

#### Outline

- Selecting research-based assessments
- Training and support in assessment administration
- Creating an assessment calendar
- Managing the data
- Using the data at the campus level
- Supporting teachers using the data



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## Selecting Research-Based Assessments

#### Reliability

- **Definition:** An assessment's dependability or consistency
- Characteristics of reliable assessments:
  - Produce similar results under similar conditions
  - Allow us to view changes in scores as indicators of progress



Farrall, 2012 **T-I-E-R** 

#### Validity

• Definition:

Evidence that an assessment measures what it is supposed to measure

- Requires strong reliability
- Predictive validity: Assessments that can be used to predict future performance



- Screening
- Diagnosing
- Progress monitoring
- Summatively assessing



#### **Effective Screening Assessments**

- Are quick to administer
- Are used with all students
- Assess grade-level performance
- Identify students on grade level and students at risk



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#### **Purposes of Screening**

- Identify at-risk students
- Set entry and exit criteria for each period of intervention
- Form instructional and intervention groups
- Set individual intervention goals
- Plan instruction and targeted intervention



#### **Screening Examples**



- Identify measures you could use to fill gaps in your own assessment plan.
- Identify measures you may want to use instead of ones you currently use.

Screenling Rotoling • Acadience Reading Jalso known as Dynamic Indicators of Basic Early Literacy Skills (DIBE)	TID: Loss	Benhip: Develop an Assessment Flan Example Screening #	Assessment Plan
DIBELS (K-6)		for Reading and Mat	hematics, PK–12
<ul> <li>exsyCBM in Reading Lite (K=6)</li> </ul>	Grade	Reading	Mathematica
<ul> <li>Texas Middle School Fluency Assessment (TMSEA, 5–6)</li> </ul>		CIPCIE (Children)/ Learning (crth.ce)	
<ul> <li>Texas Primary Reading Inventory (TPR), K–3)</li> </ul>		https://diengage.org/public/tools/assessment	
Spanish-Language Reading	к	Texas Primary Reading Inventory	Texas Early Mathematics Inventory
<ul> <li>Indicadores Dinámicos del Éxito en la Lectura (IDEL, K-3)</li> </ul>	1	www.tpri.org/index.html	http://stiermathmodeLorg/assessment
Tejas LEE (K-3)		Spanish assessment: Tejas LEE	USERNAME: Texas Teacher
	2	www.tejaslee.org	Plasmont, matteriality
Mathematics		Dynamic indicators of Rasic Early Literacy Skills	Hementary School Students in Texas:
<ul> <li>Boas carry warnematics inventory ( inset, n=2)</li> </ul>		(DIBELS Next; University of Oregon) https://acadienceleaming.org	Algebra Ready (ESTAR: The Meadows Center) https://estarmstax.org
<ul> <li>easyCDM in Midh Life (K=6)</li> </ul>	4	Spanish versioe:	
<ul> <li>Elementary School Students in Tesas: Algebra Ready (ESTAR, 3–4)</li> </ul>	5	Indicadores Dinámicos del Exito en la Lectura (IDEL: Universita of Oregon)	Middle School Students in Texas
<ul> <li>Middle School Students in Texas: Algebra Ready (MSTAR, S=8)</li> </ul>		https://dibets.acregor.edu/assessment/idel	Algebra Ready (MST/R: The Neadows Center) https://estarmstar.org
Writing	•		
Curriculum-based measurement (CBM): Written expression (1-12, writing probe generator	7	Texas Mixidia School Fluency Americanett (TMESA; This Mixed and Control	
www.interventioncentral.org)		http://buildingti.utexas.org/resource.pages/	
Behavior		texas-middle-school-fluency-assessment-tmsfa	
Student Risk Screening Scale (SRSS, K-12)		Sourch this website for possibilities :	
<ul> <li>Strengths and Difficulties Questionnaire (SDQ, K–12)</li> </ul>	8	www.rt4saccess.org/resources/iools-charts/ screening-tools-chart	
		Mare passage generator:	
		test-of-reading-comprehension	
	4	Bestmetry of unar Combination of starle 3 endorfu	Persistence of year (Trade 8 ended up at MSTAT and
		year TASPA, mase, and State of Iean Assessments	STANK
		Search this website for possibilities:	www.rtilisaccess.org/resources/tools-charts/
© 2023 The University of Texas System/Texas Education Agence. Licensed under CC 87-ND NC 4.0		www.rti4saccess.org/resources/tools-charts/ acreening-tools-chart	screening tools chart
	10	Search this website for possibilities:	
		www.rtidsaccess.org/resources/tools-charts/screet	ning-tools-chart
	12		
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#### **Effective Diagnosing**

