

Using Data-Based Individualization to Improve Student Outcomes

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2023 OSEP LEADERSHIP AND PROJECT DIRECTORS' CONFERENCE





2023 OSEP Leadership and Project Directors' Conference



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Outcomes

Participants will be able to:

- Understand how implementing data-based individualization (DBI) can help meet the needs of students with severe and persistent learning and/or behavioral needs.
- Define critical systems to support DBI implementation across the educational landscape.
- Access freely available resources to support implementation through the National Center on Intensive Intervention (NCII).



Agenda

- Introduction to DBI
- Integrating systems across educational landscapes to support DBI
- Establishing a school system to support DBI
- Keys to success and pitfalls to avoid



Acknowledgements

- Michigan Department of Education
- Michigan's MTSS Technical Assistance Center
- Chippewa Hills School District administrators, teachers, paraprofessionals, and students



Introduction to DBI



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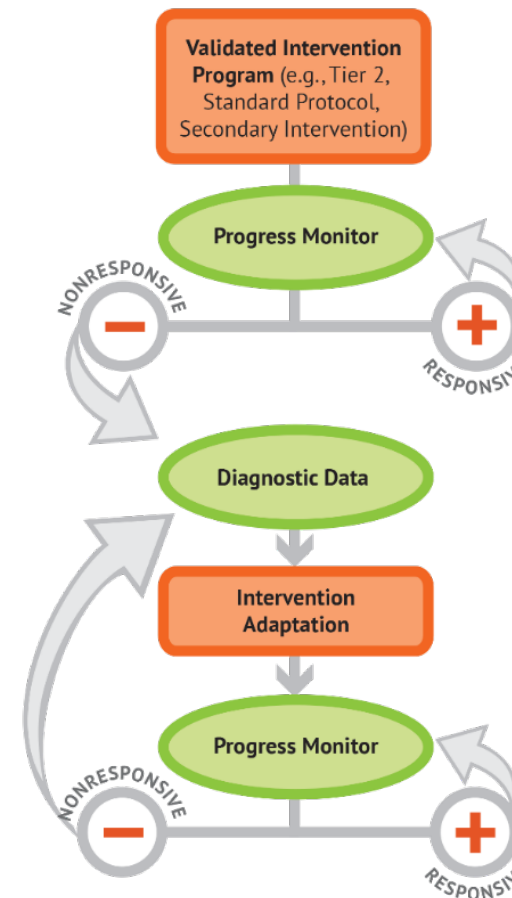
National Center on Intensive Intervention (NCII)

The mission of NCII is to build knowledge and capacity of state and local leaders, faculty and professional development providers, educators, and other stakeholders to support implementation of intensive intervention for students with severe and persistent learning and/or social, emotional, or behavioral needs using data-based individualization (DBI).



Defining Data-Based Individualization (DBI)

- A process for delivering intensive intervention
- Integrates data-based decision making across academics and social behavior
- Is not a one-time fix



NCCI's Technical Assistance Approach

Educate Students

(e.g., teachers, interventionists)

Content-focused communities of practice that include integration of academics and behavior

Goal: Learn and apply the DBI process.

Prepare Educators

(e.g., faculty, PD providers)

Virtual Community of Practice

Goal: Deep dive into DBI content to learn new concepts and apply them in their setting and/or course design.

Build and Sustain Educator Systems

(e.g., SEAs, LEA leaders)

Readiness and Sustainability CoPs
SEA strand and LEA strand

Goal: To provide the foundation and supporting systems of intensive intervention and build capacity for readiness/sustainability.



Integrating Systems Across Educational Landscapes to Support DBI



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Higher Education Landscape

Data-Based Program
Modification

Curriculum
Based
Measurement

Positive Behavioral
Interventions and
Supports

Response to
Intervention

Multi-Tiered
Systems of
Support

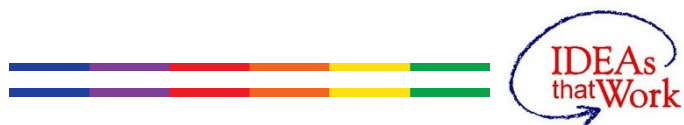


A University + LEA Partnership

- In 2000, administrators from the Ottawa Area Intermediate School District and university faculty from Grand Valley State University and Western Michigan University secured an Office of Special Education Programs (OSEP) grant to conduct a model demonstration of an **integrated MTSS model** in five elementary schools.



Ottawa Area ISDSM
Learn. Serve. Lead.



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State Interest

- In 2003, the Michigan Department of Education (MDE) issued a request for proposals to support integration of behavior and academic support.
- Three administrators from three Michigan Intermediate School Districts submitted a proposal and were awarded a contract to begin the Michigan Behavior and Learning Support Initiative (MiBLSI) in 2004.
- In their first year MiBLSI recruited 24 districts from across Michigan to participate in training.
- The state special education director provided additional funding to sponsor a district coach.



Reaching Out to National Partners

- MDE's Office of Special Education was awarded a partnership with NCII in 2017-2018.
- MiBLSi was state and federally-funded to support RtI/MTSS efforts; however, the acknowledgement and recognition of MiBLSi supporting state-wide MTSS efforts was limited to the Office of Special Education.
- Efforts had started to develop reading science expertise within MDE's Literacy Unit.



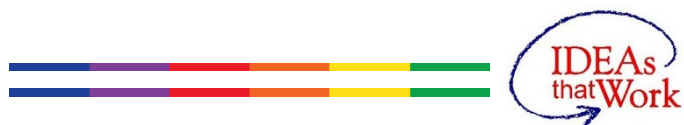
Simultaneous Work

- MDE had also been awarded a partnership with the National Implementation Research Network (State Implementation and Scaling-up of Evidence-based Practices) to learn how to apply implementation science to MTSS.
- Other federally-funded technical assistance centers were also supporting the state's efforts to improve learning outcomes (e.g., PBIS National Center, NCSI, Regional Comprehensive Centers)
- Michigan did not have an official entity acknowledged as the technical assistance provider for MTSS supports.



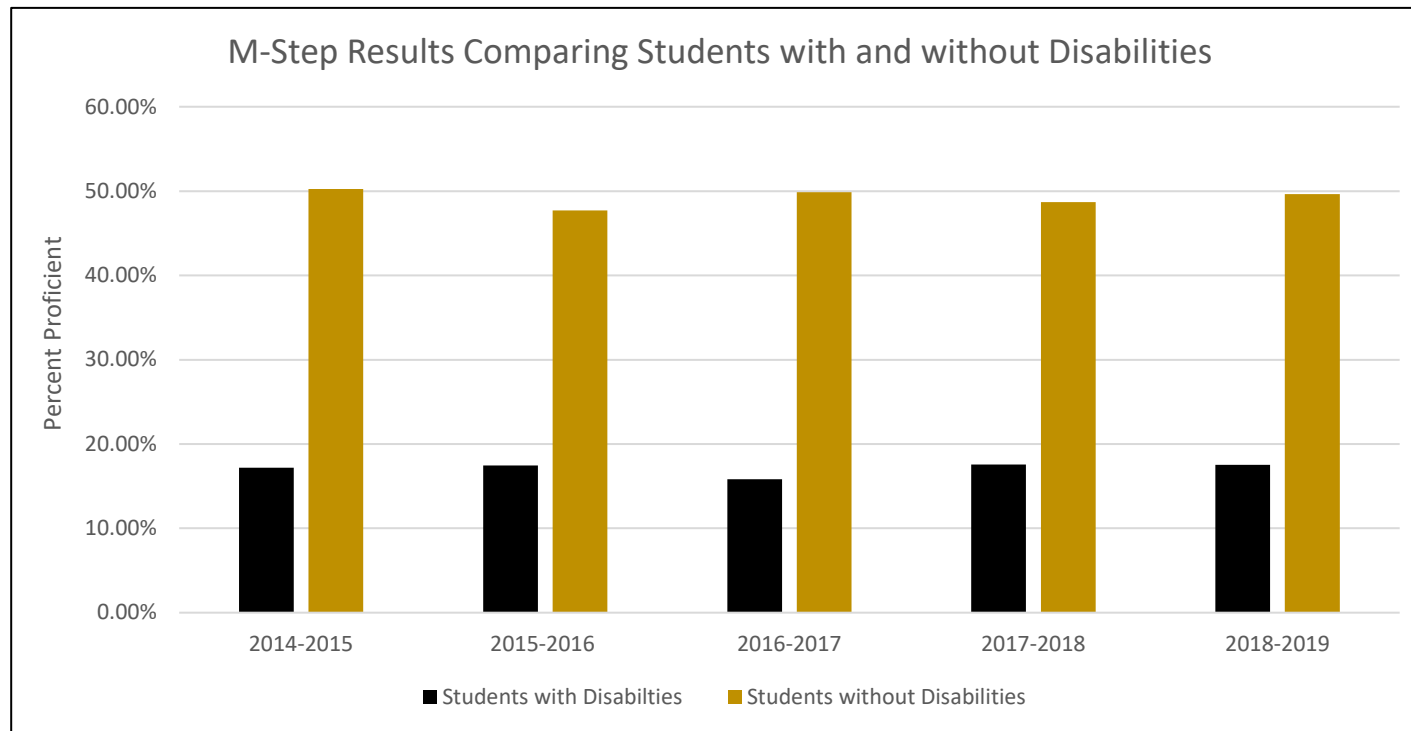
Establishing a State Technical Assistance Center

- MiBLSI was formally acknowledged as the MTSS technical assistance center and the next two years focused on rebranding, expanding the MTSS supports accessible to state stakeholders.
- USDOE provided MDE with feedback on the State Systemic Improvement Plan (SSIP) to revise the evidence-based practice (was broadly focused on MTSS) to be able to demonstrate outcomes for learners, specifically SWDs.



