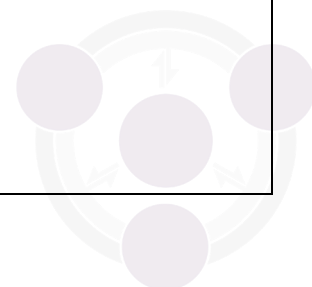


Reflection Activity. The What and Why of MTSS

Questions	What are my thoughts?
What are the potential benefits of MTSS for my site?	
What essential components of MTSS we should focus on initially?	
How can we use MTSS to align existing district, state, and federal initiatives?	



Note Taking Resource. Essential Components of Tiered System of Supports

Essential Component	What do I want to remember?	What questions do I still have?
Screening		
Progress Monitoring		
Multi-level Prevention System		
Data-Based Decision Making		

What is the Taxonomy of Intervention Intensity?

The Taxonomy of Intervention Intensity* was developed based on existing research to support educators in evaluating and building intervention intensity and considering the integrated academic and behavioral supports needed by many students with intensive needs. It includes seven dimensions that help you to answer the following questions:



Does evidence suggest the intervention is expected to lead to improved outcomes (**strength**)?



Will the group size, duration, structure, 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 (**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 easily integrated into academic instruction (**academic support**)?



Can the intervention be individualized with a data-based process to meet student needs (**individualization**)?

Learn more about the Taxonomy of Intervention Intensity and find resources to support implementation

<https://intensiveintervention.org/taxonomy-intervention-intensity>

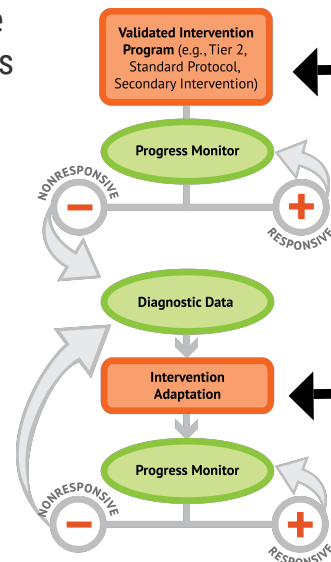
The Taxonomy of Intervention Intensity* was adapted from Fuchs, L. S., Fuchs, D., & Malone, A. S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children*, 50(1), 35-43. The National Center on Intensive Intervention in coordination with a technical working group of experts has refined and expanded the Taxonomy to incorporate considerations for both academics and behavior and lessons learned from implementation in the field.



When do I use the Taxonomy of Intervention Intensity?

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. 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. 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

Already **have an intervention**? Use the dimensions of the Taxonomy to evaluate its strengths and limitations for your target population.



Select a new intervention

Looking for a **new intervention**? Rating the dimensions of potential interventions can help educators compare their strengths and limitations to support selection.

