

# Progress Monitoring & Data-Based Individualization Within RTI

December 9, 2014

Sarah R. Powell

University of Texas at Austin

Russell Gersten

Instructional Research Group and Professor Emeritus  
University of Oregon

# Shift in Emphasis for This Session

- From broad of overview of progress monitoring (PM) in mathematics to
- Major focus on Intensive (Tier 3) intervention
- Rationale: PM in mathematics is undergoing a good deal of change with adoption of Common Core and use of formative assessments
- In earlier webinars, many participants expressed mixed feeling about commonly used measures and a need for change
- Seemed best to address this issue after changes made

AND RESEARCH ON DATA BASED INSTRUCTION IN THE CONTEXT OF TIER 3 (INTENSIVE INTERVENTION IS NEW AND SEEMS TO ADDRESS A PRESSING NEED IN DISTRICTS ACROSS THE STATE

# Today...

- Data-based individualization (DBI)
  - Intensive intervention
  - Role of progress monitoring

National Center on  
**INTENSIVE INTERVENTION**  
at American Institutes for Research

Coaches' Corner    
[Advanced Search](#)

[Resources](#) [Tools Charts](#) [Implementation Support](#) [Instructional Support](#) [About Us](#)

### Interactive DBI Process

**Intensive intervention** helps 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 intensifying interventions through the systematic use of assessment data, validated interventions, and research-based adaptation strategies.

Click on the components in the graphic to learn more about the steps in the DBI process and find relevant resources.

[Click here to learn more about DBI.](#)

[View this video to learn why intensive intervention and DBI are critical.](#)

```
graph TD; A[Validated Intervention Program (e.g. Tier2, Standard Protocol, Secondary Intervention)] --> B((Progress Monitor)); B --> C[Diagnostic Academic Assessment/Functional Assessment]; C --> D[Intervention Adaptation]; D --> E((Progress Monitor)); E --> A; B --> B1((+)); B --> B2((-)); E --> E1((+)); E --> E2((-));
```

The flowchart illustrates the Interactive DBI Process. It begins with a 'Validated Intervention Program (e.g. Tier2, Standard Protocol, Secondary Intervention)' in an orange box. An arrow points down to a green circle labeled 'Progress Monitor'. From this circle, two arrows branch out: one to the right with a plus sign (+) labeled 'RESPONSIVE', and one to the left with a minus sign (-) labeled 'NONRESPONSIVE'. A central arrow points down to a green circle labeled 'Diagnostic Academic Assessment/Functional Assessment'. From there, an arrow points down to an orange box labeled 'Intervention Adaptation'. Another arrow points down to a second green circle labeled 'Progress Monitor'. From this second circle, two arrows branch out: one to the right with a plus sign (+) labeled 'RESPONSIVE', and one to the left with a minus sign (-) labeled 'NONRESPONSIVE'. A large curved arrow on the left side of the diagram loops back from the bottom 'Progress Monitor' circle to the top 'Validated Intervention Program' box, indicating a feedback loop.

### The NCII Newsletter

Signup for our newsletter and updates!

See us on: [YouTube](#) [Twitter](#)

### Spotlight on Sample Lessons & Activities

Find lessons and activities to support students struggling with computation of fractions.

View the lesson

### MTSS & Standards-Based Instruction

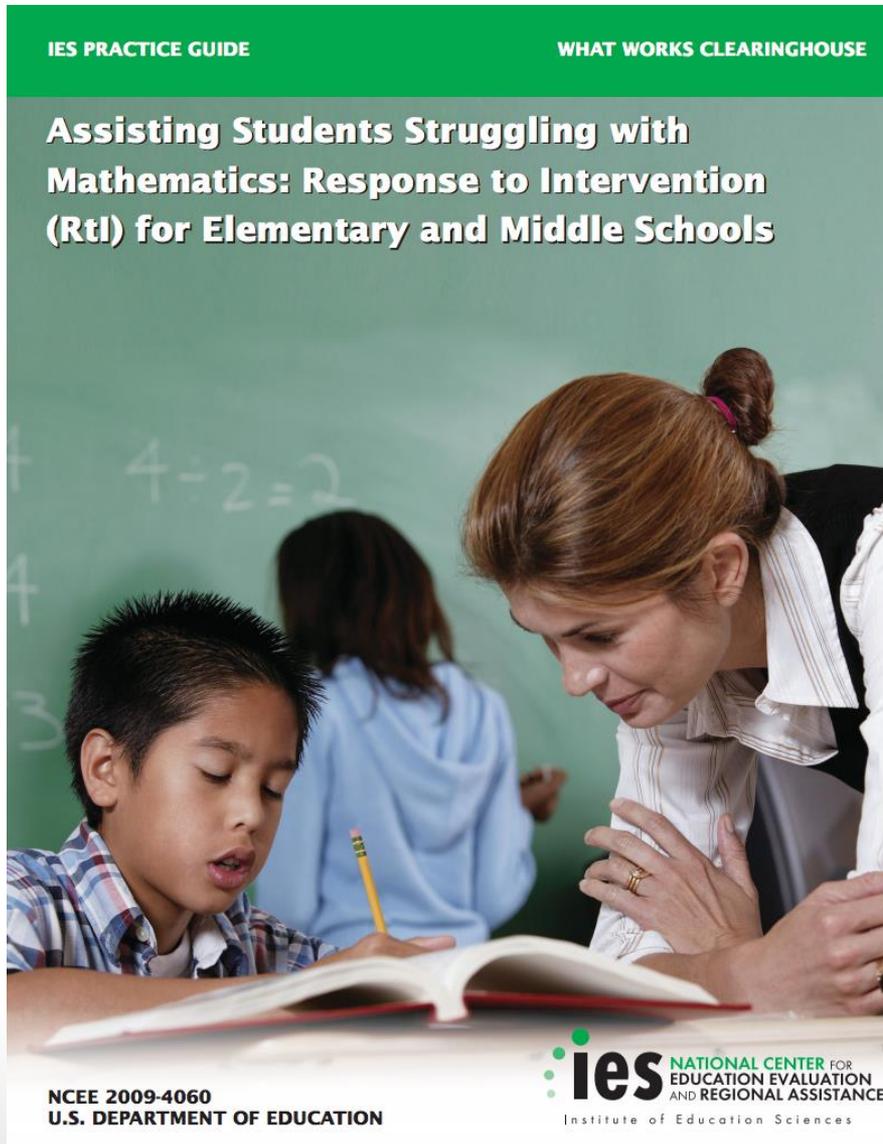
Find out how college and career ready standards can be addressed across levels of a multi-tiered system of support (MTSS) in reading and mathematics.

View examples



Molly: Poll Questions 1 and 2 here from last time.

# Let's Review



- Strong evidence:
  - Explicit and systematic instruction
  - Instruction on solving word problems using schemas
- Moderate:
  - Screening students to identify those at risk
  - Materials with visual representations
  - Fluency building activities

# Practice Guide on Progress Monitoring:

- **Level of Evidence: Low**

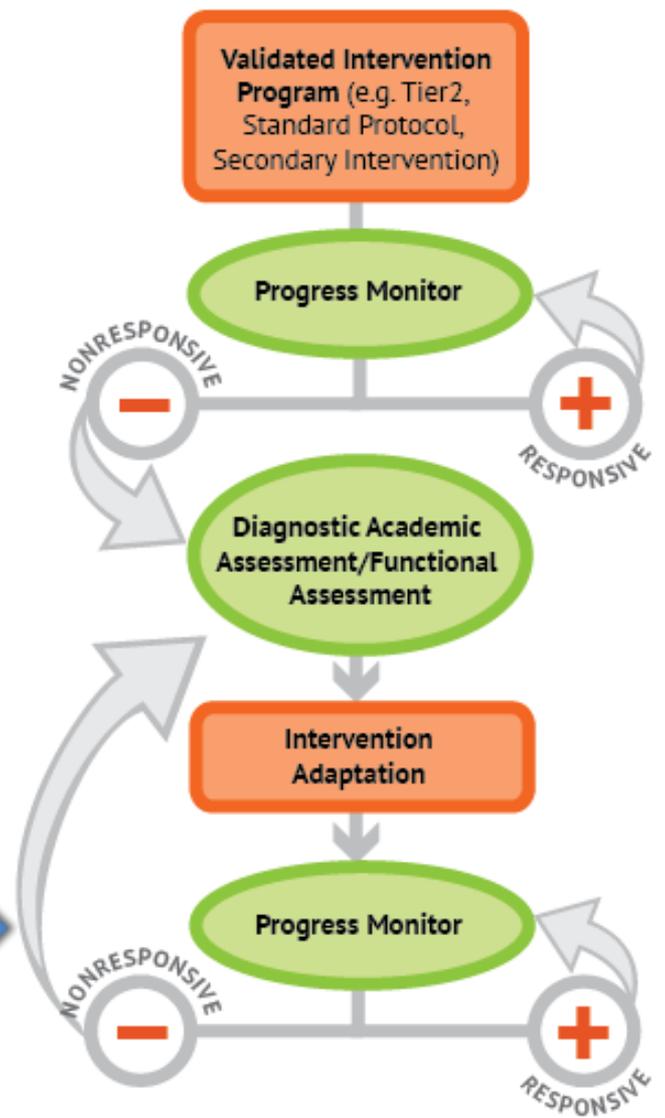
## *Why?*

1. In effective interventions, no pm was done. Assessment typically done by daily mastery tests or weekly tests.
2. Psychometrics ok for measures but not as strong as for reading measures.
3. Many data points necessary (approx. 12) to ensure slope is reliable. A key concern in data based instruction.
4. Nonetheless, Panel felt that progress monitoring information useful for quickly gauging whether a students' full instructional program (Tier1, 2 &/or 3) is helping. **Especially for borderline students**
5. **Critical to ensure that progress monitoring measures are valid using data from current state assessments.**

# What is DBI?

- Within an RTI framework...
  - Students **nonresponsive** to Tier 2
  - Students **nonresponsive** to Tier 3
- DBI is designed to address *severe and persistent* learning difficulties.
  - Driven by data
  - Characterized by increased intensity

Progress monitoring is constant





What is your current satisfaction with your current progress monitoring system?

