

Continuous Improvement: The Problem Solving Process

Needs Assessment

Florida is engaged in a long-term, sustainable, **systems** change effort. As educators, we must continually seek to elevate the effectiveness of our system by building our capacity to scale-up the effective implementation of multi-tiered supports. When scaling up the system of **supports** effort within a district and/or school, a needs assessment can serve dual purpose—both to identify areas in need of development and to mark progress toward the implementation of a functional **data**-based system for decision making. See the Self-Assessment of MTSS Implementation (SAM) — [http://florida-rti.org/gtips/docs/self_assessment_of_mtss_\(sam\).pdf](http://florida-rti.org/gtips/docs/self_assessment_of_mtss_(sam).pdf), which is a tool to help district- and school-based **leadership** teams address the aforementioned dual purpose. The SAM includes a guide for administration that provides descriptions and examples for each item. The SAM is organized around 6 content domains:

1. Leadership
2. Building Capacity and **Infrastructure**
3. Communication and Collaboration
4. Data-Based Problem Solving
5. Three-Tiered **Instructional/Intervention** Model
6. Data Evaluation

Making System-Wide Changes

The most significant factor driving educational reform is the focus on outcomes for all students and not just those being considered for services through the **Individuals with Disabilities Education Act**. Within this **framework**, the core question becomes “**What do we want students to know and be able to do?**” Responding to this question requires educators to possess a complete understanding of the behavioral and academic expectations for students throughout the course of the academic year. To illustrate the broad range of students who benefit from existing within a school **culture** of **data**-based decision making, consider the application of systematic problem solving to gifted and high-ability learners. Gifted and high-ability learners may also have needs beyond core **instruction** (Tier 1), and therefore require supplemental **interventions** for acceleration and enrichment purposes.

The expectation that schools provide effective instruction and support to foster success for all students is embedded in Rule 6A-6.0331, Florida Administrative Code (F.A.C.), *General Education Intervention Procedures, Evaluation, Determination of Eligibility, Reevaluation and the Provision of Exceptional Student Education Services*. Per this Rule, the local school district is responsible for developing and implementing a multi-tiered system of support, which integrates a continuum of academic and behavioral interventions for students who need additional support to succeed in the general education environment using a data-based problem solving process. This includes **virtual settings**. The provision of educational and behavioral evaluations, services, and supports are included as permissible problem solving activities.

Rule 6A-6.0331 leads to a need for reconsidering professional development for teachers and other school staff. Based on the provisions of this rule, teacher and staff professional

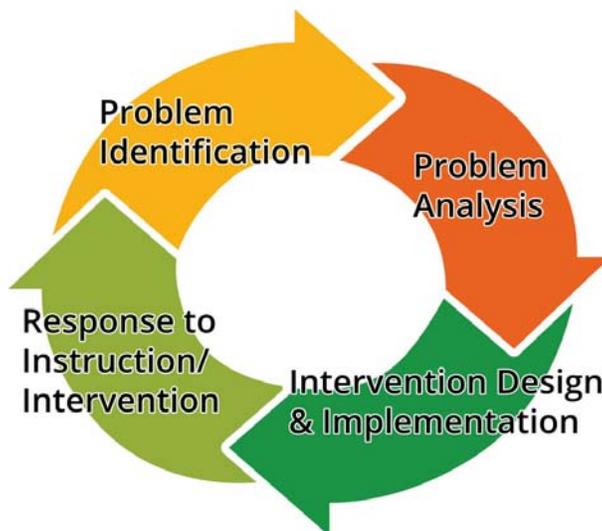
development should support the delivery of evidence based **literacy** instruction, academic and behavioral interventions, and the use of adaptive and **instructional technology**.

When educators and stakeholders consider the question “What do we want students to know and be able to do?”, improved academic and behavioral outcomes result. This question is also central when examining response to Tier 1 instruction/intervention (i.e., when considering response to class or grade-level academic and/or behavioral expectations). To effectively implement a multi-tiered system of supports, Tier 1 questions (see the imperative questions on the page Applying Problem Solving Across Tiers) regarding the efficiency of core instruction must be addressed as a **priority** to examining individual student concerns within the multi-tiered system.