- Takes longer
- Is used with students for whom you need more in-depth data
- Provides information about specific skills and subskills
- Identifies gaps in learning



#### **Diagnosing's Effect on Instruction**

- More prescriptive
- Necessary subskills targeted
- More student-specific goals addressed



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#### **Diagnosing Examples**

- Diagnostic data gained from screening assessments:
  - Spelling errors on a spelling inventory
  - Misread words on an oral reading fluency measure
  - Computation mistakes on a mathematics measure
  - Emotional symptoms shown on a behavior screening tool
- Other sample diagnostic data to gather:
  - Phonemic awareness proficiency
  - Analysis of mathematical errors
  - Motivation to learn, as assessed on a behavior measure

#### **Effective Progress Monitoring**

- Is quick
- Is used with any students for whom a teacher wants to monitor growth in a specific area
- Assesses grade-level performance, off-grade-level performance, or both
- Examines performance at one time point and performance across multiple time points

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#### **Progress Monitoring's Effect on Instruction**

Progress monitoring allows teachers to do the following:

- Monitor individual student response to instruction and intervention
- Plan differentiated and targeted instruction
- Adjust the make-up of different grouping formats
- Communicate more specifically with parents about student progress



#### **Progress-Monitoring Examples**

- Identify measures you could use to fill gaps in your own assessment plan.
- Identify measures you may want to use instead of ones you currently use.

24	d 7 TER Leadership: Creating an Asso
P	rogress Monitoring
R	rading
٠	Acadience Reading (K-6)
•	CBM: Letter-name fluency  and letter-sound fluency (K-1, letter name fluency generator at www.interventioncentral.org)
•	CBM: Mare passages (3-12, mare passage generator at www.interventioncentral.org)
•	CBM: Oral reading fluency (1-12, reading passage generator at www.interventioncentral.org)
•	DIBELS (K-6)
	easyCBM in Reading Lite (K-6)
•	TMSFA (6–8)
Sp	anish-Language Reading
•	IDEL (K-3)
М	athematics
•	easyCBM in Math Lite (K-6)
•	TEMI (K-2)
v	Tilling
CE	M: Written expression (1–12, writing probe generator at www.interventioncentral.org)
8	Direct Robusion Battan (DRR K. 8)
Ĵ	Language Transformation (ATC 10 P)
•	Momentary Lime Sampling (MIS, K-S)
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#### **Summatively Assessing**

- Takes longer to administer
- Provides outcome data at the end of every year
- Provides information on grade-level performance
- Provides an overall picture of how students are doing on general outcomes



## Training and Support in Assessment Administration

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#### **Initial Training**

- All teachers must receive initial training in administering every assessment.
- Teachers should demonstrate reliable administration by using standardized procedures and language.
- Training in every assessment must be provided every year for new teachers and as a refresher for previously trained teachers.



#### **Ongoing Support**

- Teachers may also need ongoing support in administering an assessment reliably.
- Instructional coaches, administrators, or lead teachers should observe teachers to ensure reliable administration.
- Teachers who do not demonstrate reliable administration should receive additional training and support.



- Every campus needs a system for checking the reliability of assessment administration.
- One or more of the following methods can be used for reliability checking:
  - Double-scoring
  - Using a second scorer
  - Trading students among teachers
- Teachers demonstrating unreliable assessment administration need training, support, and rechecking of reliability.