Intensify the intervention



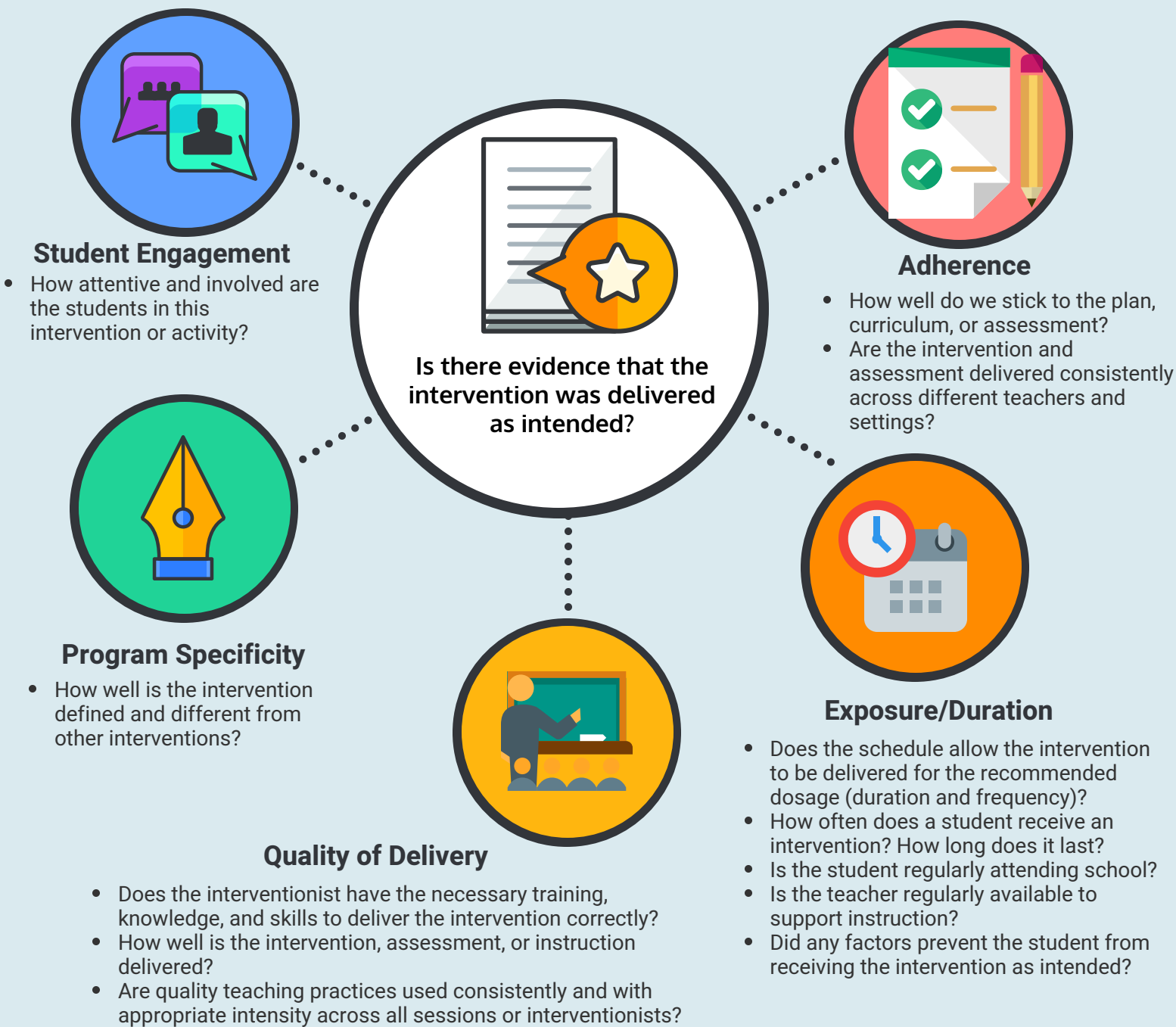
Even the best intervention is not effective for every student. Need to intensify your intervention? The dimensions of the Taxonomy in combination with student data and teacher expertise can help guide the **adaptations or intensification** of the intervention over time.

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



Considerations for Effective Implementation

5 Elements of Fidelity



Why fidelity? If we don't implement critical components of an intervention with consistency, we cannot link student outcomes to the instruction provided. Fidelity can help us to determine the effectiveness of an intervention, and identify if a student requires more intensive supports.

Source: Dane and Schneider (1998); Gresham, Gansle, and Noell (1993); O'Donnell (2008).

References

Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? *Clinical Psychology Review, 18*, 23–45.

Gresham, F. M., Gansle, K. A., & Noell, G. H. (1993). Treatment integrity in applied behavior analysis with children. *Journal of Applied Behavior Analysis, 26*, 257–263.

O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K–12 curriculum intervention research. *Review of Educational Research, 78*, 33–84.