Steps of the Problem Solving Process

Regardless of whether examining the effects of core instruction (Tier 1) or determining the need for more intensive **supports** for groups or individual students (Tier 2 and Tier 3), teams should engage in a **data**-based problem solving process. Florida’s model includes a four-step problem solving process, introduced in the Guiding Principles section. The four steps of the problem solving process are as follows:

1. **Step I: Problem Identification** – What exactly is the problem or discrepancy between the current situation and the goal?
2. **Step II: Problem Analysis** – Why is the problem occurring?
3. **Step III: Intervention Design and Implementation** – What exactly are we going to do about it?
4. **Step IV: Response to Instruction/Intervention** – Is the plan working?



Within this cyclical process, the problem to be systematically addressed is defined as the discrepancy between what is expected of a student in a given age or grade level and the current, observed level of performance. Hence the existence of a deficiency is defined, in part, by the discrepancy between expected and observed performance as opposed to any former discrepancies, such as the discrepancy between ability and achievement. Central to problem solving is an analysis of factors that impede performance beyond those that may (or may not) reside within the learner. As a result, all factors that impact learning (i.e., instruction, curriculum, environment, and learner variables) are considered through the analysis of student performance

data when assessing effectiveness of instruction/intervention and determining students' instructional needs.

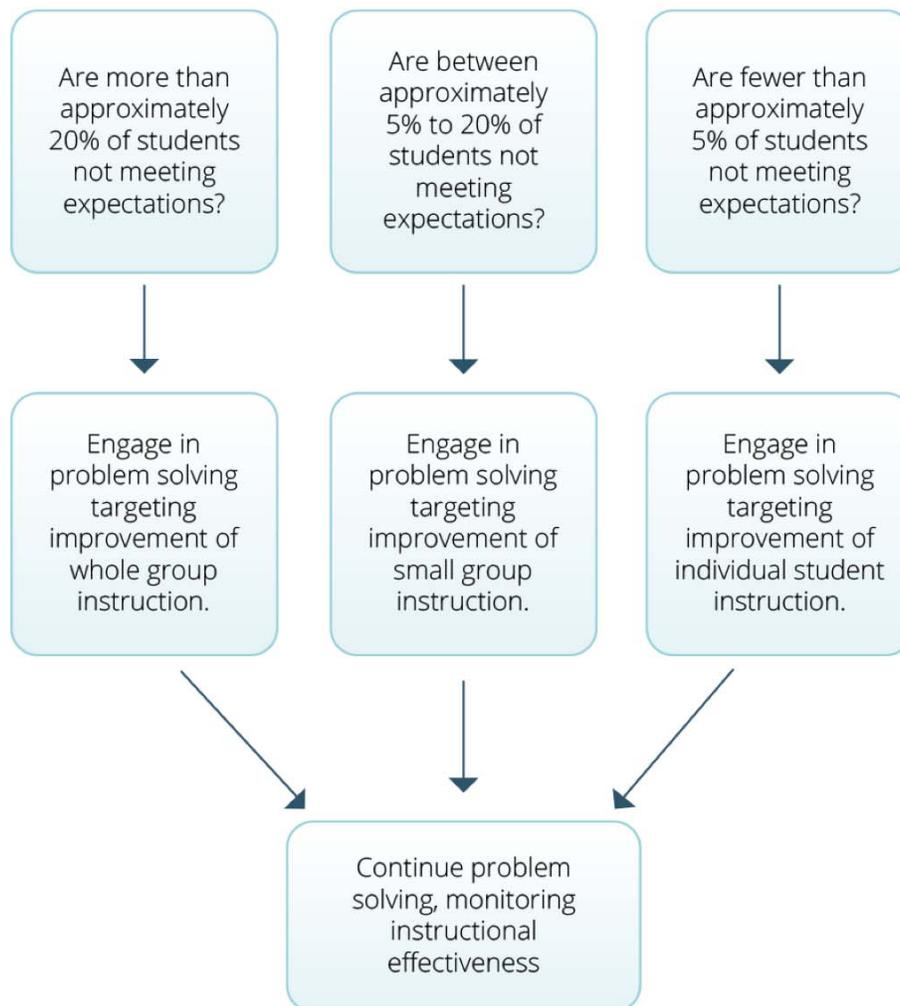
School teams can use Problem-solving/RtI Worksheets (http://florida-rti.org/gtips/docs/PS-RtI_Worksheet.pdf) to systematically address the steps of PS-RtI. The components within the worksheets capture many of the elements addressed in Rule 6A.6-0331., Florida Administrative Code. The school team members use critical thinking skills in order to apply the four steps of problem solving effectively.