Michigan Students

- In 2020-2021 there were 1,437,612 students enrolled in Michigan schools.
- 193,628 (13.47%) were students eligible for special education services.

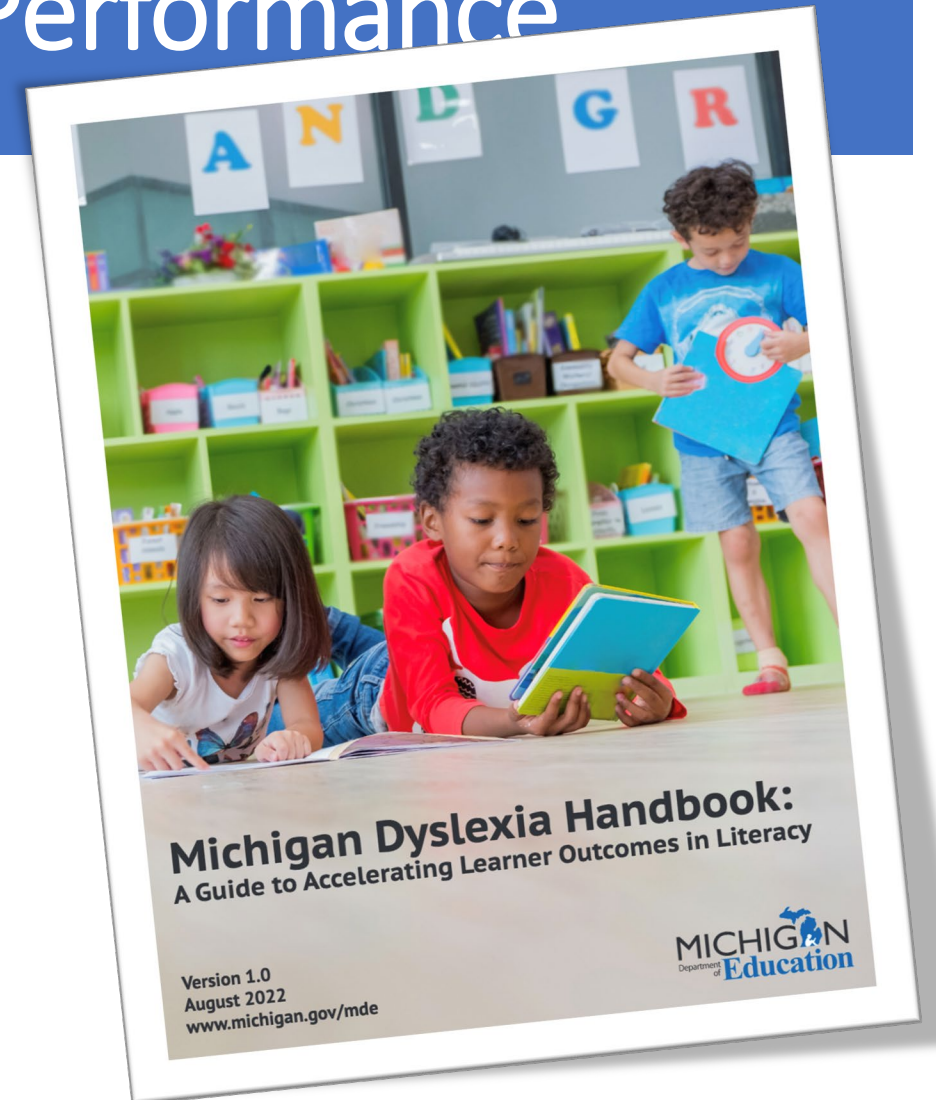


Source: [MISchoolData.org](https://www.mischooldata.org)



Efforts to Improve Literacy Performance

- Current
 - [Literacy Essentials](#)
 - [Michigan's Action Plan for Literary Excellence](#)
 - [Read by Grade 3 Law](#)
- Pending legislation
 - Dyslexia bill package



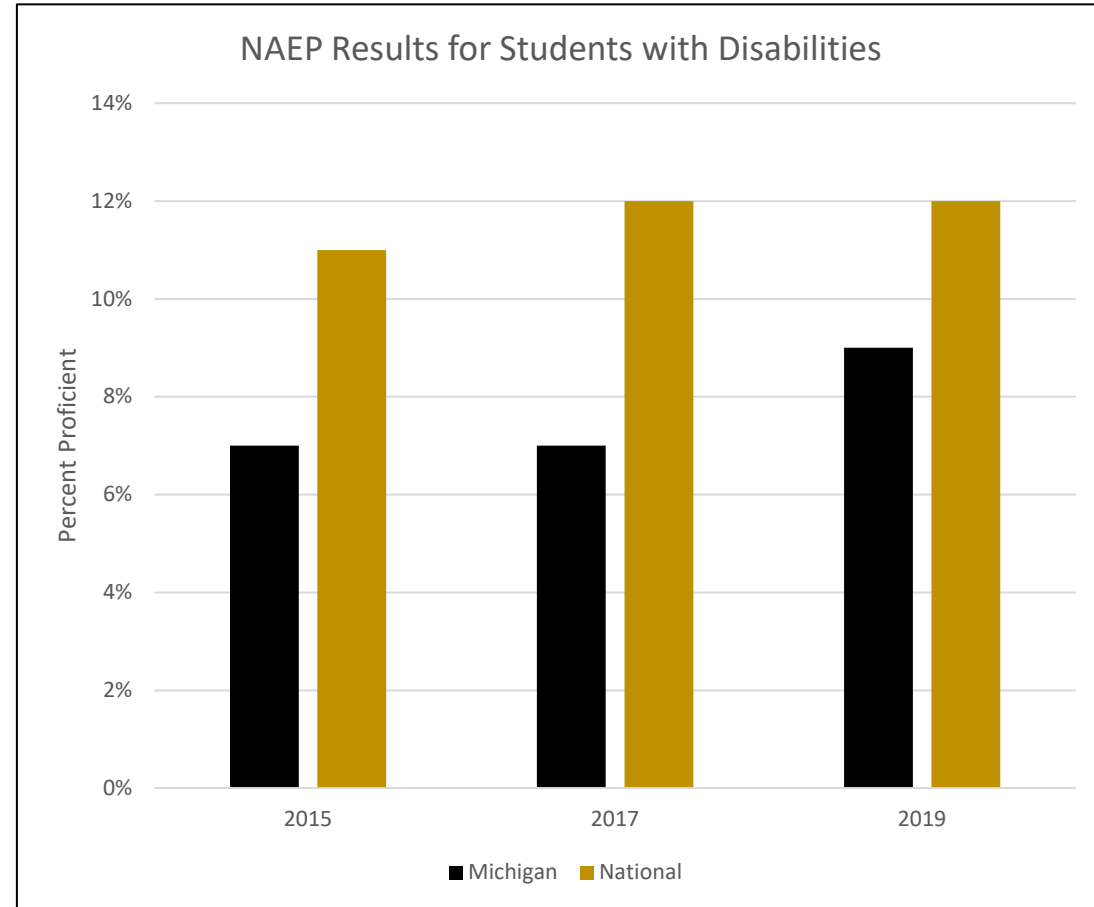
Source: Michigan Department of Education



Initiatives to Improve Literacy Performance for SWDs

- State Systemic Improvement Plan
- State Measurable Identified Result

Source: National Center for Educational Statistics, United States Department of Education. [Nationsreportcard.gov](https://www.nationsreportcard.gov)



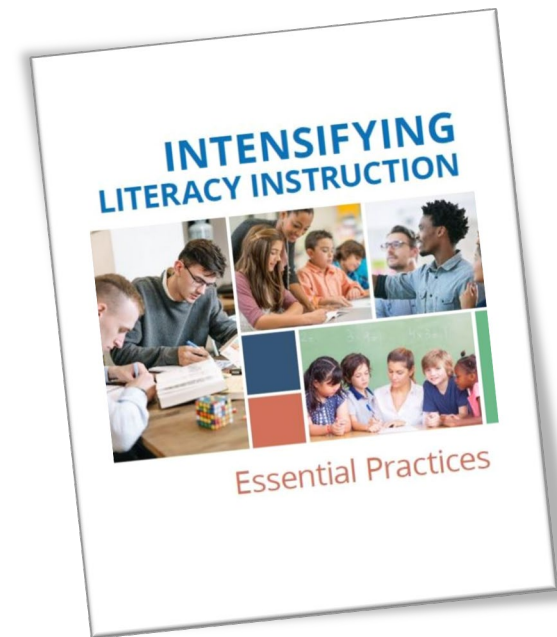
MiMTSS DBI Model Demonstration Project Goals

- Collect **feasibility information** on DBI Implementation in authentic settings
 - Can it be implemented with fidelity?
 - What barriers need to be removed?
 - What resources are needed to support the work?
- Develop **training/coaching/resources** for teachers implementing DBI
- Collect **outcome data** on students participating in DBI



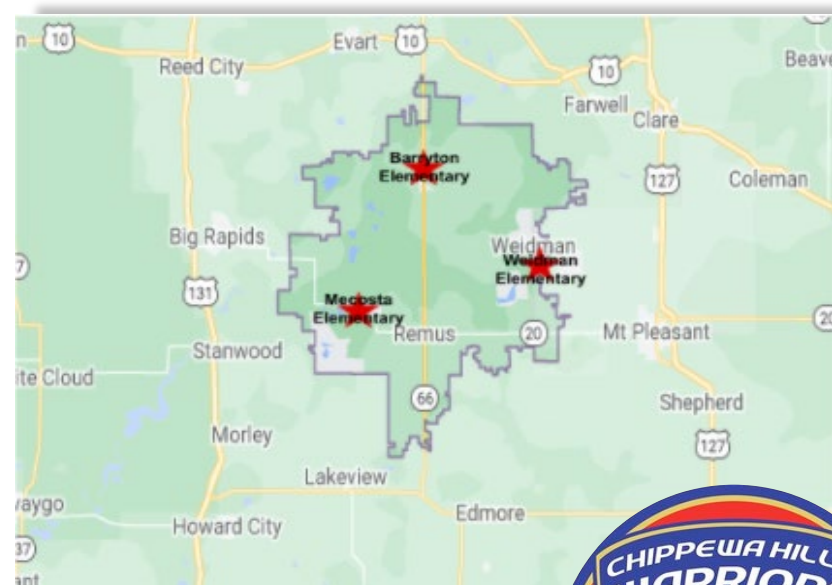
Resources

- Intensifying Literacy Instruction: Essential Practices Guide
- Michigan Department of Education State Systemic Improvement Plan

