



February 2023

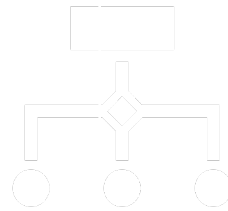
Adapting Interventions to Accelerate Learning: A Look at The Taxonomy of Intervention Intensity

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Learning Outcomes

Participants will:



Introduced to the Data-Based Individualization (DBI) process

Learn about the Taxonomy of Intervention Intensity





Setting the Stage: Data-Based Individualization

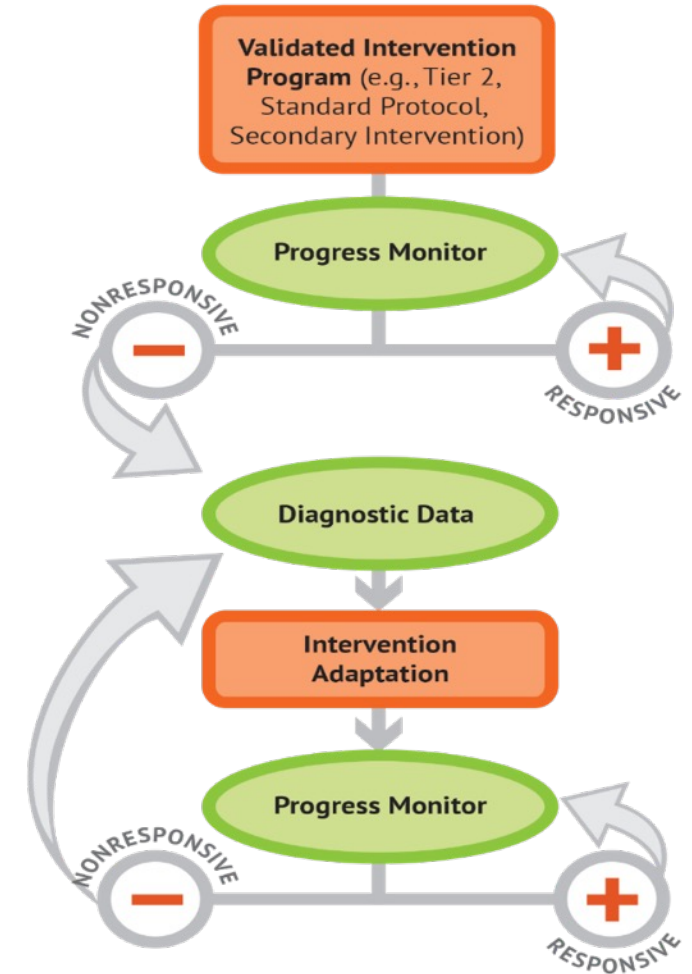
National Center on
INTENSIVE INTERVENTION

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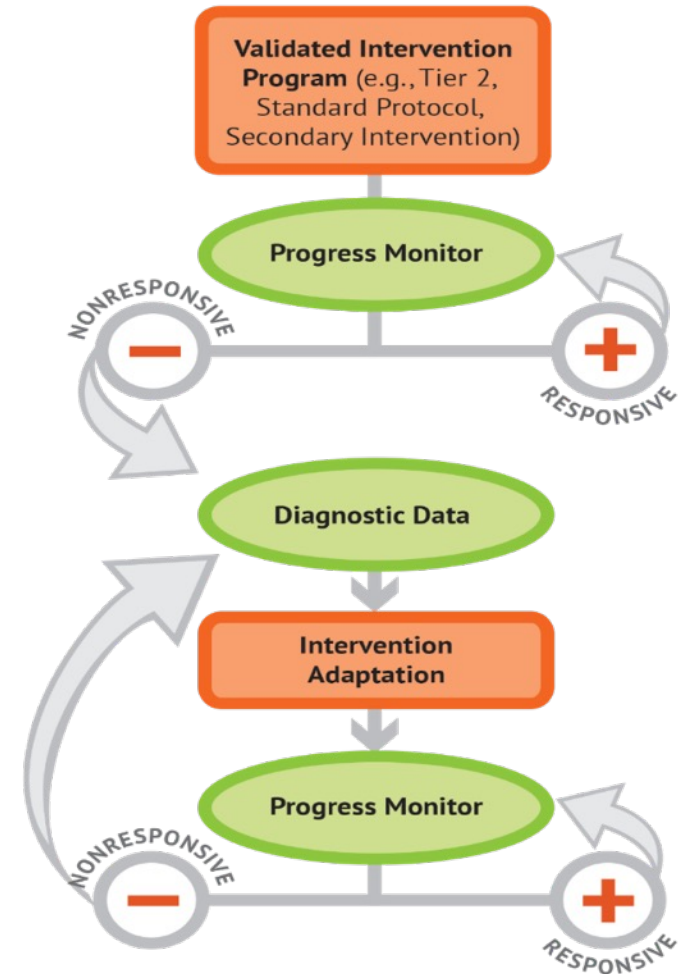
Data-Based Individualization

- The National Center on Intensive Intervention
- A systematic method for using data to determine **when** and **how** to provide more intensive intervention.
- An ongoing process—not a single intervention.
- Intended for students with **severe** and **persistent** learning and behavioral needs.