Very satisfied, satisfied, indifferent, not satisfied

# NCCI's Approach to Intensive Intervention: Data-Based Individualization (DBI)

---

**Data-Based Individualization (DBI)** is 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) and expanded upon by others (Capizzi & Fuchs, 2005; Fuchs, Deno, & Mirkin, 1984; Fuchs, Fuchs, & Hamlett, 1989).
- DBI is a process, not a single intervention program or strategy.
- Not a one-time fix—ongoing process comprising intervention and assessment adjusted over time.

# Who needs intensive intervention?

---

- Students with disabilities who are not making adequate progress in their current instructional program
- Students who present with very low math performance
- Students in a tiered intervention program who have not responded to secondary intervention programs delivered with fidelity (i.e., Tier 2 isn't enough for the student)

Some students may move to Tier 3 quickly because of need.

# DBI Steps

---

1. Progress monitoring
2. Diagnostic assessment (formal or informal) or use of formative assessment
3. Adaptation/ Adjustment
4. Continued progress monitoring, with adaptations occurring whenever needed to ensure adequate progress

DBI often includes Tier 2 intervention, although sometimes smaller groups (within a classroom) is possible. DBI can also be used one-on-one to help with grade level concepts

# Before we begin DBI...

---

- In most cases, start with a Tier 2 intervention program (if available)
- Progress monitor to evaluate the student's response to the secondary intervention.
- Look carefully at data from daily mastery probes or other curriculum embedded assessments.
  - NOTE: It can take up to 12 data points to establish slope. With some students, you may want to move quicker to DBI

# Thinking About Intervention Levels/Tiers

	Primary (T1)	Secondary (T2)	Intensive (T3)
Instruction/ Intervention Approach	Comprehensive research-based curriculum	Standardized, targeted small-group instruction	Individualized, based on student data
Group Size	Class-wide (with some small group instruction)	3–7 students	No more than 3 students
Monitor Progress	1x per term	At least 1x per month	Weekly
Population Served	All students	At-risk students	Significant and persistent learning needs

# Key Questions About the Secondary Intervention

---

- Has the student been taught using secondary (Tier 2) intervention program (if available) that is appropriate for his or her needs?
- Has the program been implemented with fidelity?
  - Content
  - Dosage/schedule
  - Group size
- Has the program been implemented for a sufficient amount of time to determine response?

# Why start with a standardized, intervention program?



- Teachers don't need to “reinvent the wheel.”
- They are efficient—teachers can plan instruction for groups rather than individual students.
- Many require only a modest amount of training—often, paraeducators can help with delivery.
- Try to find an intervention with an evidence base.
- Cost considerations often a factor. Some are relatively inexpensive, some are linked to core curricula and thus may also be inexpensive to use.

# NCII's Intervention Tools Chart Provides Reviews of Secondary Intervention Programs

<http://www.intensiveintervention.org/resources/tools-charts>

**NCII** NATIONAL CENTER ON INTENSIVE INTERVENTION at American Institutes for Research

Resources Communications Implementation Support About Us

Home > Resources > 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.

Study Quality Effect Size Intensity Additional Research

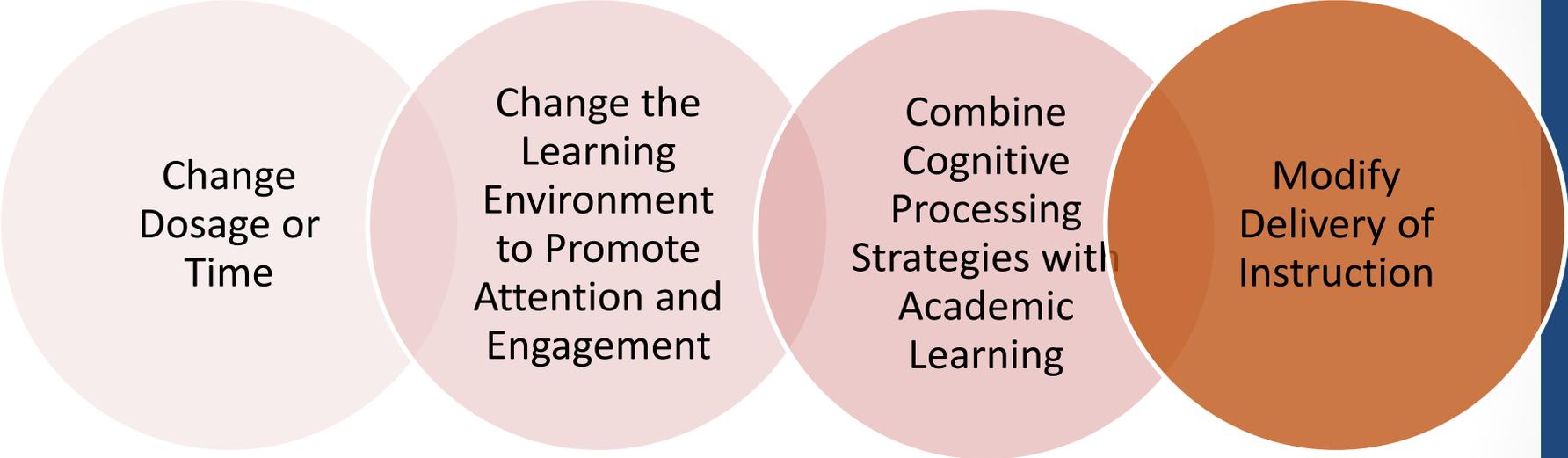
Title ▲	Study	Participants ⓪	Design ⓪	Fidelity of Implementation ⓪	Measures Targeted ⓪	Measures Broad ⓪
Academy of READING	Fiedorowicz & Trites (1987)	●	●	●	●	●
AWARD Reading	Block, & Mangieri (Tech. Rep.)	●	●	●	●	—
Failure Free Reading	Torgesen, Myers, Schirm, Stuart, Vartivarian, et al. (2006)	●	●	●	●	●
Fast Forward Language Series	Slattery (2003)	●	●	●	●	●
focusMATH Intensive Intervention	Styers & Baird-Wilkerson (2011)	●	●	●	●	—
Leveled Literacy Intervention System	Ransford-Kaldon, Flynt, Ross, Franceschini, Zoblotsky, et al. (2010)	●	●	●	●	●
Lexia Reading	Macaruso & Rodman (2011)	●	●	●	●	●

# Can I still implement DBI if I don't have a complete menu of standardized programs?



- Yes!
- Use them *when available* and consider augmenting current offerings if there are content areas where you have insufficient resources.
- Also consider—
  - Remediation materials that came with your core program
  - Expert recommendations (if evidence-based programs are not available) from Institute of Education Sciences (IES) practice guides, reputable professional organizations, etc.
  - Standards-aligned materials
- Collect data to determine whether *most* students are profiting.

# How to Intensify Intervention?



Change  
Dosage or  
Time

Change the  
Learning  
Environment  
to Promote  
Attention and  
Engagement

Combine  
Cognitive  
Processing  
Strategies with  
Academic  
Learning

Modify  
Delivery of  
Instruction

# **Practice #1: Change Dosage or Time**

# Practice #1: Change Dosage or Time

---

Methods for increasing quantity of instruction:

- Minutes per day or per session
- Sessions per week
- Total number of sessions
- Use of technology geared to intervention goals (e.g. facts programs, possibly mathematics games linked to goals, or instructional software)

**Practice #2:  
Change the  
Learning  
Environment to  
Promote  
Attention and  
Engagement**

# Practice #2: Change the Learning Environment to Promote Attention and Engagement

---

- Reduce group size
- Group students with similar needs
- Change the instructional setting to reduce noise and other distractions and promote academic engagement.