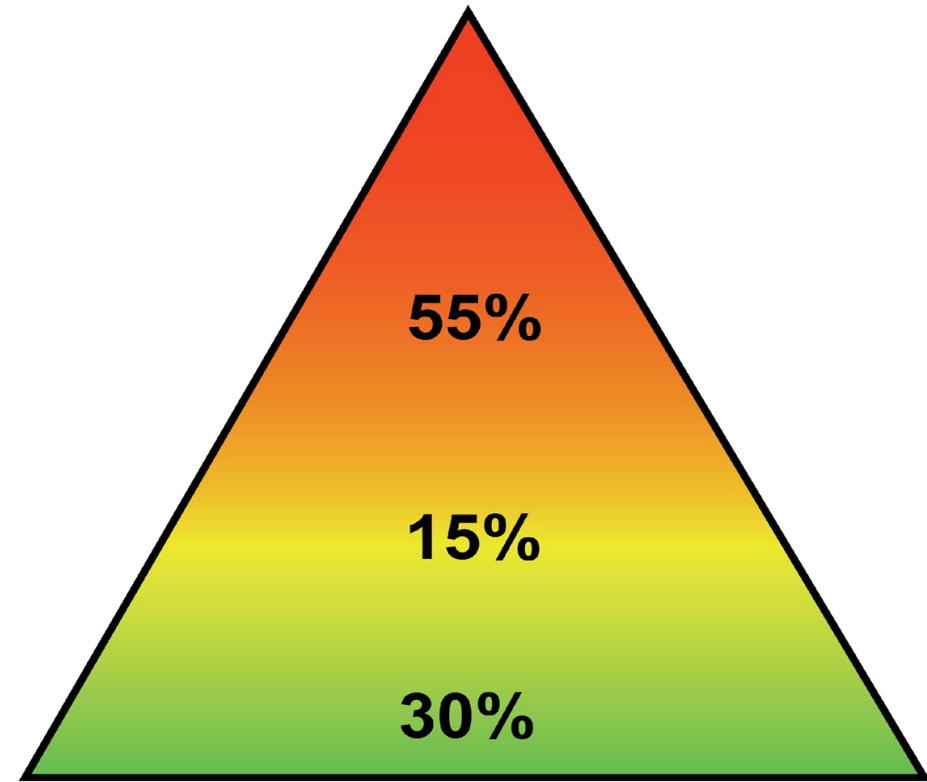
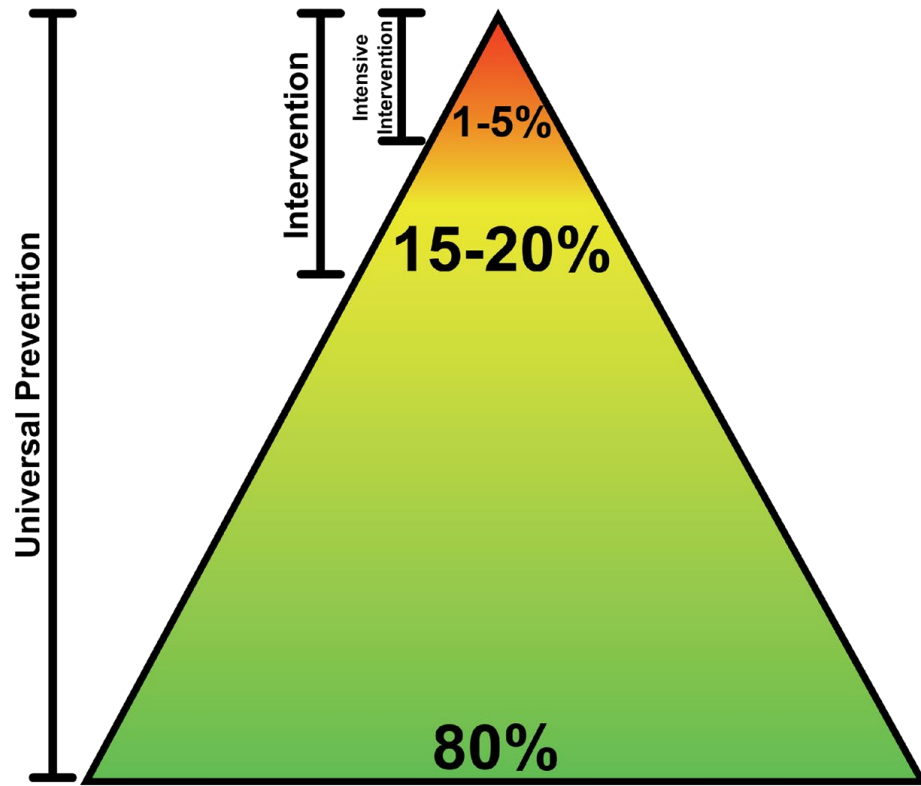


Chippewa Hills School District

- Large geographic district in central Michigan
- Total enrollment: 1,846
 - Barryton Elementary: 194
 - Mecosta Elementary: 236
 - Weidman Elementary: 281
 - CH Intermediate School: 559
 - CH High School: 465
 - Mosaic School: 111
- Recipient of State Personnel Development Grant (2016)
- MiBLSI partner district since 2016



Providing a Multi-Tiered System of Supports: Ideal vs. Reality



Preparing to Implement

Application and
District Readiness
Conversations

Review of
Systems and
Resources

Implementation
Plan



Steps Taken by the District to Support DBI

- Establish district goals and implementation plan
- Identify a district intensifying literacy instruction coordinator
- Review and select interventions and assessments
- Establish a professional learning plan for all staff



Establishing a School System to Support DBI



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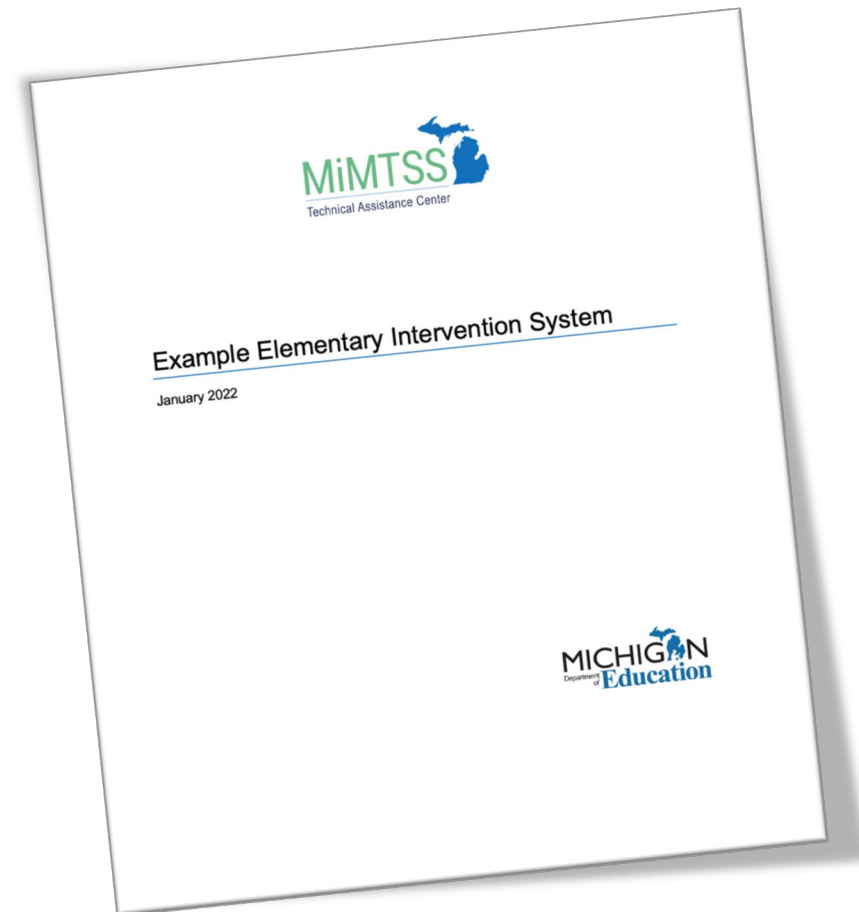
Weidman Elementary School

- **Demographics:** 69% F&R; 89% at-risk; 98% white
- **Staff:** 19 certified teachers, 17 para-educators, 1 administrator, 1 secretary
- **Special Programs:**
 - District self-contained CI classroom
 - District early childhood special education program
 - District developmental kindergarten
- **MTSS Silver Recognition**