Problem Identification (Step I): During problem identification, teams are asked to consider academic and behavioral **standards** to clarify what students are expected to know and be able to do as well as **data** to determine **peer** performance in relation to these expectations. Consideration must be given to the percentage of peers demonstrating performance similar to that of the targeted student as the response may lead to the hypothesis that the issue is related to **instructional**, curricular, or environmental variables. As demonstrated below in the Decision-Making Rubric for Use with Schoolwide Screening, when 20 percent or more students show similar problems, the likelihood increases that intervening at a group or systemic level may result in the greatest improvement for the most students through efficient use of available resources.

Conducting a gap analysis can help teams determine at which Tier they should intervene (regardless of whether or not the student receives special education services). Essentially teams must ask, "Is it a large group problem, a small group problem, or an individual student problem?" More importantly, by identifying the percentage of students with similar problems, educators can determine if class-wide instruction should be the focus or if individual/small groups of students would benefit from targeted, supplemental intervention. The figure below, Decision-Making Rubric for Use with Schoolwide Screening, can assist teams in determining how to focus the problem solving effort. If the discrepancy between the benchmark and peer group performance is large and the discrepancy between peer group performance and the student's performance is minimal, it would not be appropriate to automatically determine that the student would benefit from special education. Nor would it be appropriate, in this example, to assume that we would only be focusing on an individual student. The Gap Analysis section of the Problem Solving/RtI Worksheets further illustrates this thinking.

DECISION-MAKING RUBRIC FOR USE WITH SCHOOLWIDE SCREENING

**Is this an individual student problem
or a larger systemic problem?**



The Decision-Making Rubric for Use with Schoolwide Screening begins by asking the overarching question: Is this an individual student problem or a larger systemic problem?

Then asks the following specific questions:

- Are more than approximately 20% of students not meeting expectations?
If so, then engage in problem solving targeting improvement of whole group instruction.
OR
- Are between approximately 5% to 20% of students not meeting expectations?
If so then engage in problem solving targeting improvement of small group instruction.

OR

- Are fewer than approximately 5% of students not meeting expectations?
If so, engage in problem solving targeting improvement of individual student instruction.

No matter which scenario, continue problem solving and monitoring instructional effectiveness.

Problem Analysis (Step II):

During problem analysis, the team seeks the response to “Why is the problem occurring?” Teams develop hypotheses to explain why the problem is occurring and predict what might prevent the problem from occurring in the future. Hypothesis statements are framed as “The problem is occurring because _____.” Subsequently, prediction statements are written as “If _____ would occur, then the problem would be reduced.” **Data** are collected to confirm or reject the hypotheses that were developed. During this phase, it is important to determine if the problem reflects a skill deficit (i.e., “can’t do”) or motivation deficit (i.e., “won’t do”). For information on problem analysis and, more specifically, on hypotheses development, see the Problem Solving/RtI Worksheets at http://florida-rti.org/gtips/docs/PS-RtI_Worksheet.pdf.