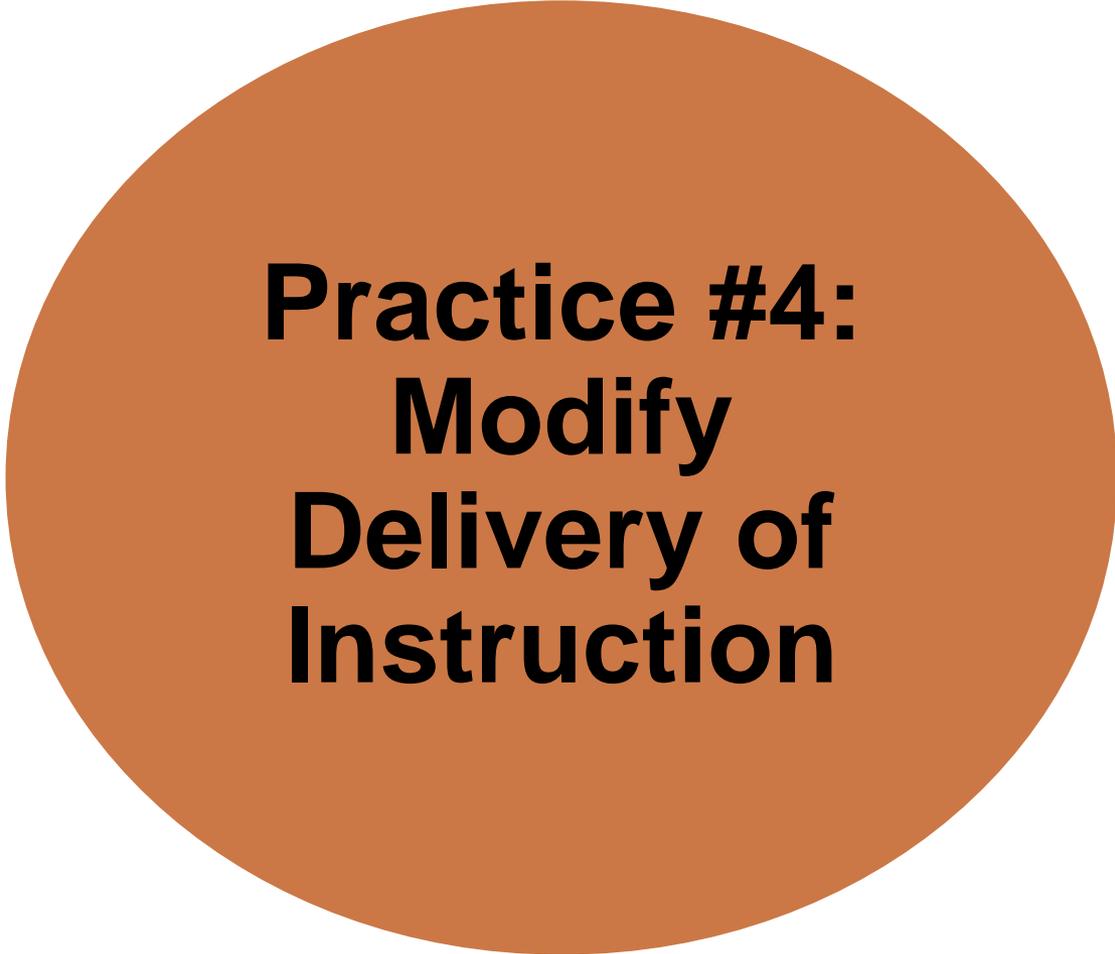
**Practice #3:  
Combine  
Cognitive  
Processing  
Strategies with  
Academic  
Learning**

# What are cognitive processes?

---

Cognitive processes comprise various mental activities that direct thinking and learning. Students with intensive needs have frequent issues with cognitive processes related to elements of executive function and self-regulation:

- Memory
- Attribution
- Attention
- Strategies to set and monitor learning goals



**Practice #4:  
Modify  
Delivery of  
Instruction**

# Modifying Delivery of Instruction

---

1. Consider the instructional match & prioritize skills to teach
2. Systematic Instruction
3. Explicit Instruction
4. Precise, simple language
5. Frequent opportunities for student response
6. Specific feedback and error correction procedures
7. Opportunities for practice, development of fluency, and review



- What's one way you currently intensify intervention?
  - Dosage
  - Time
  - Environment
  - Cognitive processes
  - Modify delivery

# Progress Monitoring and DBI

- DBI requires progress monitoring
- Measures must be reliable and valid

easyCBM<sup>™</sup> LITE EDITION

Home | Contact | FAQ

STUDENTS [Click Here!](#)

TEACHERS

Username Password

Don't have an account yet? - Register Now  
Forgot your password? - Reset Your Password

NCEM Paid participation for Research Studies. [Click here for more info!](#)

Bringing 30 years of research into the hands of classroom teachers

easyCBM Lite provides progress monitoring for students in grades K-8. [Sign-up for a free account.](#)

View a [screenshot tour of easyCBM Lite.](#)

Want to check out the system before signing up? Take a spin on the [demo account.](#)

demo

About | Contact | Requirements | FAQ | Assessments | Video | Privacy Policy | User Agreement | Login | Register

Copyright © 2006-2014 University of Oregon

easyCBM<sup>™</sup> Progress made easy for RTI.

### Curriculum-Based Measurement Solutions for Every Tier

easyCBM<sup>™</sup> is an enhanced district assessment system designed by researchers at the University of Oregon as an integral part of an RTI (Response to Intervention) model. Distributed exclusively by Riverside, it provides school districts, administrators, and teachers with a full suite of assessment and reporting options, offering a complete solution at every tier of the RTI process.

Enhanced features include:

- Full set of Benchmarking and Progress Monitoring assessments, Reading and Math, Grades K through 8.
- Sync teachers accounts, student records, and class lists from your Student Information System. Easily maintain student records from year to year.
- Multiple levels of account access for teachers, principals, district personnel, and administrators.
- Various forms of data entry including online student tests, streamlined total score entry of paper-pencil tests, and other options.
- Reports by teacher, building, grade-level, or district with customizable percentiles and color-codings, including exports for your Data Warehouse.
- Admin panel with various system-level settings and configurations, user account management, and student record maintenance.
- Secure SSL website connections with 256-bit data encryption (same level used by banks), and optional password-protection of online student tests.

DYNAMIC MEASUREMENT GROUP

Home | About | Activities | Research | Resources

## DIBELS Math

DIBELS Math is an assessment used to measure the acquisition of mathematics skills from kindergarten through sixth grade.

### DIBELS Math Early Release

The authors of DIBELS at Dynamic Measurement Group are pleased to announce the continued early release of DIBELS Math for research partners for the 2014-2015 school year. For details on the DIBELS Math Early Release, read our announcement.

### Overview

DIBELS<sup>®</sup> Math is comprised of measures of early numeracy, computation, and problem solving that function as indicators of the essential skills that every child must master in order to become proficient in mathematics. The measures can be used to quickly and efficiently monitor the development of mathematics skills. DIBELS Math is designed for use in identifying children experiencing difficulty in the acquisition of basic mathematics skills, in order to provide support early and prevent the occurrence of later mathematics difficulties.

View our Webinar

INTRODUCING DIBELS MATH

Watch the Video

aimsweb

About Assessments Training Resources News/Events Success Stories

Contact

## Real Easy

Intuitive and supportive, the new aimsweb is easy to use and quickly gives educators the insights they need to help them do what they do best, help students learn.

The new aimsweb  
Hear a current customer talk about their excitement for the new aimsweb.

Common Core. ELL. Student Growth.  
Check out what's new with aimsweb.

Dr. Mark Shinn's webinar series  
Conversations about Assessment

Algebra Assessment & Meeting Standards

Home About Activities Research Resources

## Measures & Training Now Available!

Our District Partners:

- Fort Dodge Community School District
- South Tama County Community School District
- Ballard Community School District

Coming Soon: Online professional development for algebra progress monitoring

Project AAIMS is housed in the School of Education in the College of Human Sciences at Iowa State University.

Project AAIMS, funded from January 2004 through December 2007, was designed to achieve two objectives related to the teaching and learning of algebra for students with and without disabilities. First, we examined algebra curriculum, instruction, and assessment for students with and without disabilities and determine the extent to which they were aligned. Second, we developed algebra assessment tools that can be used for monitoring the progress of students with and without disabilities as they learn algebra. We then investigated the measures' reliability, validity, and sensitivity to growth. This web site has information about the activities, research, and products associated with Project AAIMS.

Download Sample Project AAIMS Measures:

- Algebra Basic Skills
- Algebra Foundations
- Algebra Content Analysis
- Translations

# Key Things to Look for:

- 1. Is content linked to Common Core or relevant foundational skills?
- 2. Is there any evidence of concurrent validity with current state assessments?
- **NOTE: This may not be available for another two years or so given all the shifts in standards/assessments.**

# easyCBM

- [www.easycbm.com](http://www.easycbm.com)

The screenshot shows the homepage of easyCBM Lite Edition. At the top left is the logo with the text 'easyCBM LITE EDITION'. To the right are links for 'Home | Contact | FAQ'. A yellow banner indicates 'Currently in Demo Mode (Exit Here)'. Below this are two main buttons: 'STUDENTS Click Here!' and 'TEACHERS'. The 'TEACHERS' section contains a login form with fields for 'Username' and 'Password', and a 'LOGIN' button. Below the login form are links for 'Don't have an account yet? - Register Now' and 'Forgot your password? - Reset Your Password'. A yellow banner below the login form reads 'NEW! Paid participation for Research Studies. Click here for more info!'. The main content area features a section titled 'Bringing 30 years of research into the hands of classroom teachers' with a sub-header 'easyCBM Lite provides progress monitoring for students in grades K-8. Sign-up for a free account.' Below this are four small screenshots of the software interface. A blue button labeled 'Learn More >>' is positioned below the screenshots. At the bottom of the page, there is a 'demo' section with the text 'Want to check out the system before signing up? Take a spin on the demo account.' and a list of navigation links: 'About | Contact | Requirements | FAQ | Assessments | Screenshots | Video | Demo | User Agreement | Login | Register'. The footer contains the copyright notice: 'Copyright © 2006-2013 University of Oregon'.

- Numbers and Operations
- Geometry
- Measurement
- Numbers Operations and Algebra
- Geometry Measurement and Algebra
- Algebra
- Numbers Operations and Ratios
- Measurement Geometry and Algebra

# AAIMS

- [www.education.iastate.edu/c\\_i/aaims/](http://www.education.iastate.edu/c_i/aaims/)

Algebra Assessment  
& Instruction:  
Meeting Standards

Home About Activities Research Resources

Measures & Training Now Available!

Our District Partners:

- Fort Dodge Community School District
- South Tama County Community School District
- Ballard Community School District

Project AAIMS is housed in the School of Education in the College of Human Sciences at Iowa State University.

Download Sample Project AAIMS Measures:

- Algebra Basic Skills
- Algebra Foundations
- Algebra Content Analysis
- Translations

Project AAIMS, funded from January 2004 through December 2007, was designed to achieve two objectives related to the teaching and learning of algebra for students with and without disabilities. First, we examined algebra curriculum, instruction, and assessment for students with and without disabilities and determine the extent to which they were aligned. Second, we developed algebra assessment tools that can be used for monitoring the progress of students with and without disabilities as they learn algebra. We then investigated the measures' reliability, validity, and sensitivity to growth. This web site has information about the activities, research, and products associated with Project AAIMS.