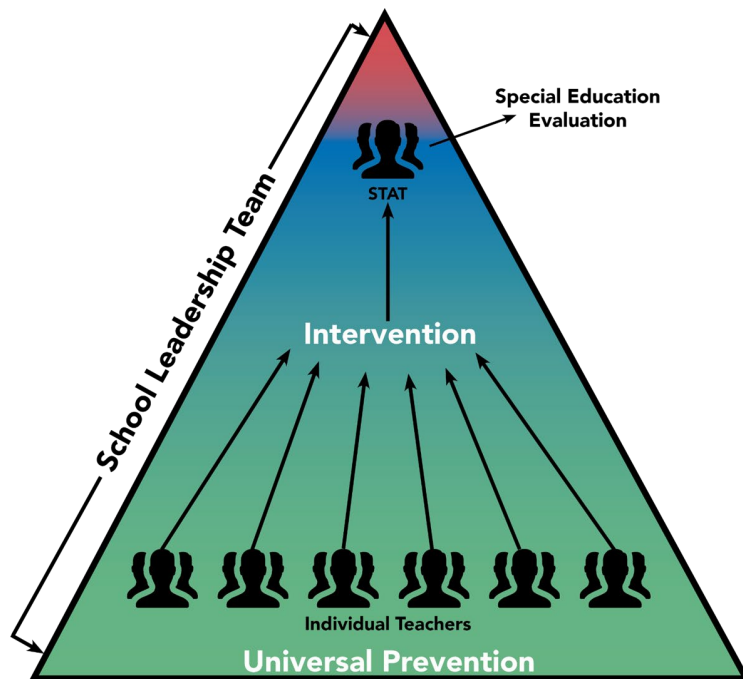
Parts of a Comprehensive Intervention System

1. Teaming Structures
2. Intervention Platform
3. Assessment Platform
4. Supports for Interventionists
5. Individualized Intensive Intervention Supports

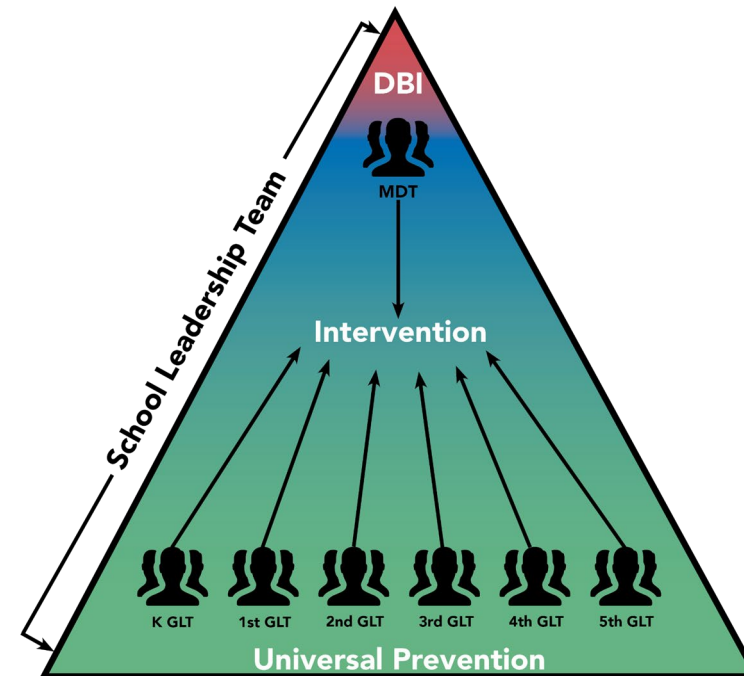


Part 1: Establish a Team

Before...



After...



Multidisciplinary Team Membership

- Principal
- Intervention Coordinator/Reading Specialist
- Special Education Teacher
- School Social Worker/Guidance Counselor
- School Psychologist
- Speech and Language Pathologist
- Behavior Interventionist



Multidisciplinary Team Tasks

1. Increase access to interventions
2. Place students in intervention groups
3. Monitor the intervention system
4. Decide when to intensify instruction
5. Decide how to intensify instruction



Part 2: Establish an Intervention Platform, Placement and Grouping

- Students placed in intervention groups based on results of universal screening

Intervention	Criteria for Placement	Criteria for Exit
Enhanced Core Reading Instruction Tier 2 (ECRI) (Fien et al., 2015)	K-2nd Students with scores below benchmark	3 consecutive data points at or above EOY benchmark
ECRI Fast Track (Fien et al., 2015)	2nd-4th Students with scores well below benchmark	Complete fast track
Phonics for Reading (Archer, Flood, Lapp, & Lungren, 2011)	3 rd -4 th Students with scores below benchmark + placement test	3 consecutive data points at or above EOY benchmark + program mastery
Rewards (Archer, Gleason, & Vachon, 2014)	3 rd -4 th Students with scores below benchmark + placement test	3 rd -4 th Students with scores below benchmark + placement test
Enrichment (materials from Wonders 2020)	K-4 th student with scores at or above benchmark	No exit



MDT's Role in Establishing the Intervention Platform

- Collect and review universal screening data
- Group students according to need (smaller groups/most experienced interventionists with the individuals with greatest need)
- All paras and teachers assigned to groups
- Set building wide intervention schedule
- Prepare materials for all groups



Part 3: Establish an Assessment Platform

- Universal Screening
- Intervention Fidelity
- Progress Monitoring
- Systems Level Fidelity



Universal Screening: Acadience

Grade	Fall	Winter	Spring
K	LNF + FSF	LNF + FSF + PSF + CLS	LNF + PSF + CLS
1st	PSF + CLS + WWR	CLS + WWR + ORF	CLS + WWR + ORF + Retell
2nd	CLS + WWR + ORF + Retell	ORF + Retell	ORF + Retell
3 rd & 4th	ORF + Retell + MAZE	ORF + Retell + MAZE	ORF + Retell + MAZE

LNF=Letter Name Fluency

FSF=First Sound Fluency

PSF=Phoneme Segmentation Fluency

CLS=Nonsense Word Fluency Correct Letter Sequence

WWR=Nonsense Word Fluency Whole Words Read

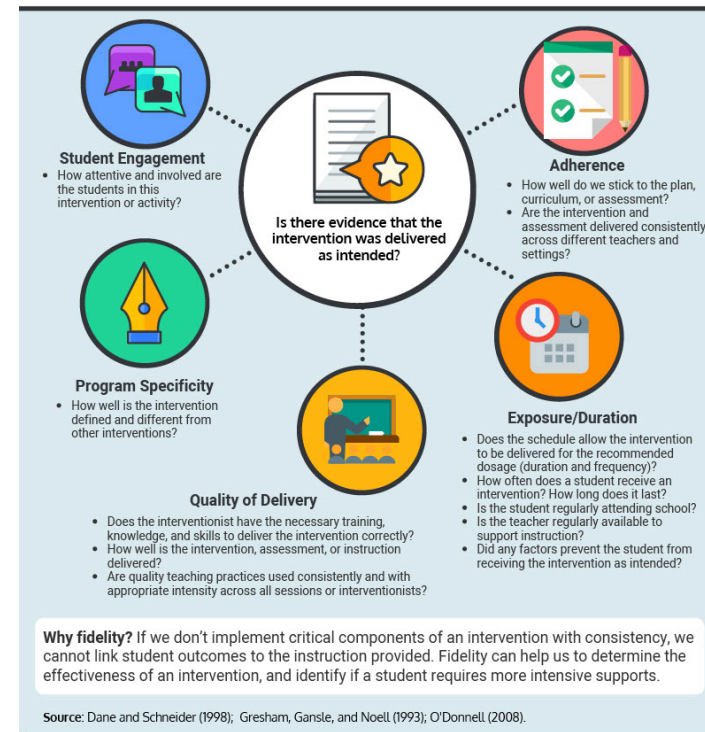
ORF=Oral Reading Fluency



Fidelity

- Capturing Student Engagement and Exposure/Duration: **Implementation Records**
- Capturing Adherence/Quality of Delivery: **Fidelity Observation**

Considerations for Effective Implementation 5 Elements of Fidelity



Implementation Records

Date: _____ Start Time: _____ End Time: _____ Lesson: _____

Student Attendance:

Students in the Group

Student	Absent	Not Engaged	Partially E.	Engaged
[Redacted]				
[Redacted]				
[Redacted]				
[Redacted]				
[Redacted]				
[Redacted] nce				

Lesson Components

Lesson Completion:

Component	Yes	NA
Irregular Word Reading		
Letter Names		
Phonemic Awareness (Blending and Segmenting)		
Sound-Spelling Introduction And Practice		
Blending Sounds		
Regular Word Reading		
Reading in Connected Text		
Encoding Practice		

Notes:



Coaching and Fidelity Observations

- Schedule video observations
- Complete fidelity checklist
- Engage in virtual coaching session
- Prioritize needs for future professional learning and additional coaching
- Gather data on overall adherence and quality

Interventionist Start Time	Grade	End Time	Date	Lesson	Routine	Explanation	Modeling	Signaling	Student Practice	CFU	Error Correction	Part-Firming	Routine Average
					Irregular words Part 1	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					Irregular words Part 2	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					PA Blending	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					PA Segmenting	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					Sound Spelling Cards	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					Sound Spelling Review	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
					Blending	NA 0 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	NA 0 3	NA 0 1 2 3	NA 0 1 2 3	
Routine AVG: _____													
Component AVG: _____													

Evidence-Based Practice	Rating
Community of Positive Learning	0 1 2 3
Organization of Instructional Materials	0 1 2 3
Classroom Management	0 1 2 3
Student Participation and Engagement	0 1 2 3
Use of Motivational Strategies	0 1 2 3



Fidelity of Progress Monitoring Data

- Are all students being progress monitored?
 - With the correct measure(s)?
 - On the right schedule?
- Are there any barriers to data collection?