Intervention Planning and Implementation (Step III):

During intervention planning and implementation, the team focuses on “What are we going to do about it?” Specifically, the Problem Solving/RtI Worksheets guide teams through the process of identifying who is responsible for intervention plan implementation, what will be done, when will it occur, and where will it occur. Components of the comprehensive intervention plan found in the Problem Solving/RtI Worksheets also include a support plan, which includes relevant training for the individual responsible for carrying out the intervention or a consistent time frame for someone to check in with the individual. Other components are intervention documentation (see the Intervention Documentation Worksheets at http://florida-rti.org/gtips/docs/intervention_documentation_worksheets.pdf) to ensure fidelity of implementation and monitoring the plan for determining student **rate of progress** to guide next steps.

Response to Instruction/Intervention (Step IV):

Evaluating the students’ actual response to the instruction/intervention is a critical component of this model. Review and analysis of data are used to determine if the plan is working. For Step IV, the Problem Solving/RtI Worksheets guide the team through thoughtful consideration of graphed data to determine if there has been a positive, questionable, or poor response to intervention.

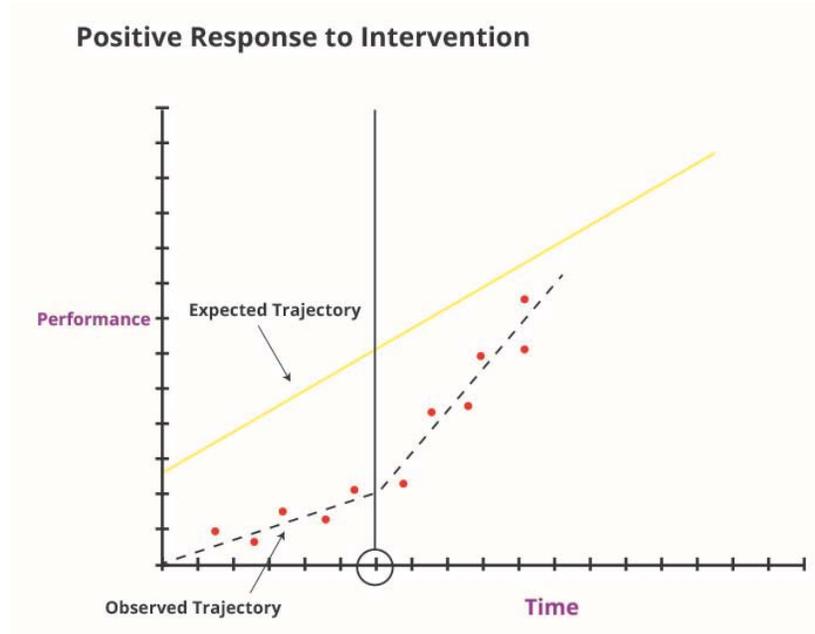
Decision Rules

Response to instruction/intervention is considered positive when the gap between expected performance and observed performance is closing. Ideally, the point at which the target student will “come in range” of grade-level expectations — even if it is the long range — can be extrapolated or estimated. **Questionable response to instruction/intervention** exists when the rate at which the gap is widening slows considerably but is still widening, or when the gap stops widening but closure does not occur. The student(s) response to instruction/intervention is considered poor when the gap continues to widen with no change in **rate of progress** after the instruction/intervention is implemented.

The conditions of positive, questionable, or **poor response to instruction/intervention** result in different sets of decisions to be made, described and illustrated as follows:

Positive: Under positive conditions, the current instruction/intervention may be continued with the same or increased goal. Alternatively, the current level of instruction/intervention may be faded gradually to determine whether the same level of intensity of instruction is necessary for student success. See the illustrations below for individual and group decision rule examples for positive responses.