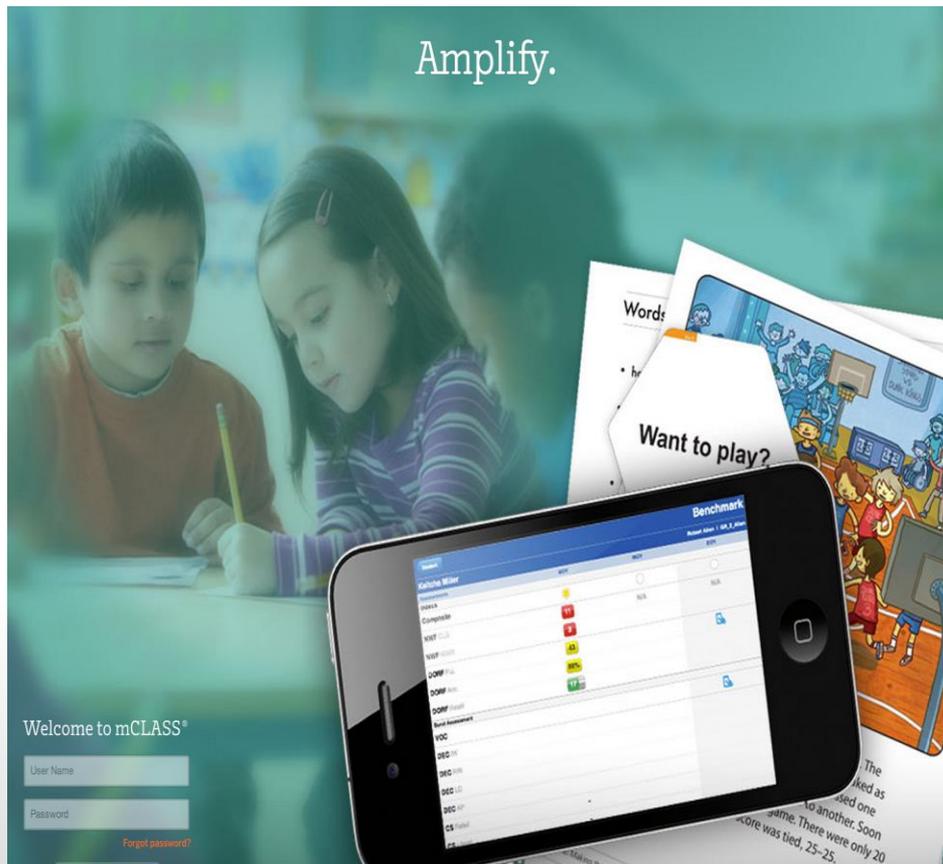
Coming Soon: Online professional development for algebra progress monitoring

XY and APM  
PROFESSIONAL DEVELOPMENT  
ALGEBRA PROGRESS MONITORING

- Algebra Basic Skills
- Algebra Foundations
- Algebra Content Analysis

# mCLASS

- [www.mclasshome.com](http://www.mclasshome.com)



- Counting
- Missing Number
- Next Number
- Number Facts
- Number Identification
- Quantity Discrimination
- Computation
- Concepts

# Progress Monitoring and DBI

- Tools Chart for comparison purposes

National Center on **INTENSIVE INTERVENTION**  
at American Institutes for Research

Coaches' Corner | Signup for our newsletter and updates | Search | Advanced Search

Resources | Tools Charts | Implementation Support | Instructional Support | About Us

Home > Tools Charts > **Academic Progress Monitoring GOM**

This tools chart presents information about academic progress monitoring tools. The three tabs, *Psychometric Standards*, *Progress Monitoring Standards*, and *Data-based Individualization Standards* include ratings from our TRC members on the technical rigor of the tool. **Additional information** is provided below the chart.

View the **Progress Monitoring Mastery Measures** »

Grade Level: - Any - | Subject: Math | Apply

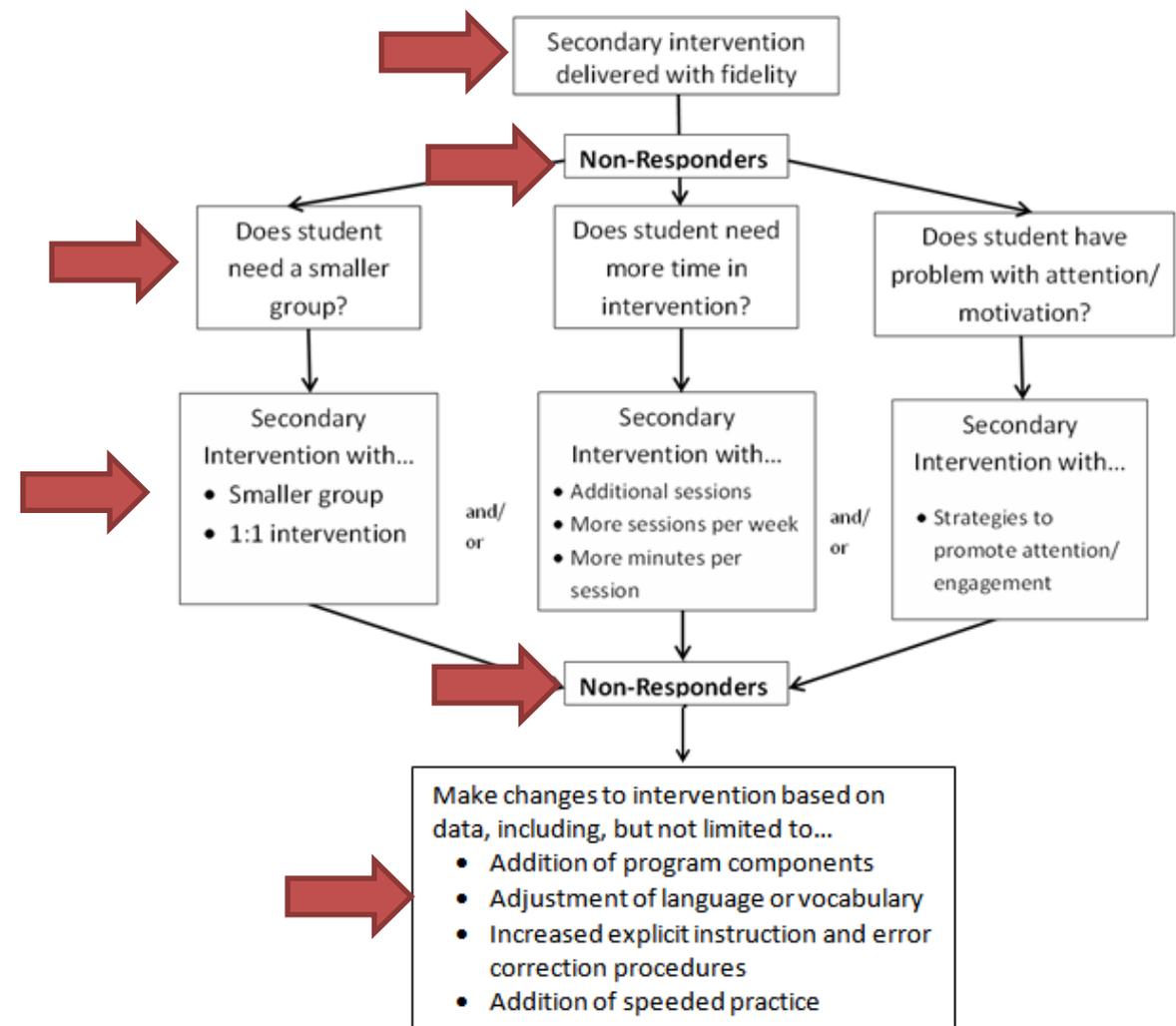
Psychometric Standards | Progress Monitoring Standards | **Data-based Individualization Standards**

Title	Area	Decision Rules for Changing Instruction	Decision Rules for Increasing Goals	Improved Student Achievement	Improved Teacher Planning
AIMSweb	M-CBM	—	—	—	—
AIMSweb	Math Computation	●	●	—	—
AIMSweb	Math Concepts and Applications	●	●	—	—
AIMSweb	Test of Early Numeracy - Missing Number	●	●	—	—
AIMSweb	Test of Early Numeracy - Number ID	●	●	—	—
AIMSweb	Test of Early Numeracy - Oral Counting	●	●	—	—
AIMSweb	Test of Early Numeracy - Quantity Discrimination	●	●	—	—
mCLASS: Math	Computation	○	○	○	—
mCLASS: Math	Concepts	○	○	○	—
mCLASS: Math	Oral Counting	○	○	—	—
mCLASS: Math	Missing Number	○	○	○	—
mCLASS: Math	Next Number	○	○	—	—
mCLASS: Math	Number Facts	○	○	○	—
mCLASS: Math	Number Identification	○	○	—	—
mCLASS: Math	Quantity Discrimination	○	○	○	—
Monitoring Basic Skills Progress (MBSP)	Basic Math Computation	●	●	●	●
Monitoring Basic Skills Progress (MBSP)	Basic Math Concepts/Applications	●	●	●	●

# Academic Illustration of DBI

---

# Sample Academic Intervention Progression



# Secondary Intervention Program: Student Example - Jason

---

**Background:** Jason presented serious mathematics problems. His performance is at an early third-grade level at the beginning of fifth grade.

**Intervention program:** Jason's teacher selected a research-validated program that addressed fraction concepts, word problems, and fluency with number combinations.