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Data-based individualization (DBI) is a research-based process for individualizing and intensifying interventions for students with severe and persistent learning and behavioral needs. The process integrates evidence-based intervention, assessment, and strategies using 5 interactive steps:



STEP 1 | Validated Intervention Program: The Foundation

The DBI process builds on an evidence-based and standardized intervention delivered with fidelity.

At this step, teachers consider:

- Does the intervention target the student's academic and behavioral needs?
- Is the intervention based on the best available evidence?
- Does the intervention align with core instruction?
- Has the intervention been shown to work with most students?
- Are procedures in place to ensure the intervention is delivered as planned?



STEP 2 | Progress Monitor: Did the Intervention Work?

At this step, staff regularly collect and analyze progress monitoring data to determine *if* the student is responding to the validated intervention. Teachers consider:

- Does the tool meet technical standards for progress monitoring and match the desired academic or behavioral outcome?
- Were data collected regularly and with a consistent approach?
- Were progress data graphed?
- Was the goal set using a validated approach?
- Was the intervention effective for most students?



ANALYZING DATA

Do data indicate that the intervention is working?



If no, **move to Step 3.**



If yes, **move back to Step 1** and continue to provide the validated intervention and monitor progress.



STEP 3 | Diagnostic Data: Why Didn't the Intervention Work?

At this step, staff use diagnostic data to develop a hypothesis about *why* the student is struggling. Teachers consider:

- Do multiple data sources confirm slow progress?
- Have both academic and behavioral explanations been considered?
- What do these data suggest about what needs to be changed?



STEP 4 | Intervention Adaptation: What Change Is Needed?

The hypothesis, along with educator expertise, is used to develop an individual student plan for modifying or adapting the intervention to better meet the student's individual needs. Teachers consider:

- Does the adaptation address the hypothesis?
- Does the plan address both academic and behavioral concerns when needed?
- Are procedures in place for implementing and monitoring the adapted intervention?
- Are only a few adaptations made at one time?



STEP 5 | Progress Monitor: Did the Change Work?

Continue to collect, graph, and analyze progress monitoring data to determine if the student is responding to the adapted intervention. Teachers consider:

- Are data collected according to the plan?
- Does the graph indicate when adaptations were made?



ANALYZING DATA

Do data indicate that the intervention is working?



If no, **return to Step 3.**



If yes, **return to Step 5** and continue to provide the adapted intervention and progress monitor.

This document was produced under U.S. Department of Education, Office of Special Education Programs (OSEP) Grant No. HH326Q160001. Celia Rosenquist is the OSEP 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 publication is intended or should be inferred. This product is public domain. Authorization to reproduce it in whole or in part is granted. Although permission to reprint this publication is not necessary, the citation should be: National Center on Intensive Intervention. (2018). *Breaking down the DBI process: Questions & considerations*. Washington, DC: Author, Office of Special Education Programs, U.S. Department of Education.

Initial Meeting Participant Guide

(30 minutes)

Meeting Step	Who	Time
<p>Before the meeting</p> <ul style="list-style-type: none"> Compile student information and data, including graphed progress-monitoring data, relevant work samples, and other diagnostic data 	Referring teacher	Before meeting
<p>1. Introduction and purpose</p> <ul style="list-style-type: none"> Welcome the team and referring teacher Explain the purpose of the meeting Review team meeting roles and agenda 	Facilitator	2 min.
<p>2. Describe the student and share data</p> <ul style="list-style-type: none"> Briefly describe the student's strengths, area(s) of concern, and previously attempted interventions Share relevant student data (progress monitoring and diagnostic) 	Referring teacher	5 min.
<p>3. Ask clarifying questions to create hypothesis</p> <ul style="list-style-type: none"> Ask teacher clarifying questions to better support effective and accurate data analysis and understand student challenges Develop a hypothesis for why the student is responding insufficiently 	Team	5 min.
<p>4. Review evidence-based strategies for intensification</p> <ul style="list-style-type: none"> Discuss evidence-based strategies that align to the hypothesized skill deficit or function of behavior Record potential evidence-based strategies so that the list is visible to all team members 	Team	8–10 min.
<p>5. Prioritize and plan</p> <ul style="list-style-type: none"> Prioritize which strategy may be most effective and should be implemented first Create a plan that includes the person(s) responsible for the delivery of the intervention, a timeline, clearly defined goal(s) and a method for progress monitoring, and other next steps needed 	Team	5–7 min.
<p>6. Wrap-up and next steps</p> <ul style="list-style-type: none"> Set a date and time for a follow-up meeting to monitor the student's progress Discuss how and where the student's new plan will be documented and how this plan will be distributed to all necessary teachers/team members Discuss how the team will communicate the new plan to parents 	Facilitator	3 min.