Teacher	Week of 1/31			Week of 2/7		
	Entered	Possible	%	Entered	Possible	%
	0	28	0%	0	28	0%
	7	9	78%	8	13	62%
	11	11	100%	4	5	80%
	7	8	88%	10	13	77%
	15	30	50%	0	11	0%
	27	33	82%	29	35	83%
	30	39	77%	0	40	0%
	18	20	90%	10	14	71%
	32	40	80%	28	44	64%
	6	6	100%	16	16	100%
	8	14	57%	18	22	82%
	12	18	67%	12	22	55%
	14	18	78%	10	12	83%
Average	187	274	68%	145	275	53%



Part 4: Progress Monitoring

Grade	Fall Semester	Spring Semester
K	First Sound Fluency	Phoneme Segmentation Fluency *Nonsense Word Fluency
1st	Nonsense Word Fluency *Phoneme Segmentation Fluency	Nonsense Word Fluency *Oral Reading Fluency
2nd	Oral Reading Fluency *Nonsense Word Fluency	Oral Reading Fluency *Nonsense Word Fluency
3 rd -4th	Oral Reading Fluency *Maze	Oral Reading Fluency *Maze

Goal Setting:

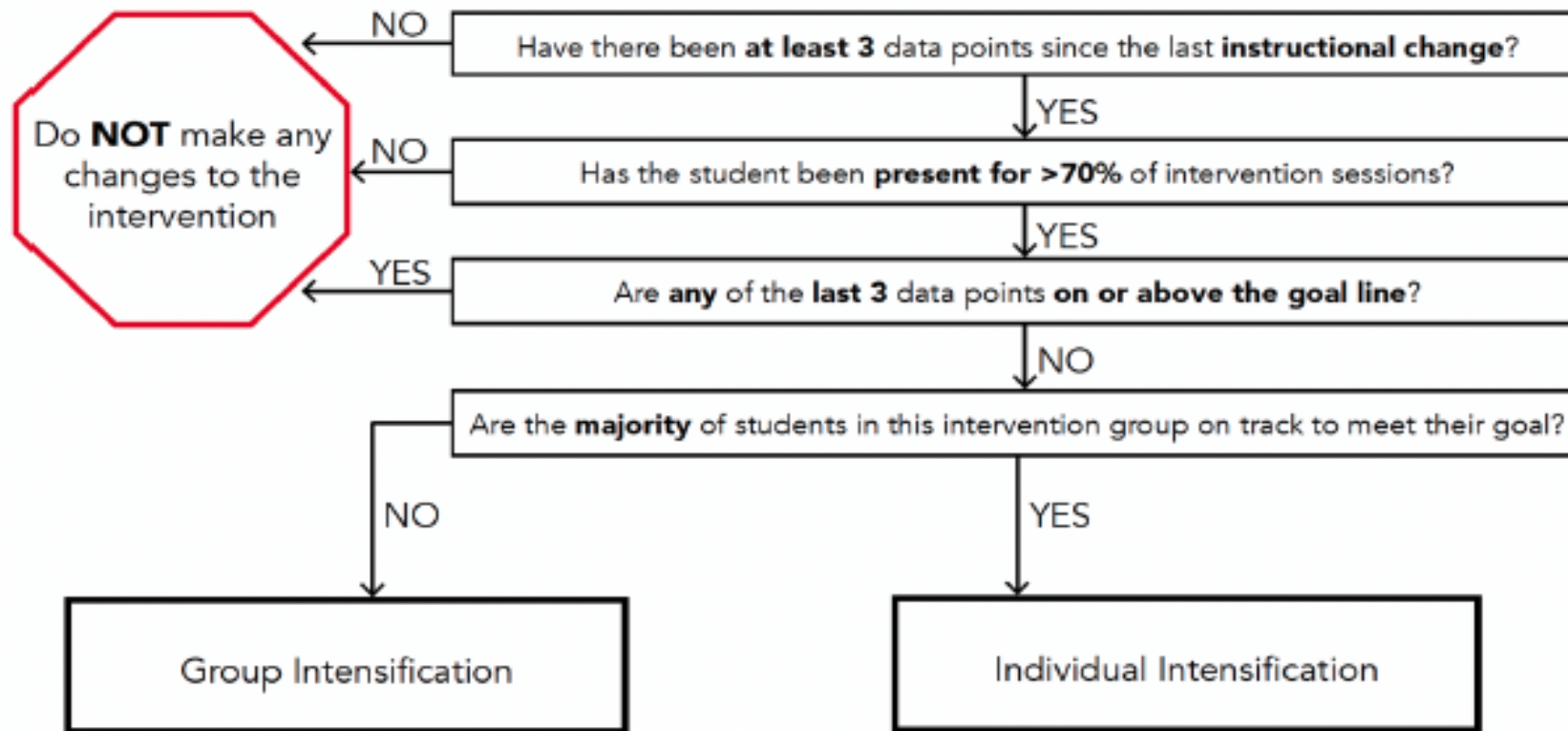
- Majority of students: goal=EOY benchmark
- Students well below benchmark: goal established using Acadience Pathway of Progress goal setting utility

Frequency:

- Students below benchmark assessed every other week,
- Students well below benchmark assessed weekly.