Decision Rules for *Positive Response* – Individual Student



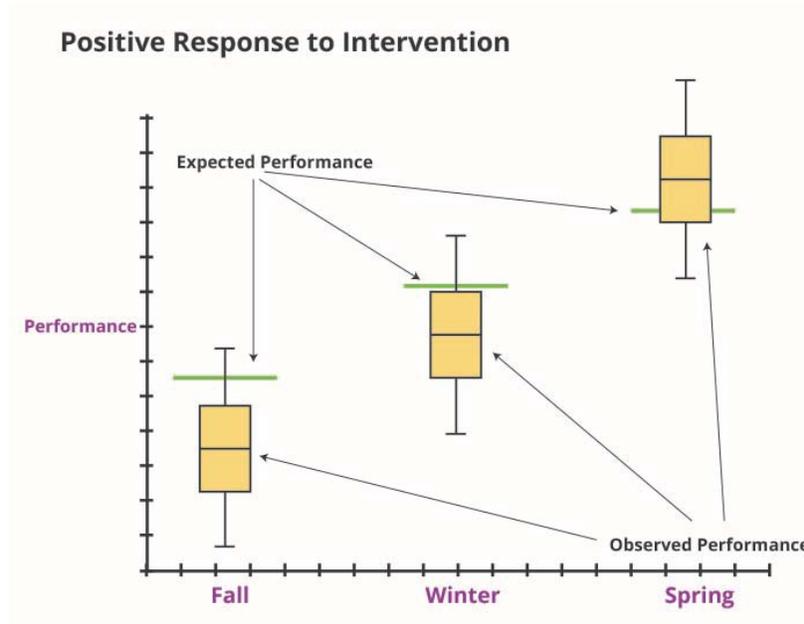
Positive Response

- Gap is closing.
- Point at which target student(s) will “come in range” of target can be extrapolated—even if this is long range.

Potential Actions

- Continue intervention with current goal.
- Continue intervention with goal increased.
- Gradually fade intervention to determine if student(s) have acquired functional independence.

Decision Rules for *Positive Response* – Group of Students



Positive Response

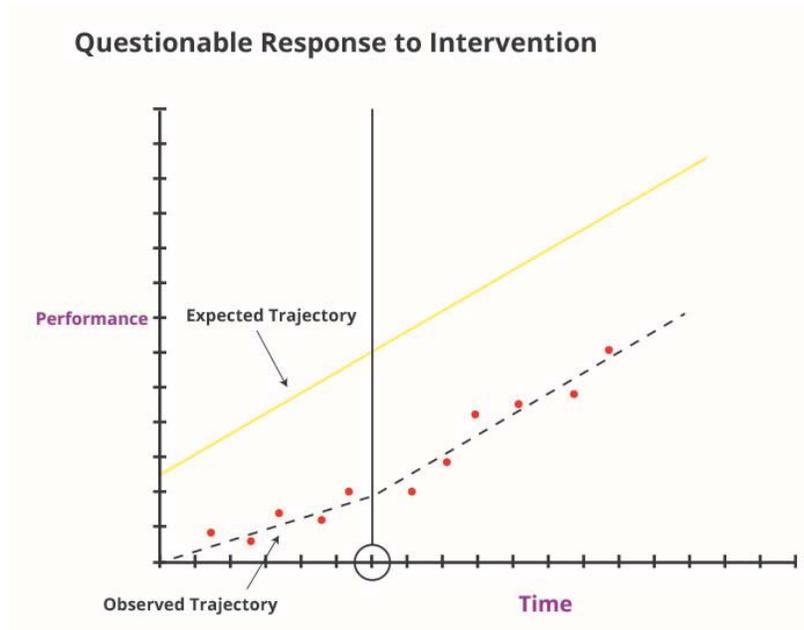
- Gap is closing.
- Point at which target student(s) will “come in range” of target can be extrapolated—even if this is long range.

Potential Actions

- Continue intervention with current goal.
- Continue intervention with goal increased.
- Gradually fade intervention to determine if student(s) have acquired functional independence.

Questionable: When the response is questionable, the first question to be asked is one of intervention implementation **fidelity**: “Was the intervention implemented as intended?” If not, then supports to increase implementation fidelity are put in place. A variety of tools are used to measure **intervention** implementation fidelity, which include both qualitative and quantitative methods such as direct **observations**, self-reports, checklists, and intervention-specific tools. If implementation fidelity is demonstrated, then the intensity of the current instruction/intervention may be increased for a short period of time. If **rate of progress** improves, then **instruction** is continued at the more intense level. If the rate does not improve, then a return to Steps 1 and 2 of problem solving is necessary. See the illustrations below for individual and group decision rule examples for questionable responses.