Clarifying Questions to Create a Hypothesis to Guide Intervention Changes: Question Bank

This resource includes questions that teams can use to develop a hypothesis about why an individual or group of students may not be responding to an intervention. The hypothesis should help guide intervention planning and selection of intensification strategies using the [Intervention Intensification Strategy Checklist](#). When developing a hypothesis, teams should consider the intervention design, fidelity of implementation, and learner needs. Intervention fidelity data collected using the [Data-Based Individualization Implementation Log](#) and informal diagnostic data may help teams answer the sample questions below related to these three areas.

Tip: If most students are not responding to the intervention, consider developing a hypothesis to guide selection and implementation of adaptations or intensification strategies for the group. If most students are responding and a few students are not, consider using this resource to develop a hypothesis to guide adaptations and intensification for individual students.

Intervention Design (*Strength/Evidence base*)

- Does evidence suggest that the intervention is expected to lead to improved outcomes (*strength*)?
 - For the identified skill deficits and/or function of the behavior?
 - For students with similar characteristics (e.g., English learner, disability, socioeconomic status, geographic setting)?
 - For students with similar growth goals?
- Does the group size, duration, and frequency provide sufficient opportunities to respond and receive corrective feedback (*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 (*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*)? Does the behavior intervention complement rather than supplant the academic focus (*academic support*)?

If teams indicate no or are unsure about any of these questions, click on the link in the parentheses to access additional questions to help clarify or narrow the hypothesis.

Intervention Delivery/Fidelity

- Does the interventionist have the necessary training, knowledge, and skills to deliver the intervention with fidelity?
- Is there evidence that the intervention was delivered with fidelity? Consider the following:

- **Adherence:** How well do we stick to the plan, curriculum, or assessment? Is the intervention delivered consistently across different teachers and settings?
- **Program specificity:** How well is the intervention defined and different from other interventions?
- **Engagement:** How engaged and involved are the students in this instruction/intervention?
- **Duration:**
 - Is the student regularly attending school?
 - Is the teacher regularly available to support instruction/intervention?
 - How often does a student receive instruction/intervention? How long does instruction/intervention last?
 - Did any factors prevent the student from receiving the intervention as intended?
- **Quality of delivery:**
 - How well is the intervention, assessment, or instruction delivered?
 - Are quality teaching practices used consistently and with appropriate intensity across all sessions or interventionists?

Learner Needs and Background

- What previous interventions or supports has the student received? How has he/she responded to these interventions or supports?
- Have we reviewed available assessment data related to areas of strength, concern, skill deficits, etc.?
- Has the teacher communicated with previous teachers, parents, or the student to get a better sense of his/her performance and considerations of factors that may be impacting the student?
- Are other factors contributing to the learning or behavior concerns that need to be addressed (e.g., home life, health, vision, hearing, attendance/tardies, disability, behavior)?
- Are there environmental variables that may be impacting the student's learning? For instance, does the problem occur in a particular setting, under certain conditions, or at a certain time of day?
- Is the student an English learner? Are appropriate practices to support language development used?
- For students with an identified disability, does the support and instruction align with the individualized education program (IEP) or 504 plan? Are modifications needed to the student's program or plan?
- For students without an identified disability, do data warrant a referral to special education, given the district's policies?