# Secondary Intervention Program: Jason

---

## **Fidelity**

- Group size: six students
- Session length: 20-40 minutes per session
- Frequency: 3-4 sessions per week
- Program duration: 7 weeks
- Instructional content and delivery: explicit instruction covering all components laid out in the instruction manual
- Progress monitoring: Numbers and Operations (easyCBM)

# Progress Monitoring for Jason

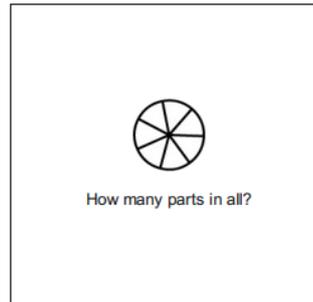
- easyCBM
  - 3<sup>rd</sup> grade materials
  - Numbers and Operations

## Math Numbers and Operations 3\_1

Student Name: \_\_\_\_\_

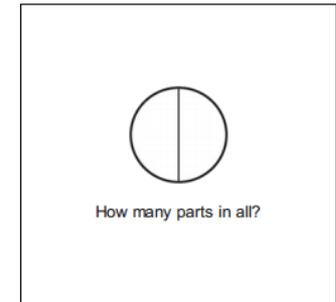
Date: \_\_\_\_\_

1.



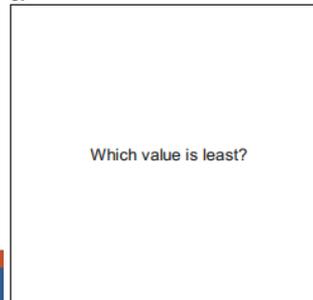
- A. 3
- B. 7
- C. 9

2.



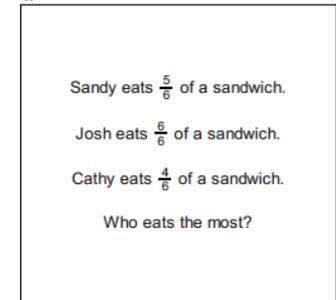
- A. 2
- B. 1
- C. 4

3.



- A.  $\frac{2}{5}$
- B.  $\frac{3}{5}$
- C.  $\frac{1}{5}$

4.



- A. Cathy
- B. Sandy
- C. Josh

# Progress Monitoring: Does Jason need DBI?

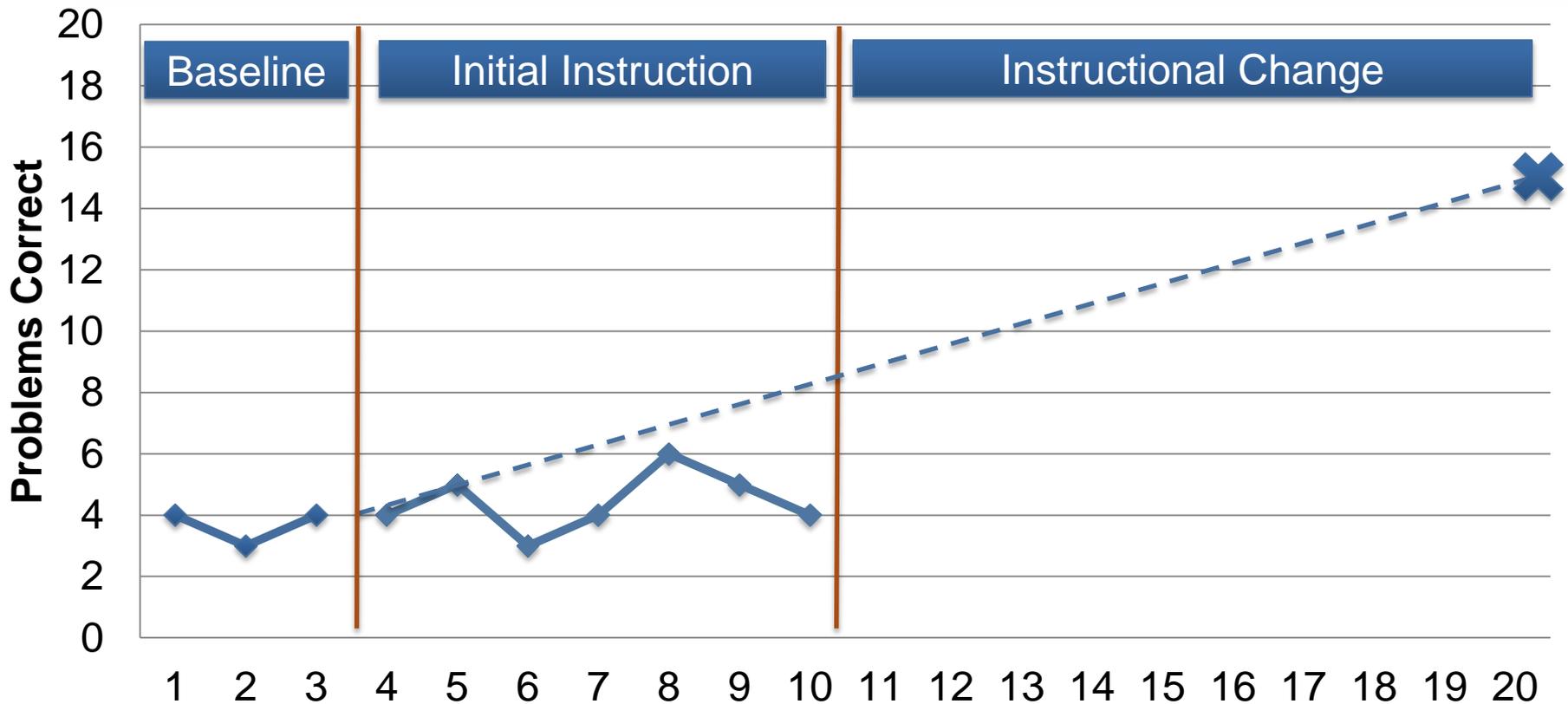
---

**Reliable and valid tool:** Jason's teacher implemented formal progress monitoring using Computation assessments that were a match for his mathematics skills.

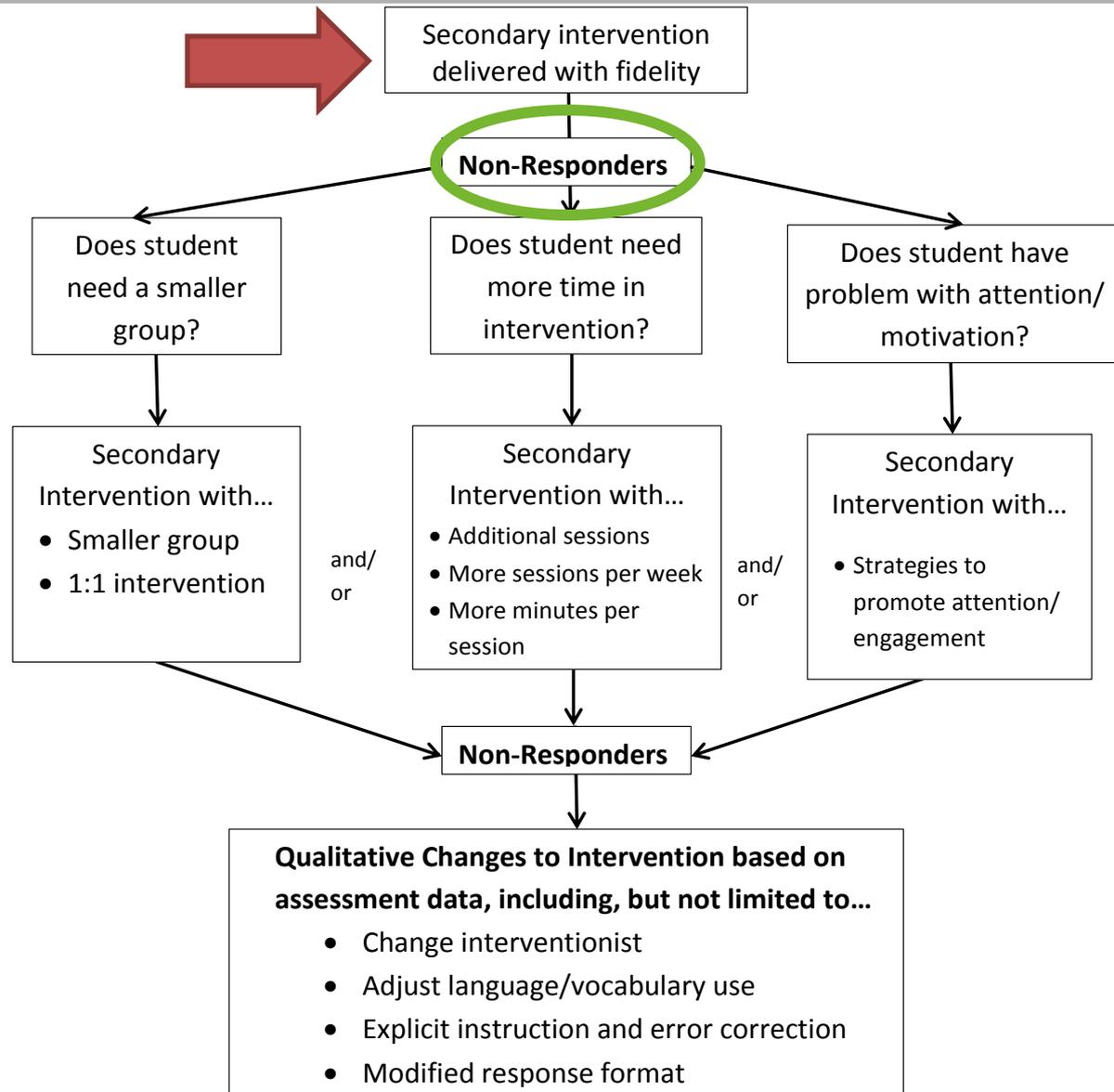
**Detect improvement:** This progress monitoring tool is appropriate to his skill level, allowing his teacher to detect changes in Jason's mathematics.