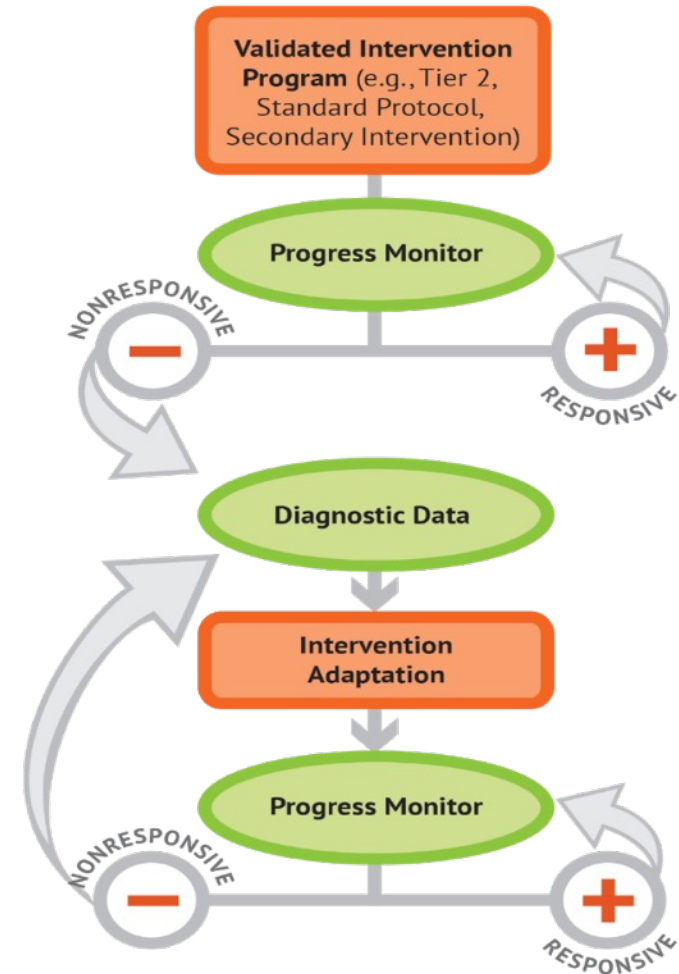
Five DBI Steps

1. Validated intervention program, delivered with fidelity
2. Progress monitoring
3. Informal diagnostic assessment
4. Adaptation to validated intervention
5. Continued progress monitoring, with adaptations occurring whenever needed to ensure adequate progress



Today's Focus

1. Validated intervention program, delivered with fidelity
2. Progress monitoring
3. Informal diagnostic assessment
4. Adaptation to validated intervention
5. Continued progress monitoring, with adaptations occurring whenever needed to ensure adequate progress



Validated Intervention Programs: Components to Consider

Opportunities to respond

Explicit instruction and modeling

Group size

Concrete learning opportunities

Connection to Tier 1 instruction

Effect size

Frequency and duration of intervention

Evidence-based programs

Alignment with grade-level standards

Break tasks into smaller steps



Validated Intervention Programs: Components to Consider

Effect size Evidence-based programs

Opportunities to respond

Group size

Explicit instruction and modeling

Concrete learning opportunities



It would be helpful if there was a framework to guide our thinking when we decide what interventions to use and how to adapt them.

standards

steps



Key Considerations When Selecting or Evaluating Validated Interventions for DBI

- ✓ Does evidence suggest that the intervention is expected to lead to improved outcomes (*strength*)?
- ✓ Will the group size, duration, and frequency provide sufficient opportunities to respond (*dosage*)?
- ✓ Does the intervention match the student's identified needs (*alignment*)?
- ✓ Does it assist the student in generalizing the learned skills to general education or other tasks (*promoting transfer*)?
- ✓ Does the intervention include elements of explicit instruction (*comprehensiveness*)?
- ✓ Does the student have opportunities to develop the behavior skills needed to be successful (*behavioral support*)? Can the intervention be easily integrated into academic instruction (*academic support*)?
- ✓ Can the intervention be individualized with a data-based process to meet student needs (*individualization*)?