Decision Rule for Questionable Response – Individual Student



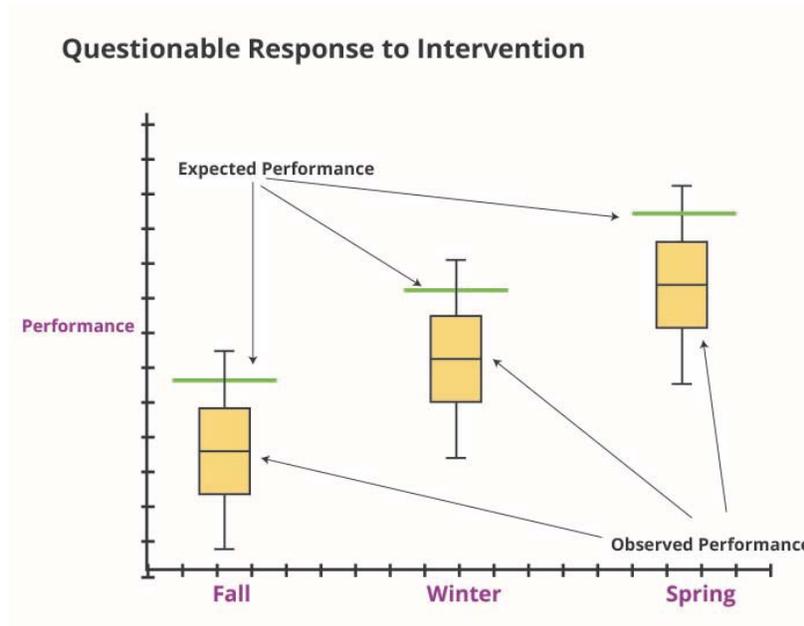
Questionable Response

- Rate at which gap is widening slows considerably, but gap is still widening.
- Gap stops widening, but closure does not occur.

Potential Actions

- Was intervention implemented as intended?
- If no—employ strategies to increase implementation integrity.
- If yes—increase intensity of current intervention for a short period of time and assess impact. If rate improves, continue. If rate does not improve, return to problem solving.

Decision Rule for Questionable Response – Group of Students



Questionable Response

- Rate at which gap is widening slows considerably, but gap is still widening.
- Gap stops widening, but closure does not occur.

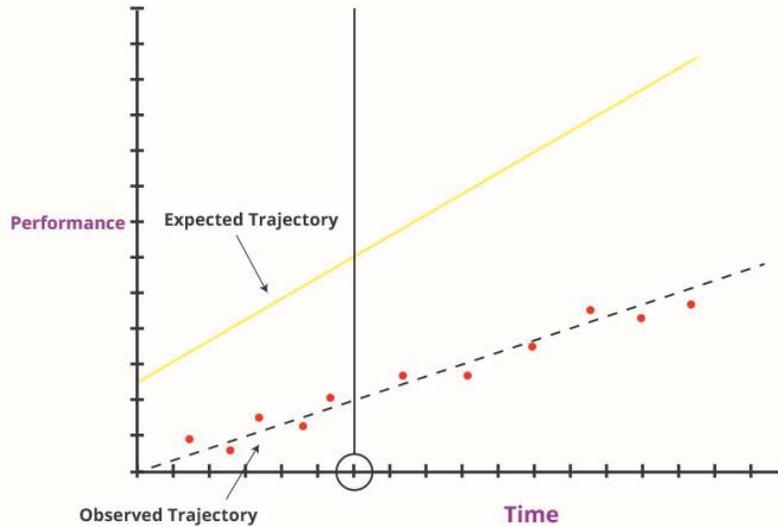
Potential Actions

- Was intervention implemented as intended?
- If no—employ strategies to increase implementation integrity.
- If yes—increase intensity of current intervention for a short period of time and assess impact. If rate improves, continue. If rate does not improve, return to problem solving.

