Intervention (NCII) is aimed at district or school teams involved in initial planning or implementation of data-based individualization (DBI) as a framework for providing intensive intervention in academics and behavior. The following modules provide an overview of the DBI process and more in-depth exploration of the various components of DBI. Each module is intended as a component of comprehensive professional development that includes supplemental coaching and ongoing support. Presentation slides, handouts, and a coaching guide with suggested coaching activities are provided.

1. Introduction to Data-Based Individualization (DBI): Considerations for Implementation in Academics and Behavior

This module provides a rationale for intensive intervention and an overview of DBI, NCII's approach to intensive intervention. DBI is a research-based process for individualizing validated interventions through the systematic use of assessment data to determine when and how to intensify intervention. Two case studies, one academic and one behavioral, are used to illustrate the process, highlighting considerations for implementation.

<http://www.intensiveintervention.org/resource/introduction-data-based-individualization>

2. Using Academic Progress Monitoring for Individualized Instructional Planning

This module focuses on academic progress monitoring within the context of the DBI process and addresses (a) approaches and tools for academic progress monitoring, and (b) using progress monitoring data to make instructional decisions for individual students.

<http://www.intensiveintervention.org/resource/using-academic-progress-monitoring-individualized-instructional-planning>

3. Monitoring Student Progress for Behavioral Interventions

This module focuses on behavioral progress monitoring within the context of the DBI process and addresses (a) methods available for behavioral progress monitoring, including but not limited to Direct Behavior Rating (DBR); and (b) using progress monitoring data to make decisions about behavioral interventions.

<http://www.intensiveintervention.org/resource/monitoring-student-progress-behavioral-interventions-dbi-training-series-module-3>

4. Secondary Interventions: Setting the Foundation for Intensive Support

This module explains (a) the purpose and rationale for secondary interventions as part of a larger multi-tiered system of support, (b) how secondary interventions fit into the DBI process, (c) key components that should be in place for effective secondary interventions, and (d) guidance for prioritizing next steps related to improving secondary interventions.

<http://www.intensiveintervention.org/resource/secondary-interventions-setting-foundation-intensive-support>

- 5. Informal Academic Diagnostic Assessment: Using Data to Guide Intensive Instruction**
This module is intended to help teams understand how to use progress monitoring and other accessible assessment data to guide instructional decision making. Trainers can select among several presentation sections to best address teams' needs. Sections include (a) administering progress monitoring measures, (b) graphing data and reviewing graphed data, (c) conducting miscue and skills analysis in reading and math, and (d) identifying skills to target in reading and math interventions. <http://www.intensiveintervention.org/resource/informal-academic-diagnostic-assessment-using-data-guide-intensive-instruction-dbi-training>
- 6. Using Functional Behavior Assessment (FBA) for Diagnostic Assessment in Behavior**
This module serves as an introduction to important concepts and processes for implementing FBA. Key topics include (a) defining FBAs in the context of DBI, (b) basic concepts in behavior, including antecedents, behaviors, and consequences, (c) levels of FBAs, and (d) considerations and procedures for conducting FBAs.
<http://www.intensiveintervention.org/resource/using-fba-diagnostic-assessment-behavior-dbi-training-series-module-6>
- 7. Designing and Delivering Intervention for Students with Severe and Persistent Academic Needs**
This module discusses approaches to intensifying academic intervention for students with severe and persistent learning needs. The module describes how intensification fits into DBI process and introduces four categories of intensification practices. It uses examples to illustrate concepts and provides activities to support development of teams' understanding of these practices, and how they might be used to design effective individualized programs for students with intensive academic needs.
<http://www.intensiveintervention.org/resource/designing-and-delivering-intervention-students-severe-and-persistent-academic-needs-dbi>
- 8. Designing and Delivering Intervention for Students with Severe and Persistent Behavior Needs**
This module focuses primarily on selecting evidence-based interventions that align with the functions of behavior for students with severe and persistent learning needs. The emphasis of this training will include four main content areas: (a) relating assessment to function, (b) selecting evidence-based interventions that align with functions of behavior, (c) linking assessment and monitoring, and (d) connecting data with the evidence-based interventions selected.
<http://www.intensiveintervention.org/resource/designing-and-delivering-intensive-intervention-behavior-dbi-training-series-module-8>