Taxonomy of Intervention Intensity

Strength	Dosage	Alignment	Attention to Transfer	Comprehensiveness	Behavioral or Academic Support
Evidence of effectiveness	Number of opportunities the student has to respond and receive feedback	How well the intervention matches the targeted academic skills or behavior concerns	Intervention is explicitly designed to help students make connections between the skills taught in intervention and other environments	How well the intervention incorporates explicit instruction principles	Whether an academic intervention incorporates behavioral strategies or whether a behavioral intervention considers academic components.
Does evidence suggest that the intervention is expected to lead to improved outcomes?	Does the student need additional practice opportunities or feedback to benefit from the intervention?	Have you considered the antecedents – behavior-consequences?	Do data suggest the student is making progress in the intervention, but not transferring the skills to other settings?	Does the academic intervention include elements of explicit instruction? (e.g., models efficient strategies)	How engaged and involved is the student in this intervention or activity?

Fuchs, Fuchs, and Malone (2017).



Taxonomy: Academics and Behavior

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Taxonomy of Intervention Intensity: Academics



The *Taxonomy of Intervention Intensity** was developed based on existing research to support educators in evaluating and building intervention intensity.

Dimensions*	Description
Strength	How well the program works for students with intensive intervention needs, expressed in terms of effect sizes. Effect sizes of above .25 indicate an intervention has value in improving outcomes. Effect sizes of 0.35 to 0.40 are moderate; effect sizes of 0.50 or larger are strong (preferred).
Dosage	The number of opportunities a student has to respond and receive corrective feedback. It refers to the size of the instructional group, the number of minutes each session lasts, and the number of sessions provided per week.
Alignment	How well the program (a) addresses the target student's full set of academic skill deficits, (b) does <i>not</i> address skills the target student has already mastered (extraneous skills for that student), and (c) incorporates a meaningful focus on grade-appropriate curricular standards.
Attention to transfer	The extent to which an intervention is designed to help students (a) transfer the skills they learn to other formats and contexts and (b) realize connections between mastered and related skills.
Comprehensiveness	The number of explicit instruction principles the intervention incorporates (e.g., providing explanations in simple, direct language; modeling efficient solution strategies instead of expecting students to discover strategies on their own; providing practice so students use the strategies to generate many correct responses; and incorporating systematic cumulative review).
Behavioral support	The extent to which the program incorporates (a) self-regulation and executive function components and (b) behavioral principles to minimize nonproductive behavior.
Individualization	A validated, data-based process for individualizing intervention, in which the educator systematically adjusts the intervention over time, in response to ongoing progress monitoring data, to address the student's complex learning needs.

*Fuchs, L.S., Fuchs, D. & Malone, A.S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children*, 50(1), 35–43.

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Taxonomy of Intervention Intensity: Behavior



The *Taxonomy of Intervention Intensity** was developed based on existing research to support educators in evaluating and building intervention intensity.

Dimensions*	Description
Strength	How well the program works for students with intensive intervention needs, sometimes expressed as a promising or effective program by a reliable source (e.g., NCI Tools Charts, WWC).
Dosage	The number of opportunities a student has to (a) respond (i.e., practice/demonstrate skill), (b) receive positive feedback (e.g., praise, tokens, points), (c) exchange for backup reinforcers, and (d) receive corrective feedback.
Alignment	How well the program (a) addresses school-wide expectations, (b) addresses classroom/teacher expectations, (c) addresses student's skill deficits, (d) matches rewards to student's preferences and/or function of problem behavior, and (e) does not address extraneous skills.
Attention to transfer	The extent to which an intervention emphasizes how and when a student uses skills across contexts/situations and includes opportunities to practice using skills across context/situations. The program reinforces the use of skills across contexts/situations.
Comprehensiveness	The extent to which the intervention includes a plan for (a) teaching appropriate behavior, (b) adjusting antecedent conditions to prevent problem behavior, (c) reinforcing appropriate behavior, (d) minimizing reinforcement for problem behavior, (e) fading supports (and supports can be easily faded), (f) monitoring fidelity, (g) working in conjunction with related services, and (h) communicating with parents.
Academic support	The extent to which the program (a) can be easily integrated within context of academic instruction, (b) complements rather than supplants academic focus, and (c) includes procedures for reinforcing responses related to academic achievement (e.g., engagement, work completion).
Individualization	A validated, data-based process for individualizing intervention, in which the educator systematically adjusts the intervention over time, in response to ongoing progress monitoring, to address the student's complex learning needs.