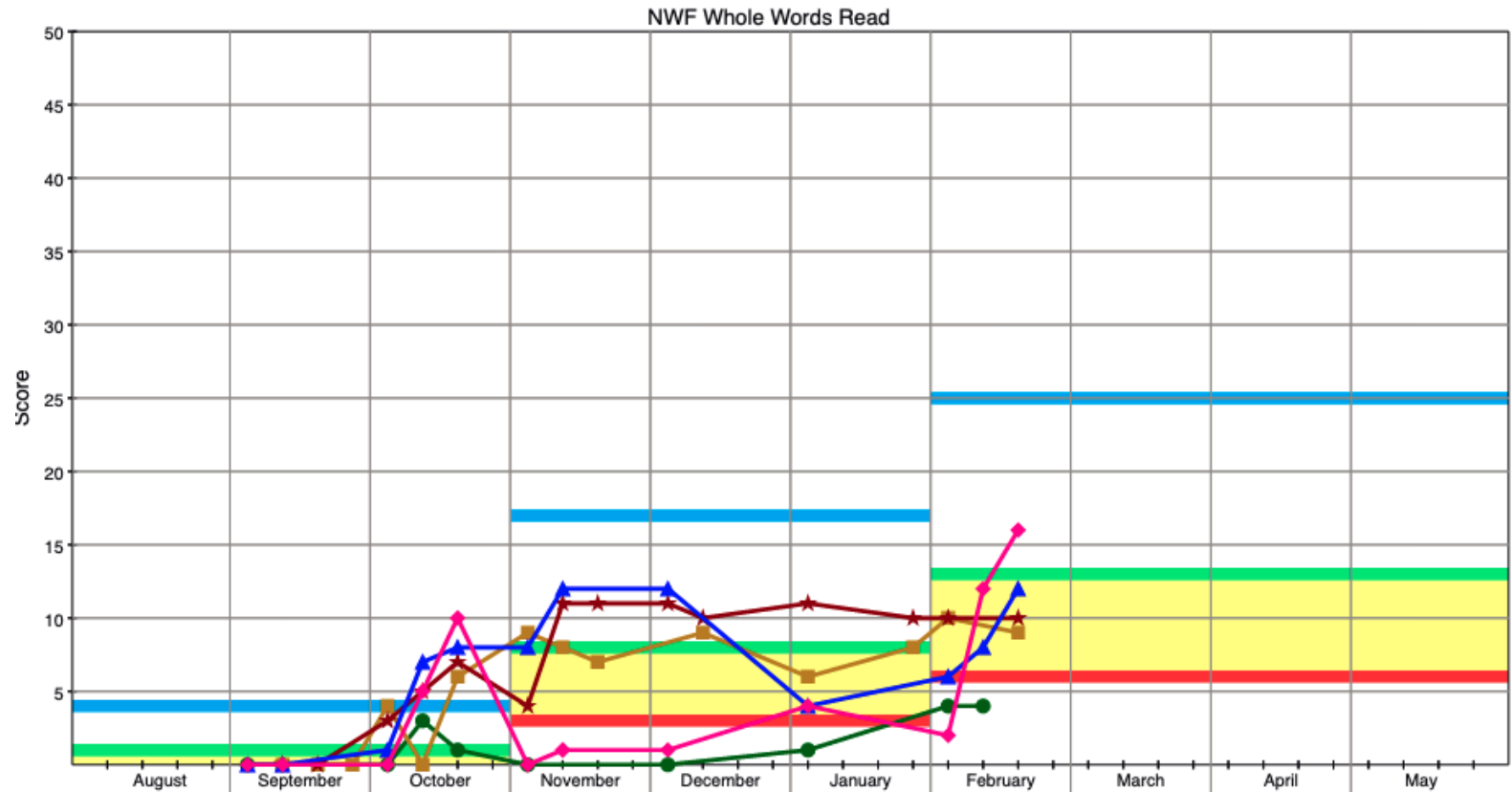


Part 5: Individualizing Instruction

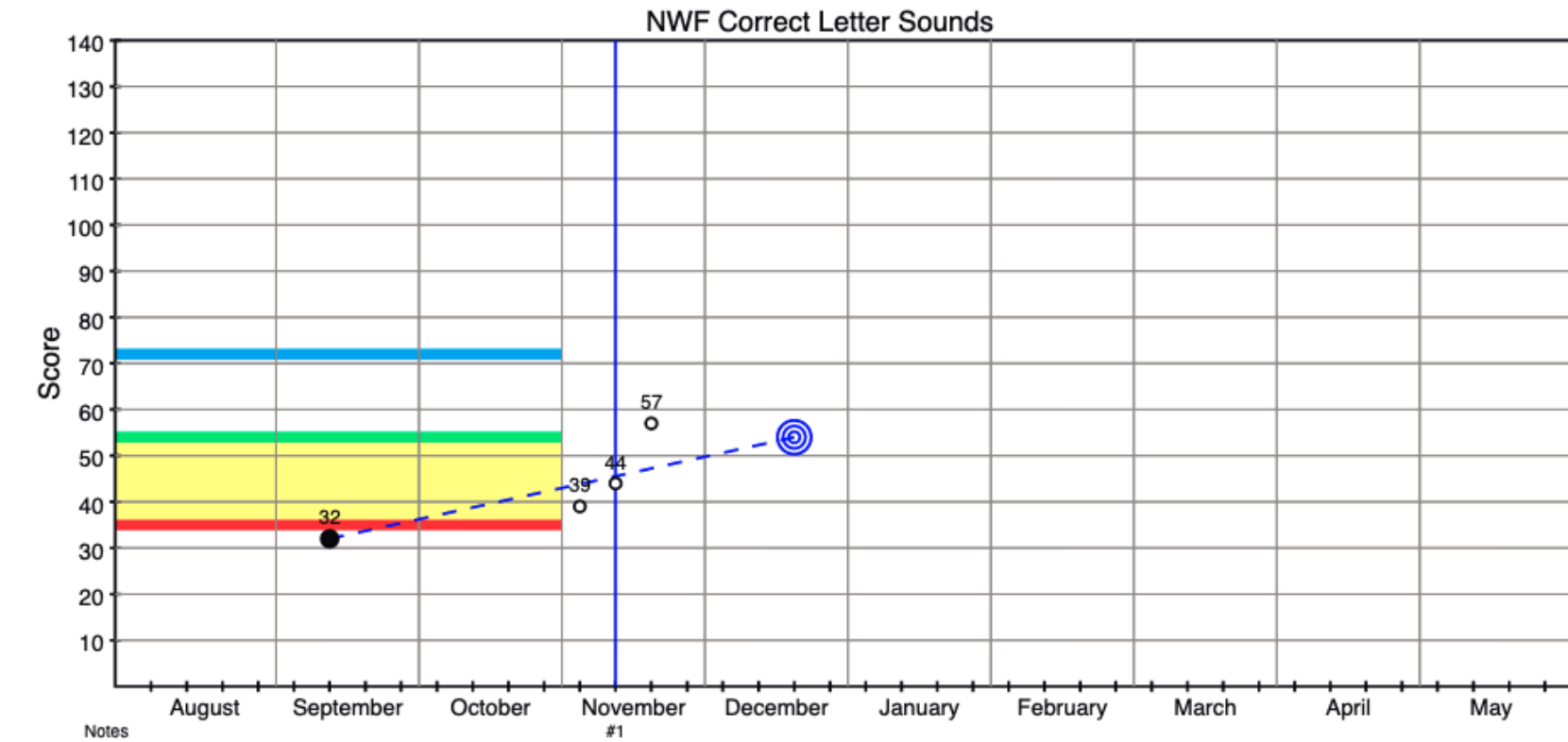


Grouping Students in Acadience

- Allows us to monitor progress monitoring data entry
- Allows us to look at progress at the group level



Insufficient Progress Monitoring Data

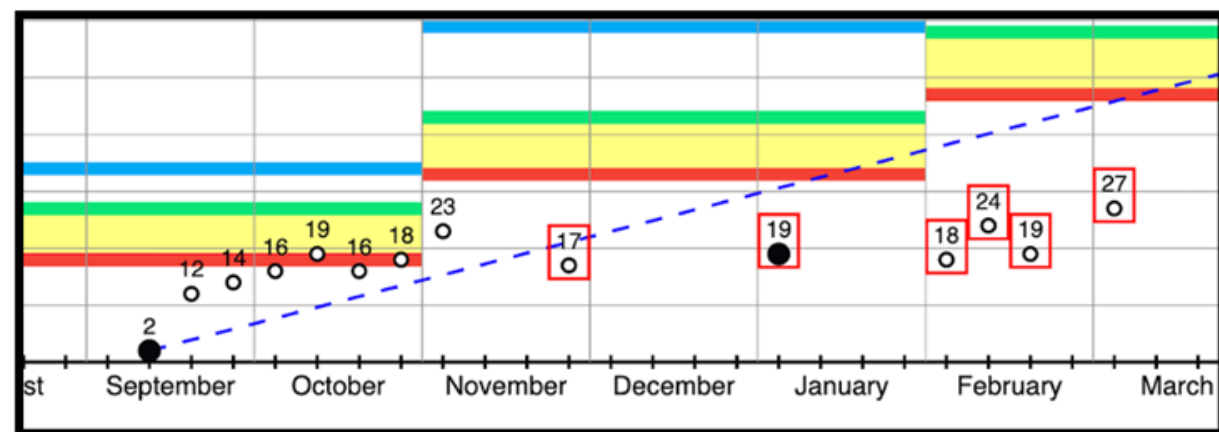
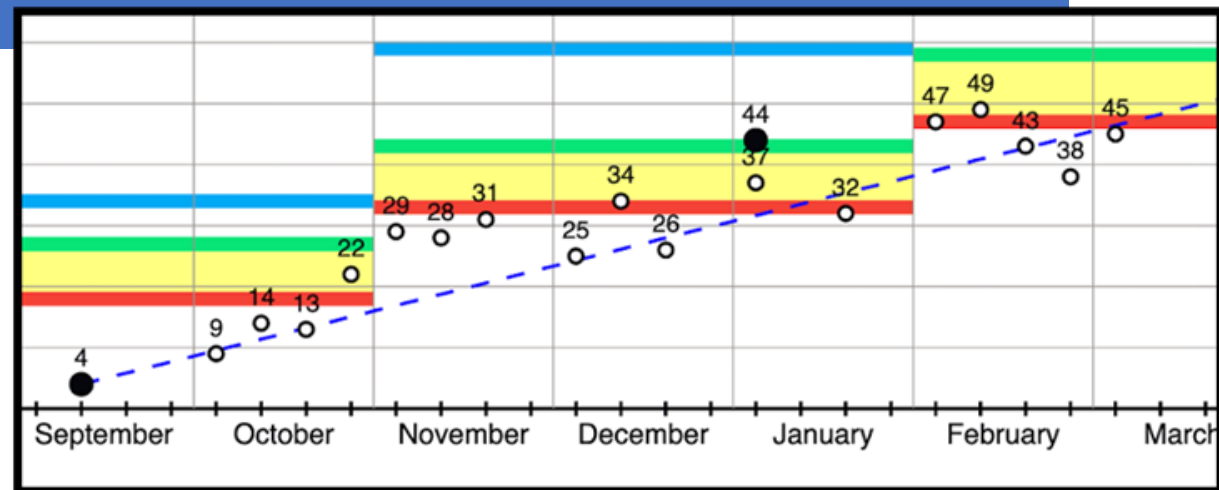
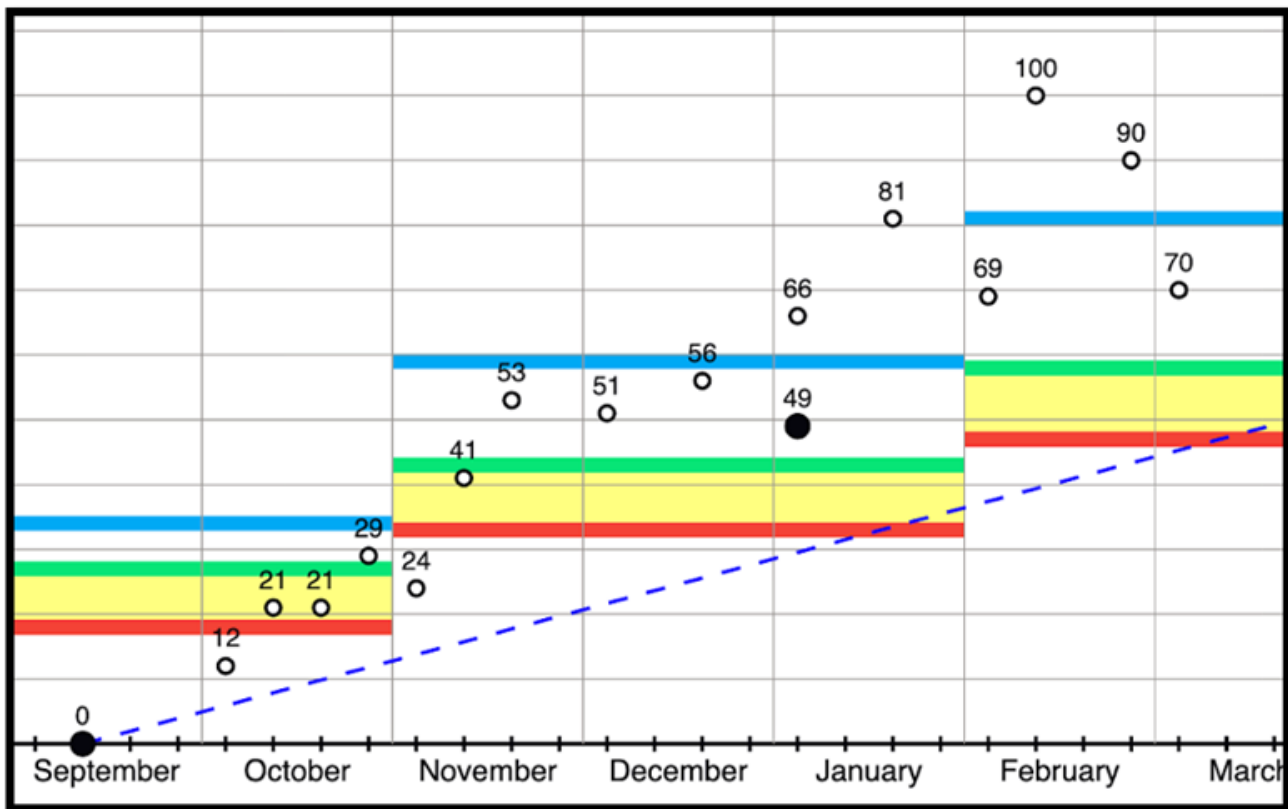


Student Engagement and Attendance

Day	Student 1	Student 2	Student 3	Student 4
1	A	P	E	E
2	A	E	A	E
3	A	E	E	E
4	A	E	A	E
5	N	E	E	E
6	N	E	E	A
7	E	E	E	E
8	P	P	E	E
9	E	E	E	E
10	A	E	A	E
11	P	E	E	E
12	A	P	E	E
13	P	E	E	E
14	A	E	E	E
15	A	E	E	E
16	A	P	E	E
Average	22%	88%	81%	94%