**Rate of progress:** Based on Jason's progress monitoring graph, he was not progressing at the rate needed to meet his goal.

# Progress Monitoring: Jason



# Progress Monitoring: Determining Jason's Need for DBI



# Intervention Adaptation/Change

---

- When appropriate, use data to make adjustments/adaptations to the secondary intervention program to meet the unique needs of the individual.
- In some cases, however, data may indicate that the student requires a different intervention program or approach.

## **Consider two types of intervention change:**

- Quantitative changes to setting or format
- Qualitative changes to delivery

# Try quantitative change(s) first...

---

- **Increase** intervention frequency, length of sessions, or duration.
- **Decrease** group size.
- **Decrease** heterogeneity of the intervention group.

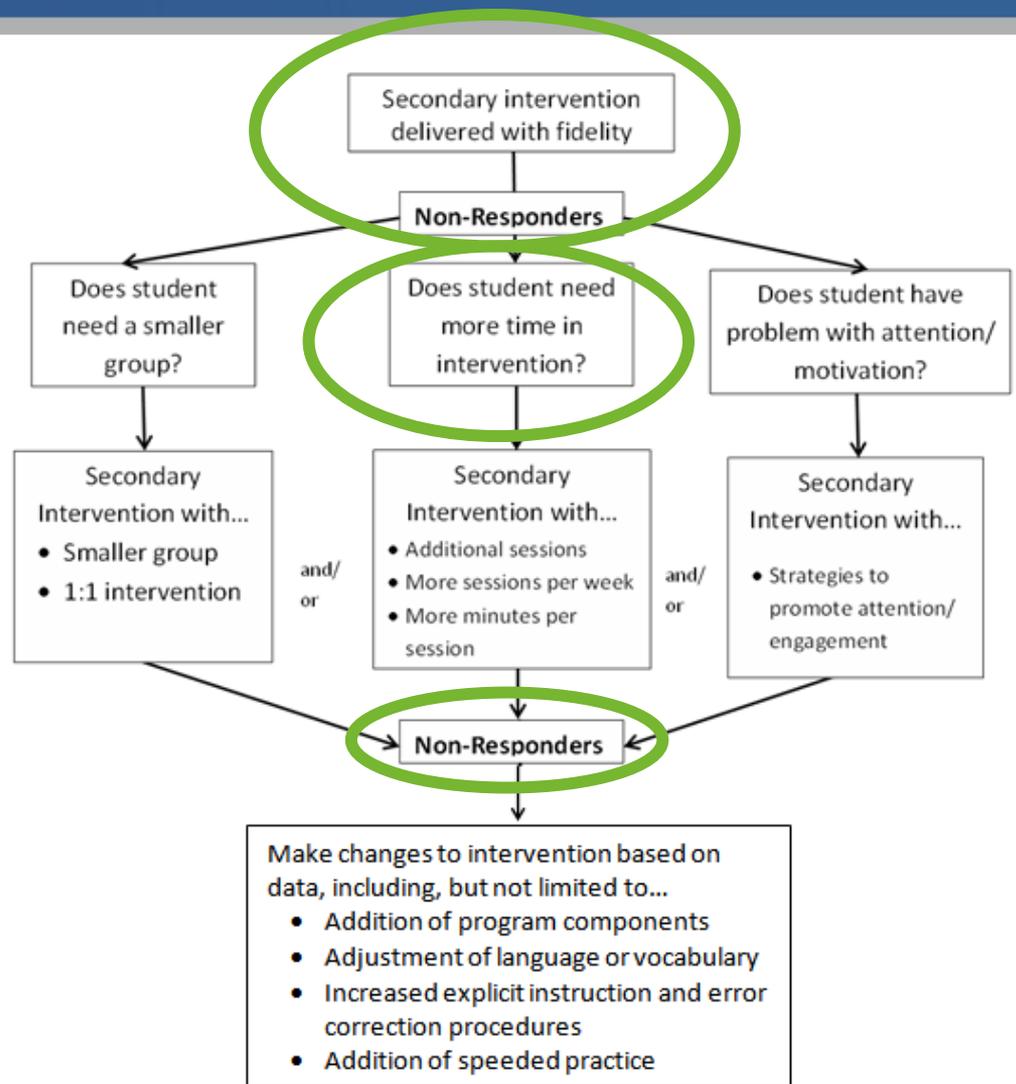
**Note:** In many cases, quantitative changes may be necessary, but not sufficient, to facilitate progress for students with intensive needs.

# Consider qualitative changes second...

**Qualitative** adaptations may be made to the intervention program that alter—

- Instruction based on learner characteristics (e.g., addressing working memory or attention problems)
- Skill level of interventionist
- Content delivery
- How students respond
- The amount of adult feedback and error correction students receive
- Frequency/specificity of checks for retention
- The materials, curriculum, or whole intervention (could be a complete change in program)