#### **Annual Follow-Up Training**

Follow-up training during the year can be provided to address the following:

- Questions that have arisen about administration
- New teachers who need training
- Common reliability issues observed across assessment administrations



### Creating an Assessment Calendar

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#### Screening

- Typically conducted three times a year:
  - Beginning of year (BOY): Usually in September or maybe a bit later
  - Middle of year (MOY): January or beginning of February
  - End of year (EOY): End of April or May
- Conducted with all students
- May take a couple of weeks to complete

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#### Diagnosing

- Diagnosing can occur any time a teacher needs in-depth information on individual students to target instruction.
- Diagnostic assessments usually follow screening measures, especially at the beginning of an intervention.
- These assessments may require fewer days to conduct than screening.



#### **Progress Monitoring**

- Frequency:
  - Every 2 weeks for some students
  - Every week or more often for students with more significant skill gaps
- These assessments are conducted only with students who need to demonstrate accelerated improvement, so they may occur during interventions or Tier 1 small-group instruction.

#### Sample Assessment Calendar

- How does the sample calendar compare to how you currently schedule assessments?
- Why would it be helpful to create a calendar similar to this one at the start of the year?
- What obstacles might prevent you from following the schedule in this calendar?
- How could you overcome these obstacles to ensure implementation of this calendar or one similar to it?



#### **Collecting Data**

- After administering assessments, teachers need to enter the data into a data management system.
- Data should be collected at both the campus and district levels to allow for different kinds of analyses.
- Giving teachers a window for collecting and entering the data into the management system allows for timely analyses and instructional decision making.

#### **Using a Data Management System**

- Effective data management is key to data analysis and use.
- Data management systems allow for analysis at multiple levels, including the following:
  - District
  - Campus
  - Grade
  - Classroom
  - Student group
  - Individual student



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#### **Managing Different Types of Data**

A data management system should allow different kinds of data to be warehoused in one place, including the following:

- Screening, diagnostic, and progress-monitoring data
- Demographic data (e.g., Public Education Information Management System [PEIMS])
- Summative assessment data (e.g., STAAR)
- Other types of data (e.g., district-created assessments, intervention status)

Does your data management system allow this type of data collection and storage?

#### **Creating Data Reports**

Reports should aggregate data at the levels mentioned earlier (e.g., district, campus) for answers to questions such as the following:

- What percentage of students are on grade level?
- What percentage of students need intervention?
- Are demographic groups over-represented in these percentages?
- How do grade levels compare across campuses?
- How do classrooms compare to one another?
- Do students demonstrate gaps in specific skills?

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#### How to Examine Data

What do the questions in the checklists tell you about how to examine data?

Data Level	Assessed Components (Circle All Assessed)		Possible to Examine Progress?	Questions I Can Answer (Check All That Can Be Answered)					
District	Phonological Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	How did the data look at one time point?     Did we improve across time?     Can we see strengths or weaknesses?     Can the data inform intervention decisions?	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Other:?				
Campus	Phonological Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	<ul> <li>How did the data look at one time point?</li> <li>Did we improve across time?</li> <li>Can we see strengths or weaknesses?</li> <li>Can the data inform intervention decisions?</li> </ul>	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Can the data inform PD? Cther:	7			
Grade Level	Phonological Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	<ul> <li>How did the data look at one time point?</li> <li>Did we improve across time?</li> <li>Can we see strengths or weaknesses?</li> <li>Can the data inform intervention decisions?</li> </ul>	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Other:	7			
Teacher	Phonological Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	<ul> <li>How did the data look at one time point?</li> <li>Did we improve across time?</li> <li>Can we see strengths or weaknesses?</li> <li>Can the data inform intervention decisions?</li> </ul>	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Christ	7			
Intervention Group	Phonological Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	<ul> <li>How did the data look at one time point?</li> <li>Did we improve across time?</li> <li>Can we see strengths or weaknesses?</li> <li>Can the data inform intervention decisions?</li> </ul>	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Can the data inform PD? Other.	7			
Student	Phonoiogical Awareness Phonics/Spelling Word Reading	Fluency Vocabulary Comprehension	Yes No	<ul> <li>How did the data look at one time point?</li> <li>Did we improve across time?</li> <li>Can we see strengths or weaknesses?</li> <li>Can the data inform intervention decisions?</li> </ul>	Can we use the data to set goals? Can the data inform instruction? Can the data inform PD? Con the data inform PD? Conten:	7			

#### **Examining Data at Multiple Levels- Third Grade**

• Using the district data, complete the first row of the chart:

- Circle all reading components assessed.
- Circle whether progress can be examined.
- Check all questions that can be answered.
- Does this data report provide a comprehensive perspective of the district's reading performance across kindergarten to grade 5? Why or why not?