*Adapted from Fuchs, L.S., Fuchs, D. & Malone, A.S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children*, 50(1), 35–43.

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Academic Rating Rubric

- Used to evaluate an intervention
- Scale 0 – 3
- Can be evaluated by individual educators or a team

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Taxonomy of Intervention Intensity: Academic Rating Rubric

This tool can support teams in selecting and evaluating validated interventions for small groups or individual students. Teams may consider using data available on the [National Center on Intensive Intervention Academic Tools Chart](#) and the publishers' websites as well as results from previous implementation efforts. Each dimension will be rated on a scale of 0– Fails to Address Standard to 3 – Addresses Standard Well. Visit the NCII website for additional information about the dimensions of the [Taxonomy of Intervention Intensity](#) and use the [Intervention Plan \(For Small Groups or Individual Students\)](#) to document ratings and adaptations over time.

	0 Fails to Address Standard	1 Addresses Standard Minimally	2 Addresses Standard Moderately	3 Addresses Standard Well
Strength	<ul style="list-style-type: none"> No validated studies No effect size can be determined Reported effect size is ≤ 0 	$0.2 < \text{Effect Size} < 0.34$ (researcher-designed measure)	Effect size 0.35 - 0.55 (researcher-designed measure) -OR- Effect size 0.20 - 0.3 (standardized measure)	Effect Size > 0.55 (researcher-designed measure) -OR- Effect Size > 0.3 (standardized measure)
Dosage	Same as Tier I (opportunities to respond and receive corrective feedback are similar to Tier 1)	Slightly more than Tier 1 (e.g., 2-3x more opportunities to respond and receive corrective feedback)	Same as Tier 2 (e.g., 4-5x more opportunities to respond and receive corrective feedback)	Substantially more than Tier 2 ($>5x$ more opportunities to respond and receive corrective feedback)
Alignment	Does not align to students' or student's needs	Only address some of a students' or student's deficits, overemphasizes already mastered skills, and is not aligned to grade-level standards	Addresses most students' or student deficits, does not overemphasize already mastered skills, and aligns to curriculum standards	Addresses all of students' or student's deficits, does not overemphasize already mastered skills, and aligns to curriculum standards

National Center on Intensive Intervention
Taxonomy of Intervention Intensity—1
02/2020





Other Resources

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Purpose of the Academic Intervention Taxonomy Briefs

- The briefs provide educators with information to evaluate the appropriateness of academic interventions available on the Academic Intervention Tools Chart for students who require intervention.
- The information included in the briefs is organized along the dimensions of the Taxonomy of Intervention Intensity.

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Intervention Taxonomy Brief: Fraction Face-Off!

The goal of this brief is to provide educators with information they can use to evaluate the appropriateness of **Fraction Face-Off!** for a specific student or group of students who require supplemental and intensive intervention. The brief also may be used to guide decisions about the selection or purchase of a new intervention. We envision that the brief may allow users to examine the extent to which the program aligns to the Taxonomy of Intervention Intensity, a framework used by educators to categorize interventions along key dimensions. The information included in this brief is organized along the seven dimensions of the Taxonomy of Intervention Intensity and can assist educators in answering the following questions:

- Does evidence suggest that this intervention is expected to lead to improved outcomes in the identified area of need (**strength**)?
- Will the group size, duration, structure, and frequency provide sufficient opportunities for students to respond and receive corrective feedback (**dosage**)?
- Does the intervention match the student's identified needs (**alignment**)?
- Does the intervention assist the student in generalizing target skills to general education or other tasks (**attention to transfer**)?
- Does the intervention include elements of explicit instruction (**comprehensiveness**)?
- Does the student have opportunities to develop the behavior skills necessary to be successful (**behavioral support**)?
- Can the intervention be individualized with a data-based process to meet student needs (**individualization**)?