# Intensify the Secondary Intervention: Begin With Quantitative Changes

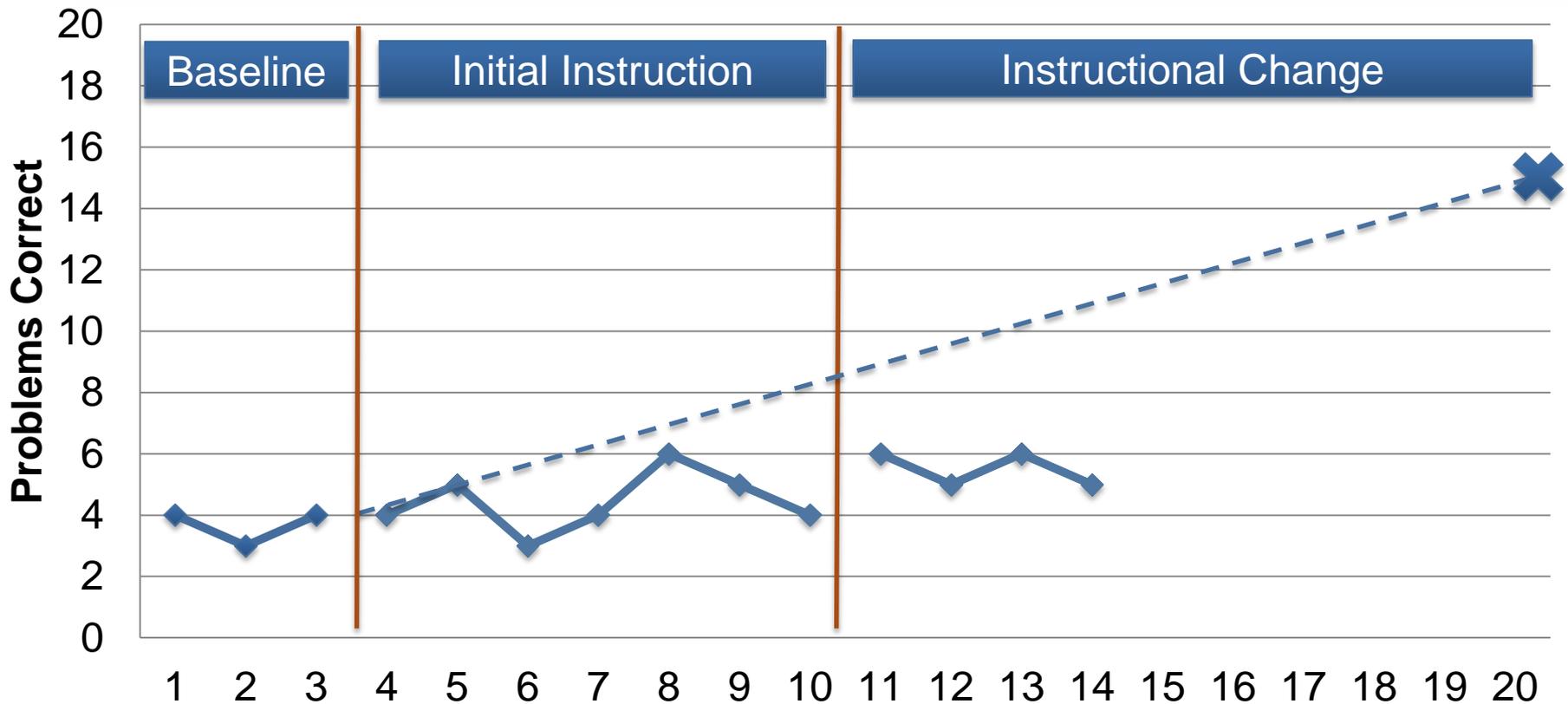


# Quantitative Intervention Adaptation: Jason

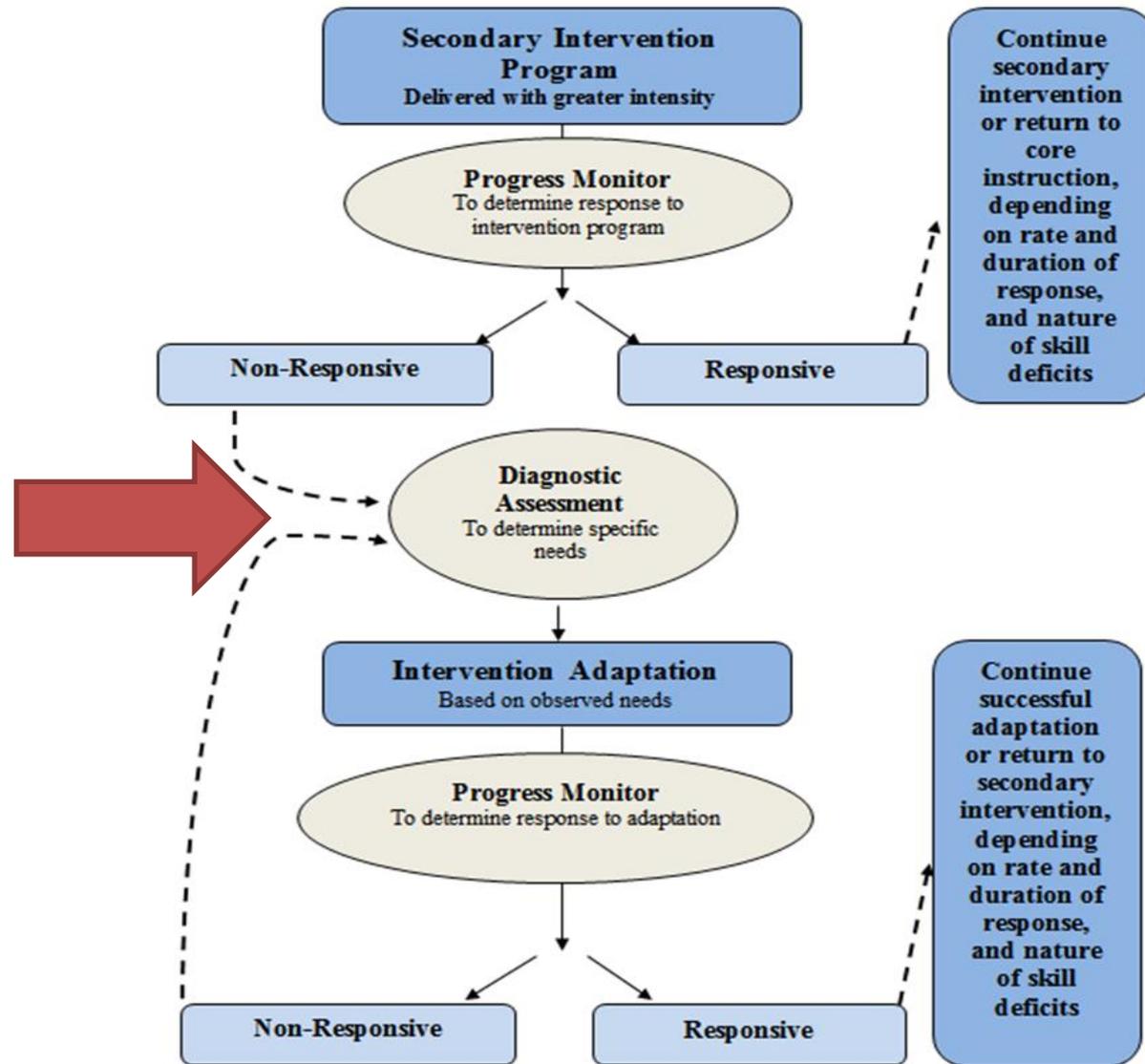
---

Jason's teacher intensified his instruction by adding an additional 15 minutes of instruction per session. Despite this change in intervention length, Jason continued to make insufficient progress.

# Progress Monitoring: Jason



# Diagnostic Assessment: *What changes are needed to support Jason?*



# Informal Diagnostic Assessment

---

- Progress monitoring assessments help teams determine *when* an instructional change is needed.
- Informal diagnostic assessments allow teams to use available data (e.g., progress monitoring data, informal skill inventories, work samples) to help determine the *nature* of the intervention change needed.

# Informal Diagnostic Assessment

---

## **Potential data sources:**

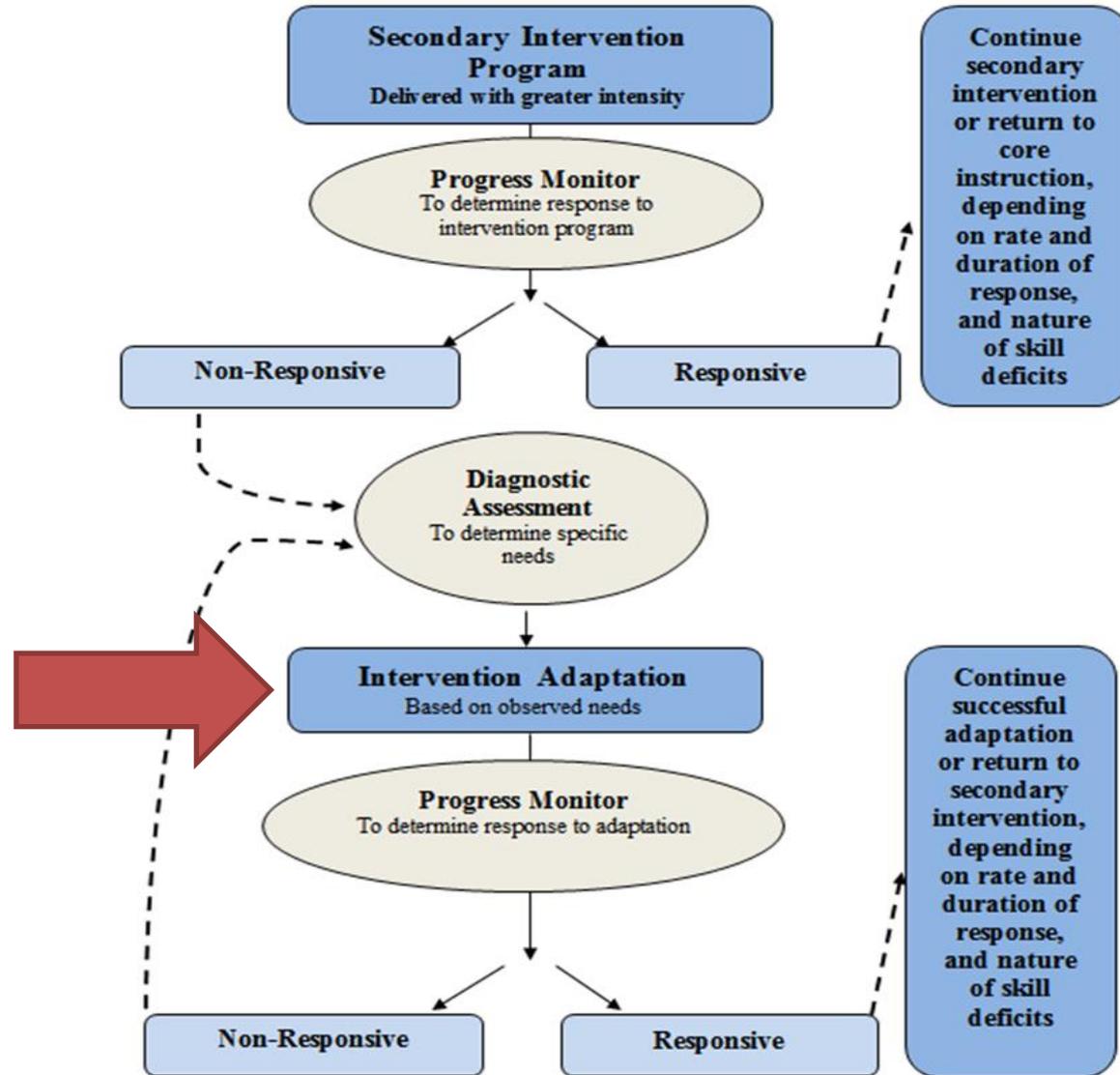
- Classroom-based assessments
- Error analysis of progress monitoring data
- Student work samples
- Standardized measures (if feasible)

# Informal Diagnostic Assessment: Jason

---

- To determine the nature of the instructional change needed, Jason's teacher conducted an error analysis of Jason's most recent Numbers and Operations data.
- She also administered a computation assessment to determine Jason's strengths and weaknesses.

# Intervention Adaptation: Use Diagnostic Information to Adapt the Intervention



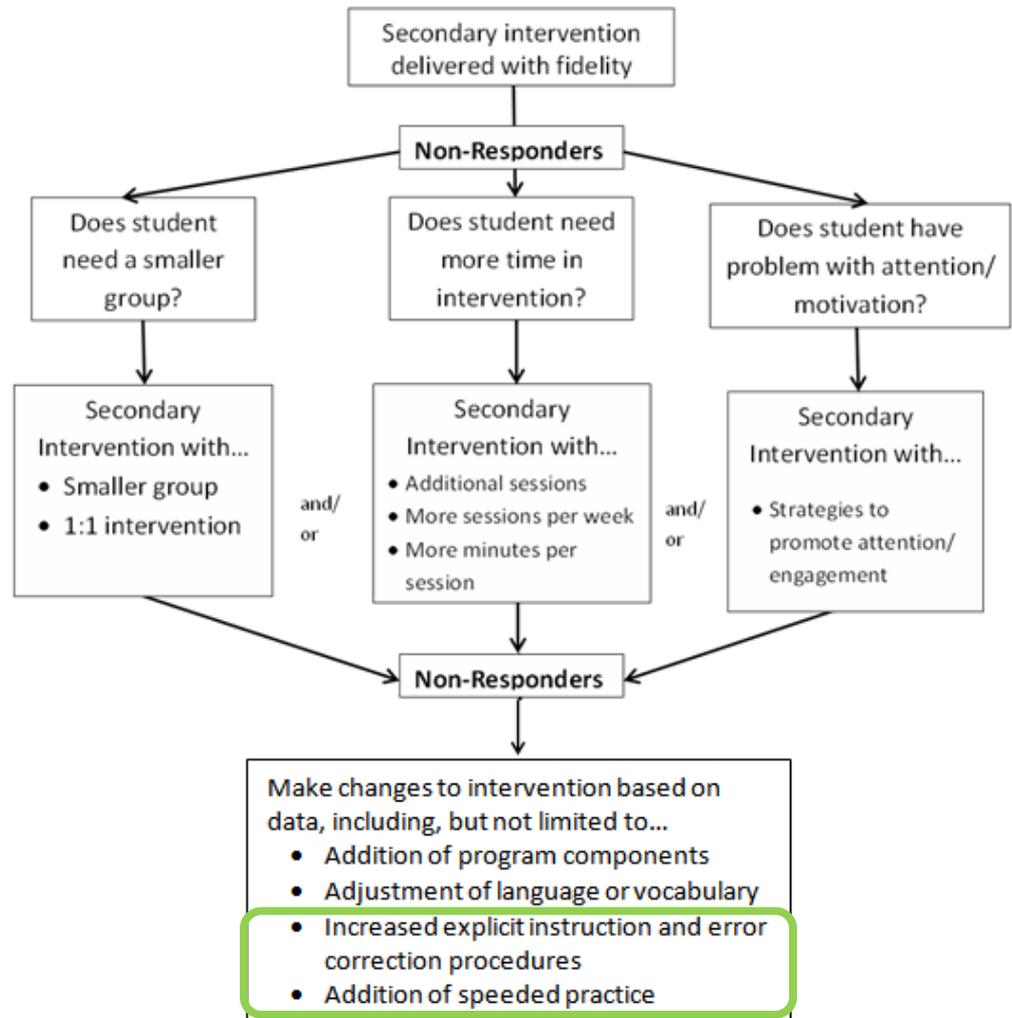
# Intervention Adaptation: Jason

---

Diagnostic assessment showed that Jason had difficulty with basic number combinations and computation. His teacher applied the following intensive intervention principles to intensify his instruction:

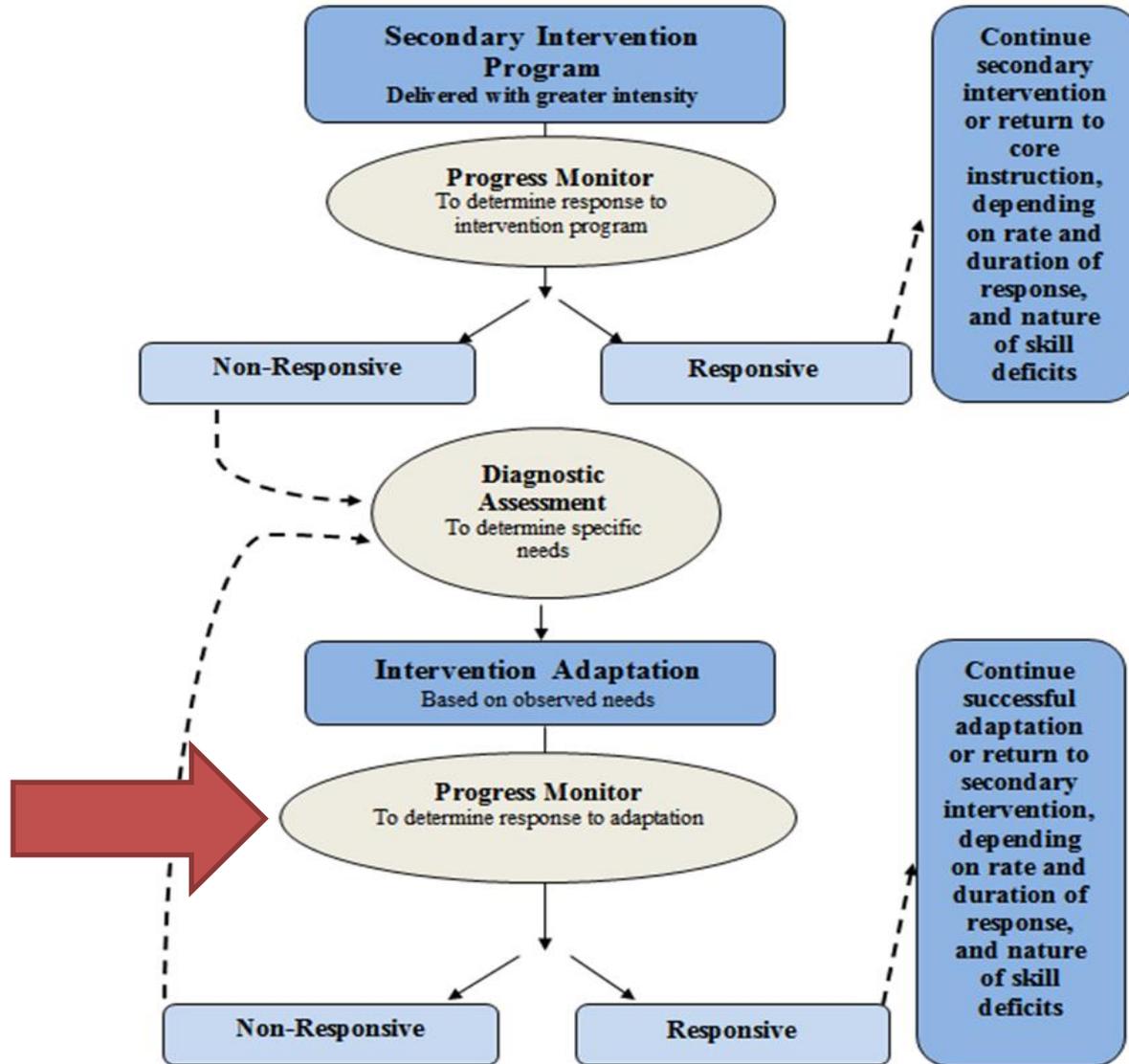
- Incorporated fluency practice, with specified mastery criteria
- Provided explicit instruction and error correction
- Frequently checked for retention with reteaching as needed

# Jason's Intervention Adaptation

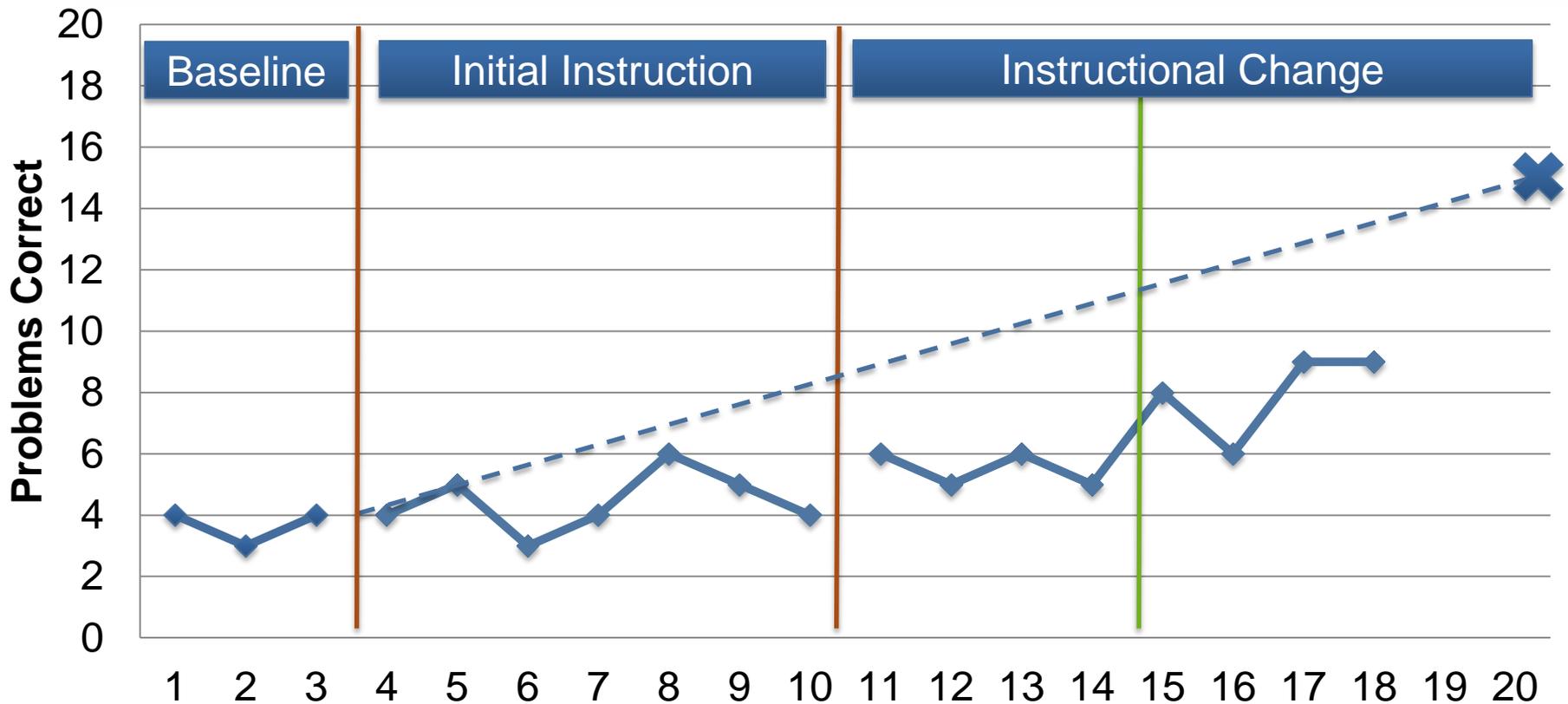


# Ongoing Progress Monitoring

- Is Jason responding to the adapted instruction?
- Is his response sufficient?



# Progress Monitoring: Jason



# Evaluation of Jason's Progress

---

- Jason's math is improving but not fast enough to achieve his goal. Another instructional change is needed.
- Jason's teacher may collect additional diagnostic data if needed to make an informed instructional change.
- Jason's teacher will continue to collect progress monitoring data and meet with the intervention team to evaluate progress and modify the plan as needed.

# Wrap Up

- What is DBI?
- What are methods for intensifying intervention?
- What's the role of progress monitoring?
  - How to learn information about progress monitoring measures used within intensive intervention?

# Thank you!

- Sarah Powell
  - [srpowell@austin.utexas.edu](mailto:srpowell@austin.utexas.edu)