Poor: When the response is poor, the same question of implementation fidelity is asked. Again, if implementation fidelity is problematic, supportive strategies to increase implementation fidelity are employed. If implementation integrity is good, then the steps of problem solving are retraced, asking: “Is the instruction/intervention aligned with the verified hypothesis, or are there other aligned interventions to consider?” (Intervention Design), “Are there other hypotheses to consider?” (Problem Analysis), and “Is the problem identified correctly?” (Problem Identification). See the illustrations below for individual and group decision rule examples for poor responses.

Decision Rule for *Poor* Response – Individual Student

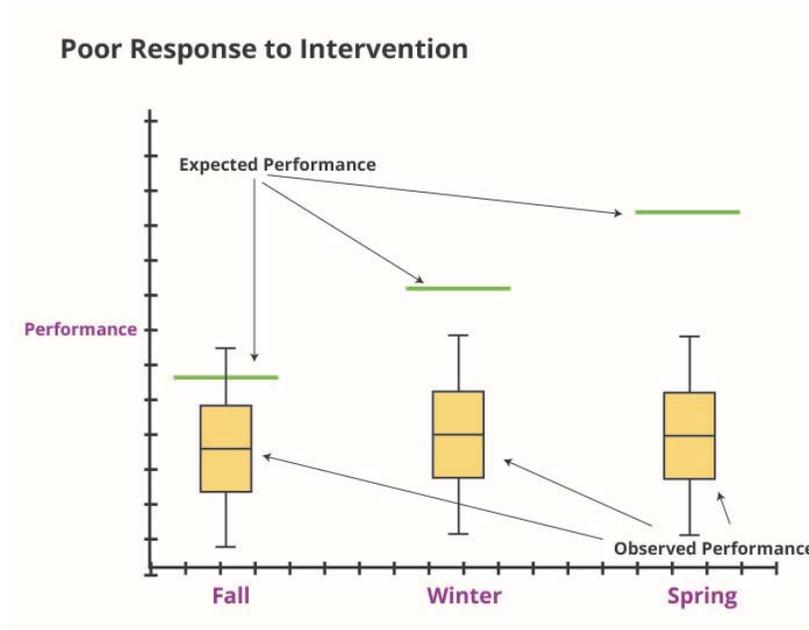
Poor Response to Intervention



Poor Response

- Gap continues to widen with no change in rate.
- Potential Actions
- Was intervention implemented as intended?
- If no—employ strategies to increase implementation integrity.
- If yes—
 - Is intervention aligned with the verified hypothesis? (Intervention Design)
 - Are there other hypotheses to consider? (Problem Analysis)
 - Was the problem identified correctly? (Problem Identification)

Decision Rule for *Poor* Response – Group of Students



Poor Response

- Gap continues to widen with no change in rate.
- Potential Actions
- Was intervention implemented as intended?
- If no—employ strategies to increase implementation integrity.
- If yes—
 - Is intervention aligned with the verified hypothesis? (Intervention Design)
 - Are there other hypotheses to consider? (Problem Analysis)
 - Was the problem identified correctly? (Problem Identification)

General Education Interventions

In conjunction with the FDOE’s goal to increase student proficiency within a seamless system, the local school district is responsible for implementing a coordinated system of **intervention** procedures for each student needing additional academic and behavioral support (Rule 6A-6.0331(1), Florida Administrative Code [F.A.C.]). A coordinated, multi-tiered system of intervention support facilitates the success of all students and ensures that students receive the prevention and early intervention services that promote academic success. The general education interventions rule aligns with the statutory requirements to address the needs of students with **instruction** and intervention that is targeted to improve the student’s achievement (s. 1008.25(4), Florida Statutes) and with the intent of the **Individuals with Disabilities Education Act** to improve educational outcomes for students with disabilities.

Rule 6A-6.0331(1)(e), F.A.C., requires that schools implement evidence based interventions to address the identified area(s) of concern in the general education environment. These interventions must be developed through a problem solving process that uses student performance **data** to identify and analyze the area(s) of concern, select and implement interventions, and monitor the effectiveness of the interventions. The intensity and instructional