Taxonomy of Intervention Intensity Dimensions—Refining the Hypothesis

Teams may use these additional questions, organized using the [Taxonomy of Intervention Intensity](#), to refine the hypothesis to make more effective and efficient decisions about intensification.

Dosage (Opportunities to practice and receive corrective feedback)

- Does the intervention, when delivered with fidelity, provide enough opportunities to learn or practice the target skill(s)? Is the frequency of corrective feedback sufficient?
 - How does the group size impact the student's opportunities to respond and receive feedback?

- Is there sufficient time during the intervention session for modeling, guided practice, and corrective feedback?
- Does the frequency in which the intervention components are delivered match the learner's needs?
- Does the student participate or remain engaged during the entire session?
- Does the student need additional practice opportunities or feedback to benefit from the intervention?
- Does the student need additional practice opportunities distributed across the instructional day or week?

Alignment

- Does the intervention target the student's academic or behavior learning needs?
- Have we identified all potential skill deficits or functions of the behavior?
- Are progress monitoring data collected at the appropriate level and frequency?
- Does the intervention incorporate a meaningful focus on skills necessary to access grade-appropriate curricular standards or meet schoolwide expectations?
- Are the academic tasks at the right level for the student? Are the target behavior skills relevant for the student?
- Does the student need additional instruction in a specific skill area?
 - What specific skill deficits may be contributing to the problem?
 - Are the academic tasks on the right level for the student?
- What does the team believe the student is trying to accomplish with the behavior? (What is the function of the behavior?)
 - To avoid or escape something (e.g., difficult task or social interaction).
 - To gain or obtain something (e.g., attention or stimuli).
- Have you considered the Antecedents-Behavior-Consequences (ABCs)? Also, are strategies in place to address the [ABCs](#)?
 - Antecedent (i.e., anything that happens immediately before the behavior occurs)
 - Behavior (i.e., the action a student demonstrates that can be clearly defined and measured)
 - Consequence (i.e., any positive or negative event that occurs after a student demonstrates a behavior)
- Other: _____

Attention to Transfer (*Generalization of skills*)

- To what extent are other classroom teachers reinforcing the knowledge and skills being taught in the intervention?
- To what extent does the intervention help the student(s) realize connections between mastered and related skills?
- Do data suggest the student is making progress in the intervention, but not transferring the skills to other settings (e.g., core instruction, other content areas, other settings)?
- Are there inconsistencies in expectations or routines from transferring the intervention to other settings?
- Other: _____

Comprehensiveness (*Elements of explicit instruction*)

- To what extent does the academic intervention include elements of explicit instruction? Consider the following:
 - Provides explanations in simple, direct language.
 - Models efficient strategies (e.g., decoding unknown words) instead of expecting students to discover strategies on their own.
 - Ensures that students have the necessary background knowledge and skills to succeed with those strategies.
 - Gradually fades support for students' correct execution of those strategies.
 - Provides practice so that students use the strategies to generate many correct responses.
 - Incorporates systematic cumulative review.
- To what extent does the behavior intervention:
 - Teach appropriate behavior?
 - Adjust antecedent conditions to prevent problem behavior?
 - Reinforce appropriate behavior?
 - Minimize reinforcement for problem behavior?
 - Fade supports?
 - Monitor fidelity?
 - Work in conjunction with related services?
- Is the student's academic/behavioral/social-emotional skill deficit a "can't do" (i.e., the student requires instruction) or a "won't do" (i.e., the student has performed the skill previously but is no longer demonstrating the skill)?
- Other: _____

Behavior and Academic Supports and Considerations

- Does the student demonstrate appropriate behavioral/social-emotional skills? If so, how are those reinforced during academic intervention? If not, how are those skills being taught to the student?
- How engaged and involved is the student in this intervention or activity?
 - What strategies support the student's engagement?
- Other: _____

For Intensive Intervention in Academics

- Are methods to promote self-regulation and executive function incorporated?
- Are behavioral principles to minimize nonproductive behavior incorporated?