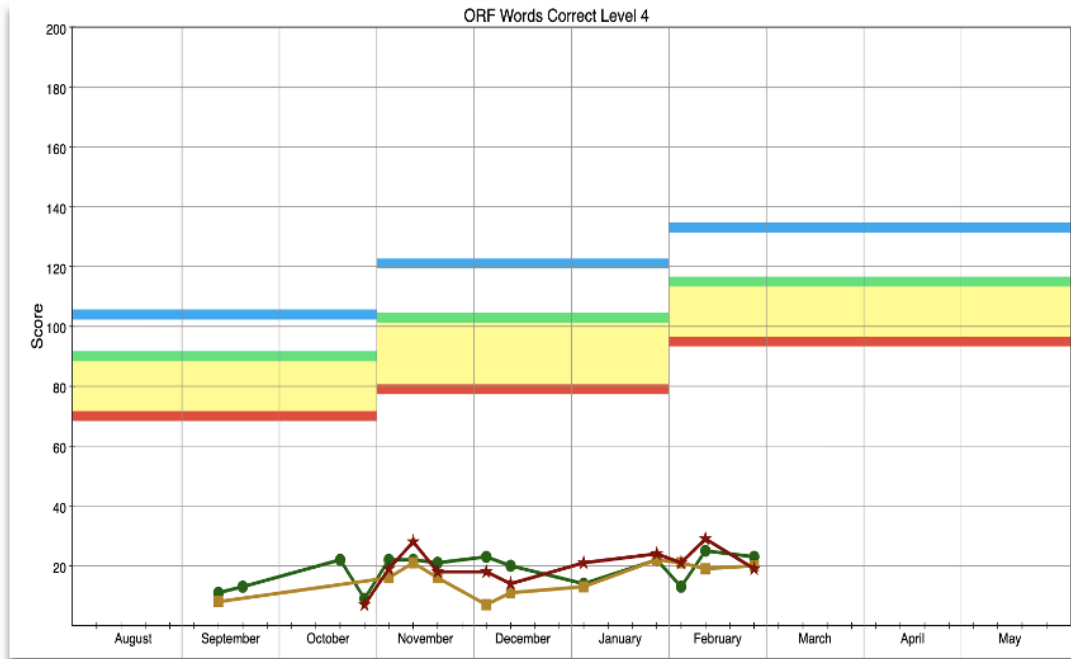


Evaluating Student Response

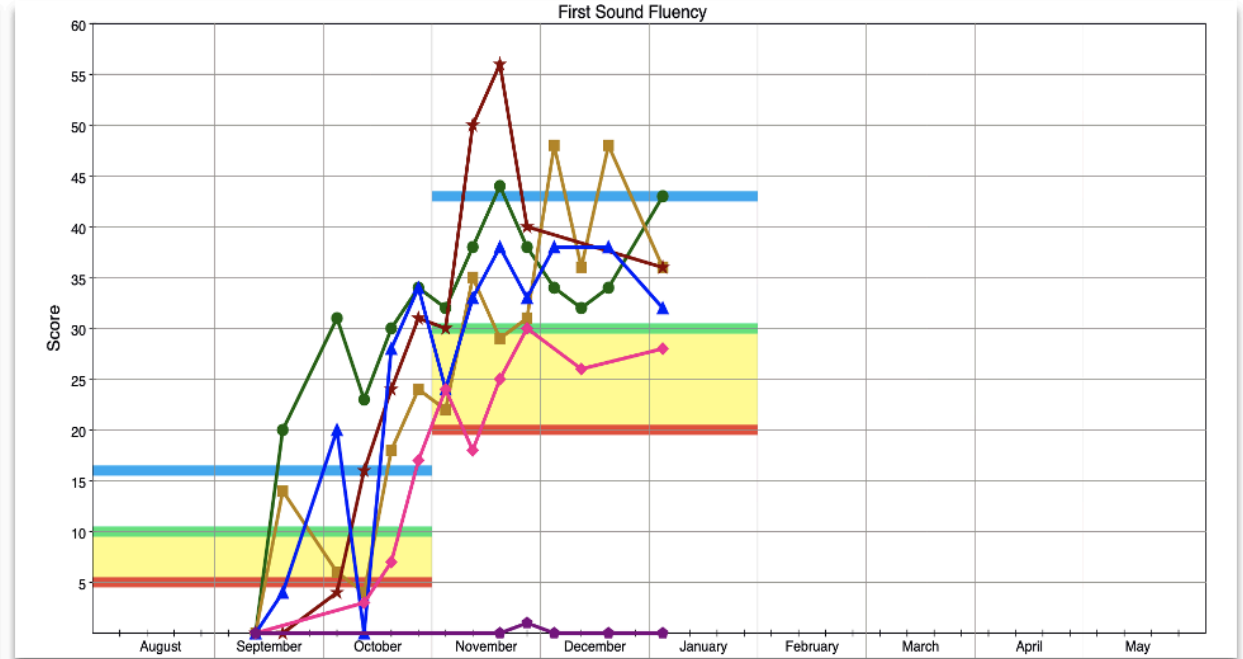


Group vs. Individual Non-Response

Group intensification required

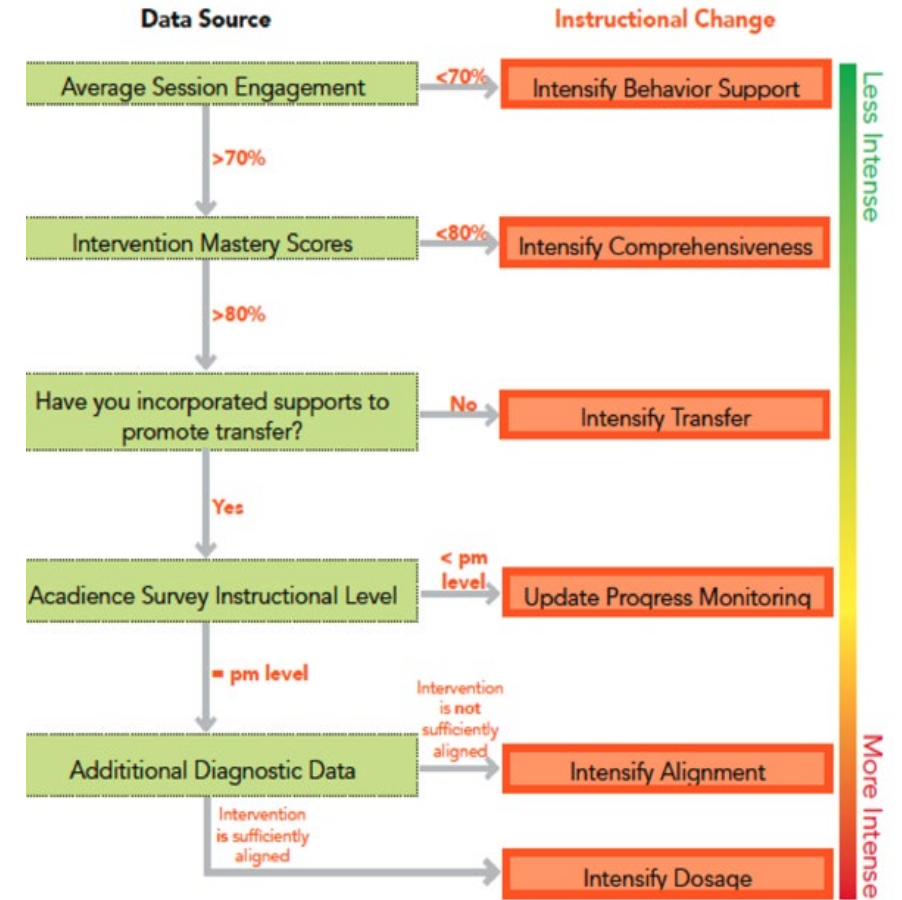


Individual intensification required



Designing Intervention Adaptations

- Use diagnostic data to form a hypothesis
- Determine a dimension of instructional intensity to target for intensification (behavior support, comprehensiveness, transfer, progress monitoring, alignment, dosage)
- Make 1-2 small changes to the individual student's plan
- Implement the revised plan
- Mark an instructional change in Acadience



Keys to Success and Pitfalls to Avoid

Preliminary Results From Two Years of Implementation



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Moving Students from Below Expectations to On Target

2021-2022

Grade	Fall % proficient	Spring % Proficient	Winter % Proficient
Kinder	30%	55%	75%
1st	25%	41%	46%
2nd	39%	44%	54%
3rd	46%	55%	46%
4th	64%	62%	64%

2022-2023

Grade	Fall % proficient	Spring % Proficient	Winter % Proficient
Kinder	31%	46%	89%
1st	53%	57%	73%
2nd	55%	54%	64%
3rd	28%	37%	40%
4th	70%	66%	69%



How Has Implementation Impacted Students with Significant Needs (21-22)?

First-Second grade students with scores below the 20th percentile for the district (n=18):

- 1 (6%) made progress that was “below typical expectations”
- 5 (28%) made “typical progress”
- 12 (67%) made “above typical progress”
- Last year only 1 of these students made typical progress, and 0 made “above typical progress”

WELL ABOVE TYPICAL	0	★★★★★
ABOVE TYPICAL	0	★★★★
TYPICAL	0	★★★
BELOW TYPICAL	0	★★
WELL BELOW TYPICAL	0	★



How Has Implementation Impacted Students with Significant Needs (22-23)?