<https://intensiveintervention.org/tools-charts/academic-intervention-taxonomy-briefs>



Locate the Briefs on the NCII Website

The screenshot displays the National Center on Intensive Intervention website. At the top, the logo reads "National Center on INTENSIVE INTERVENTION at American Institutes for Research". A search bar and social media icons are on the right. The main navigation bar includes "About DBI", "Tools Charts", "Implementation & Intervention", "Training", "Special Topics", and "Resource by Audience". The "Tools Charts" menu item is highlighted with a red box. Below the navigation bar, the page is organized into four columns:

- ABOUT THE CHARTS**: Tools Charts Overview (Tools Chart User Guide, What Do the Screening Standards Mean), Tools Chart Review Process (Technical Review Committees).
- ASSESSMENT CHARTS**: Academic Screening Chart, Behavior Screening Chart, Academic Progress Monitoring Chart, Behavior Progress Monitoring Chart, Example Diagnostic Tools.
- INTERVENTION CHARTS**: Academic Intervention Chart (with a sub-link for Academic Intervention Taxonomy Briefs, highlighted by a red box and a callout arrow), Behavioral Intervention Chart.
- Return to School Resource**: Updated Academic Screening Chart (with a brief description of its importance).

At the bottom, there are two footnotes: "^{*} The mean effect size includes at least one statistically significant individual effect size" and "[†] A mean effect size could not be calculated". A large brown box at the bottom center contains the text "NCII Website".



Academic Briefs Currently Available

Reading

- [Leveled Literacy Intervention](#)
- [Lexia Core5 Reading](#)
- [Lexia PowerUp Literacy](#)
- [Promoting Adolescent's Comprehension of Text](#)
- [Read Naturally Live](#)
- [Seeing Stars Program: Symbol Imagery for Phonological and Orthographic Processing in Reading and Spelling](#)
- [Sound Partners](#)
- [Visualizing and Verbalizing Program for Language Comprehension and Thinking](#)

Mathematics

- [Fraction Face-off!](#)
- [Fusion Whole Number Foundations Level 1](#)
- [Hot Math Tutoring](#)
- [Number Rockets](#)
- [Pirate Math](#)
- [ROOTS Whole Number Foundations Level K](#)
- [Spring Math](#)
- [Strategic Instruction Multiplication With Regrouping Partial Products Algorithm](#)
- [Strategic Instruction Multiplication With Regrouping Standard Algorithm](#)



Taxonomy of Intervention Intensity: Module

Overview of the Taxonomy of Intervention Intensity

Resource Type: **Self-Paced Modules**
Developed By: **National Center on Intensive Intervention**



Dimensions
Strength
Dosage
Alignment
Attention to transfer
Comprehensiveness
Behavioral support / Academic support / Individualization

The course is expected to take 30 minutes to complete. You may complete the course in one sitting or return at a later time to complete it.

[View Module](#)

This interactive self-paced module is intended to help educators and administrators learn about the Taxonomy of Intervention Intensity. By completing this course, you will be able to:

- Define the dimensions of the Taxonomy of Intervention Intensity.
- Explain how the Taxonomy of Intervention Intensity can support the selection, design, or evaluation of a validated intervention program.
- Explain how the Taxonomy of Intervention Intensity can be used to intensify an intervention for a student who is not responsive.

- In-depth module about the Taxonomy of Intervention Intensity
- Approximately 30 min



How to Support English Learners

How Do I Use the Taxonomy of Intervention Intensity To Support Students Who Are English Learners?

The seven dimensions of the Taxonomy of Intervention Intensity can help educators make informed, systematic decisions in the context of the data-based individualization (DBI) process to support students who are English learners (ELs). DBI is a research-based process for individualizing and intensifying interventions through the systematic use of assessment data, validated interventions, and research-based adaptation strategies. When intensifying, consider ways to address content and language development simultaneously. The Taxonomy can help educators:

DBI Process



Taxonomy Dimensions

1. Strength
2. Dosage
3. Alignment
4. Attention to Transfer
5. Comprehensiveness
6. Behavioral or Academic Support
7. Individualization

Evaluate current interventions being provided to ELs



Already **have an intervention**? Use the dimensions of the Taxonomy to evaluate its strengths and cultural and linguistic appropriateness for your target population of students who are ELs.

Select a new intervention to meet the needs of ELs



Looking for a **new intervention**? Rating the dimensions of potential interventions can help educators compare their strengths and determine cultural and linguistic appropriateness to support selection for students who are ELs.

Intensify the intervention

Even the best intervention is not effective for every student. When a student who is an EL needs more support, combine the Taxonomy dimensions, student data, and teacher expertise in culturally and linguistically responsive instruction to help guide the adaptation or intensification of intervention.



Interested in learning more about what NCII has to offer? Connect with us!

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Visit www.intensiveintervention.org to learn more



Contact us at NCII@air.org



Questions?



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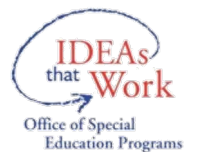
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 <https://twitter.com/TheNCII>

 <https://www.youtube.com/c/NationalCenteronIntensiveIntervention>



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