For Intensive Intervention in Behavior

- Is the intervention easily integrated within the context of academic instruction?
- Does it complement rather than supplant the academic focus?
- Does it include procedures for reinforcing responses related to academic achievement (e.g., engagement, work completion)?

Intervention Intensification Strategy Checklist

Use these ideas, as well as your own, to intensify interventions. For more information about intensifying interventions, check out our website, www.intensiveintervention.org. *Before adapting or intensifying an intervention, always consider whether the current intervention program has been implemented with fidelity and for a sufficient amount of time.*

Strength: Teams can increase the strength of an intervention by focusing on strategies and attention given to other dimensions of the [Taxonomy of Intervention Intensity](#).

Dosage

Increase opportunities for practice and corrective feedback.

- Increase the length of intervention sessions.
- Increase the number of intervention sessions per week.
- Decrease the group size.
- Increase the total number of sessions.
- Decrease the heterogeneity of the groups (group students with similar performance levels).
- Consider an intervention setting with fewer distractions.
- Embed additional practice and feedback sessions throughout the day.
- _____

Alignment

- Increase instructional time for the target skill.*
- Supplement intervention with National Center on Intensive Intervention materials in [reading](#), [math](#), or [behavior](#).
- Focus on discrete skill instruction within the target skill.
- _____

Attention to Transfer

- Align instructional routines and language with core instruction and the environment.
- Preteach content.
- Embed guided practice on target skills within core instruction and other environments.
- Embed explicit opportunities in other settings to maintain skills acquired in the intervention.
- Explicitly teach connections.
- _____

Comprehensiveness or Elements of Explicit Instruction

- Use precise, simple language to teach key concepts or procedures.
- When introducing a concept, provide worked examples and show the steps in writing.
- Present a completed work example. Explain why a specific step is important and have the student complete that step and explain its significance.

- Model new concepts with examples and “think aloud” as you work through steps.
- Use explicit instruction and modeling with repetition to teach a concept or demonstrate the steps in a process.
- Fade steps from examples, so that students gradually assume responsibility for completing more and more steps.
- Once students can complete entire examples and explain their work, incorporate fluency-building activities to develop automaticity of skills.*
- Once students can fluently produce correct work, move to a new concept. Provide ongoing practice opportunities to facilitate skill maintenance.*
- Increase opportunities for student response and practice through unison choral responding, peer activities, and opportunities for the student to perform with adult feedback.*
- Break academic or behavior tasks into smaller chunks or steps.
- Provide concrete learning opportunities (including role play and use of manipulatives).
- Have students explain new concepts, in their own words, incorporating the important terms you have taught.
- Provide sufficient opportunities for independent practice with feedback.
- Provide immediate and explicit error correction when mistakes are made, and have the student repeat the correct response before moving on. Offer repeated opportunities to correctly practice the step.*
- Increase the frequency of error correction and corrective feedback across learning environments.*
- _____

Behavior, Engagement, and Motivation Support

- Use a timer for intermittent reinforcement of on-task, appropriate behavior.
- Provide differential reinforcement or change the schedule of reinforcement.
- Create a motivation plan based on what you know about the student that provides frequent behavior feedback.
- Use a report card for home communication.
- Add a social skills group.
- Combine or align academic and behavioral supports.
- Convene a functional behavior assessment team to determine the function of the behavior.
- Use group contingencies to promote on-task, appropriate behavior.
- Use peer support to model and encourage desired behavior.
- _____

Other

- Change to an interventionist with more expertise, such as a reading specialist, behavior specialist, social worker, or special education teacher, depending on the student’s needs.
- Change the intervention to better meet the individual needs.
- _____

*These areas also are important to consider for dosage.