First-Third grade students with scores below the 20th percentile for the district (n=26):

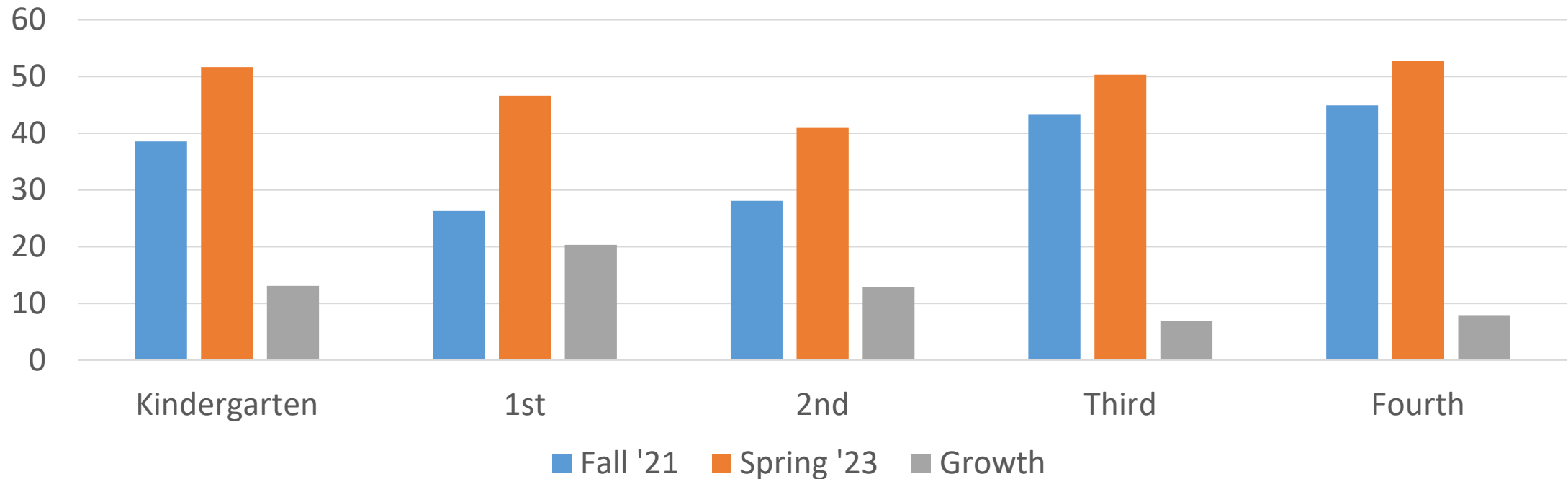
- Pathway of Progress
 - 11 (42%) made progress that was “below typical expectations”
 - 5 (15%) made “typical progress”
 - 11 (42%) made “above typical progress”
- Reaching Benchmark Expectations
 - 7 (27%) met or exceeded grade level benchmark
- Response to DBI
 - 4 (15%) received an individualized plan that led to better than expected growth

WELL ABOVE TYPICAL	0	★ ★ ★ ★ ★
ABOVE TYPICAL	1	★ ★ ★ ★
TYPICAL	2	★ ★ ★
BELOW TYPICAL	3	★ ★
WELL BELOW TYPICAL	4	★



District Average National Percentile Rank Growth

Mean National Percentile for Composite Scores



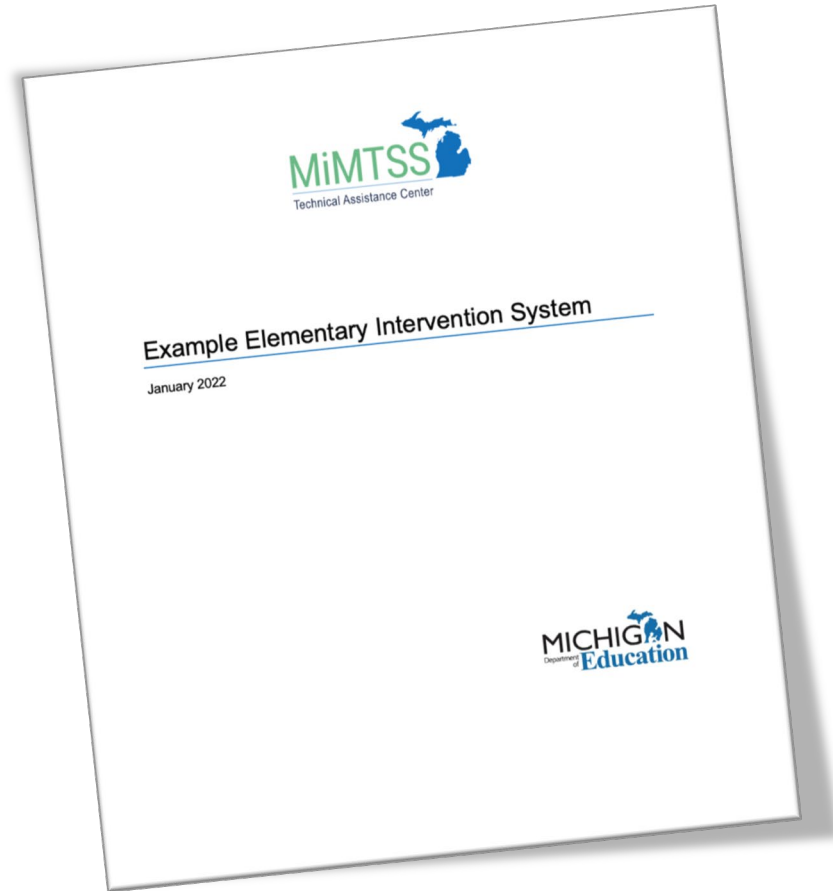
State Impacts

- Results submitted to OSEP: Goals achieved!
- Recruited second and third cohorts of schools to participate in the DBI Model Demonstration Project
- MiMTSS received updated SPDG funding to continue scale-up of intensifying Intervention
- Intensifying Implementation Team includes representatives from MiMTSS and Michigan Department of Education
- Products: Intervention system, training scope and sequence, installation checklist



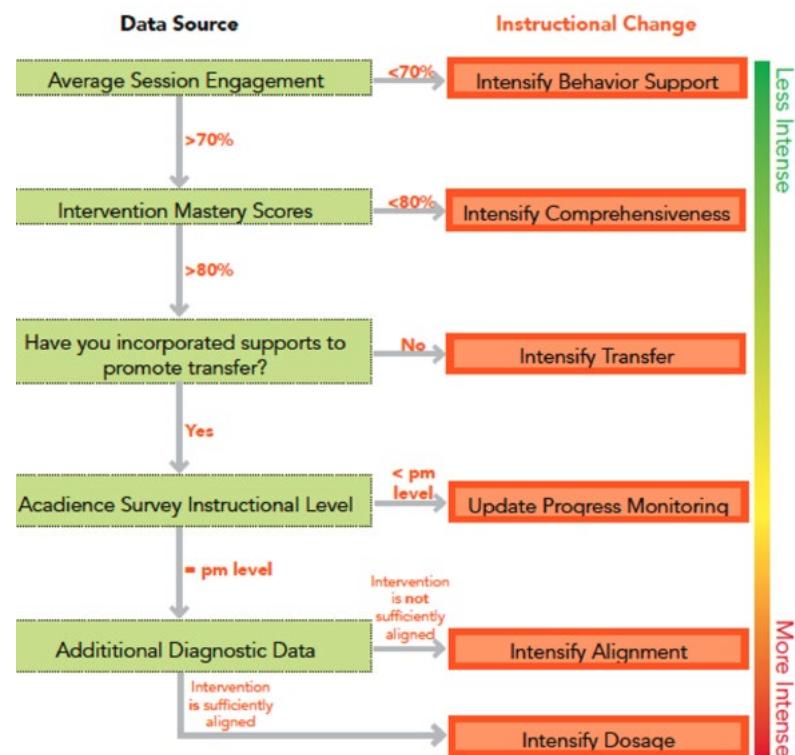
Keys to Success

- Identify an Intervention Coordinator and clearly define role
- Establish a School (and district) system to guide intervention
- Prioritize intervention and progress monitoring in the school schedule
- Use evidence-based interventions and assessments
- Align intervention efforts to Tier 1 Universal Prevention to promote transfer
- Be prepared to make intervention adjustments
- Communicate with parents



Pitfalls to Avoid

- Intervention coordinator works alone without input from the team
- Teachers/grade level teams develop their own intervention system
- Thinking that “setting aside time” is not the same as “implementing with fidelity”
- Not identifying evidence-based interventions for behavior/comprehension
- Making unnecessary adjustments
- Making changes to alignment or dosage without addressing behavior/fidelity
- Not including parents in planning



Cautionary Tale: Special Education

- Pre-implementation: SWDs not included in intervention groups, no universal screening for students in self-contained placement
- In year 1: SWDs included in intervention groups, special education teacher acted as intervention coordinator, all students universally screened, no systematic intervention implementation in self-contained setting
- In year 2:
 - Special education teacher no longer part of MDT
 - No individualized plans were developed for students with IEPs
 - Move to retain/change placement for students with most significant needs
 - No fidelity data collected on supports provided in special education settings (Resource Room or self-contained EI classroom)



Conclusions

- DBI can benefit learners with the most significant needs
- Integration of supports across all levels of the educational landscape can lead to high levels of sustained implementation of DBI
- Establishing a comprehensive intervention system supports DBI implementation and all learners
- Students with disabilities, their teachers, and their parents **MUST** be included in the intervention system
- Students are not problems to solve, instruction is.



Resource Spotlight

- **Individuals with Disabilities Education Act (IDEA) website**
 - Brings together IDEA information and resources from the Department and its grantees.
 - <https://sites.ed.gov/idea/>
- **IDEAS That Work**
 - For information from research to practice initiatives funded by OSEP that address the provisions of IDEA and ESSA. This website includes resources, links, and other important information relevant to OSEP's research to practice efforts.
 - <https://osepideasthatwork.org/>





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