# Using Screening Data to Set Intervention Entrance and Exit Criteria

- Screening data are used at the following time points to establish criteria for entering an intervention:
  - BOY for students participating in interventions during the first semester
  - MOY for students participating in interventions during the second semester
  - EOY for students participating in interventions toward the end of the school year and during summer school
- Progress-monitoring and screening data are used to decide who will exit an intervention at each of these time points.

# Example Methods for Setting Entry Criteria Identifying students below a certain percentile on a screening measure (e.g., 35th or 25th percentile) Moving a designated percentage of students into intervention (e.g., the bottom 5% to 10% go into Tier 3, the next lowest 15% to 20% go into Tier 2) Using the screening assessment's criteria for identifying students (e.g., at-risk criteria, Tier 2 or Tier 3 designation) Consider each method. Which one do you currently use? Would a different

method make more sense?

# Using Screening Data for Campus- and Grade-Level Analyses

- Campus- and grade-level analyses include examining the following:
  - Percentages or numbers of students on and below grade level in different skills (e.g., problem solving, spelling, oral reading fluency)
  - Breakdowns of different demographic groups' performance on different skills
- These data should be compared to those at the district level and, if applicable, data from campuses with similar demographics to yours in the district.

#### Campus- and Grade-Level Analyses: Example

- How does this campus compare to the district on the different reading components assessed?
- How does the campus compare overall to the district in reading?



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#### Using Screening Data to Set Goals and Evaluate Progress

- Set goals for improvement:
  - From BOY to MOY and MOY to EOY within a school year
  - From BOY to BOY, MOY to MOY, and EOY to EOY across years
- Examine data for progress:
  - Instruction: Compare a grade level's or teacher's data from one year to the next.
  - Students: Examine cohorts of students from one year to the next.

#### Setting Goals and Evaluating Progress: Example

- What do the data within one year tell you?
- What do the data from one year to the next tell you?

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		istrie	t and C	amp	us Da	ita Ana	lysis	-	
	Sec	ond-	Grade S	cree	nıng	Across	2 Yea	ars	
2018-2019	Tier S BOT	Tier 3 EOT	CHANGE	Tier 2 BOY	Tier 2 EOY	CHANGE	Tier 1 BOT	Tier 1 EOY	CHANG
DISTRICT	89%	26%	-13%	17%	8%	-9%	44%	66%	UP 22%
B/1 Campus	36%	31%	-5%	22%	11%	-11%	42%	58%	UP 16%
BI2 Campus	48%	40%	-8%	27%	16%	-12%	25%	44%	UP 19%
BiB Campus	45%	35%	-10%	34%	6%	-8%	41%	59%	UP 18%
Bi4 Campus	43%	34%	-2%	1956	9%	-10%	38%	57%	UP 19%
815 Campus	65%	53%	-12%	14%	8%	-6%	21%	39%	UP 18%
High1 Campus	20%	12%	-4%	22%	4%	-18%	50%	8455	UP 26%
High2 Campus	23%	5%	-13%	1455	5%	-9%	63%	90%	UP 27%
High3 Campus	39%	15%	-23%	13%	10%	-3%	48%	7456	UP 26%
Campus1	2356	11%	-125	15%	8%	-9%	62%	83%	UP 21%
Campus2	49%	36%	-13%	18%	9%	-9%	33%	55%	UP 22%
Campus3	49%	34%	-15%	16%	5%	-12%	35%	61%	UP 26%
Campus-1	37%	19%	-18%	18%	7%	-12%	45%	74%	UP 29%
Campus5	4355	27%	-16%	14%	8%	-6%	43%	65%	UP 22%
CampusG	39%	23%	-11%	19%	10%	-9%	42%	62%	UP 20%
2019-2020	Tier 3 BOY	Tier 3 EOT	CHANGE	Tier 2 BOY	Tier 2 EOY	CHANGE	Tier 1 BOY	Tier 1 EOY	CHANG
DISTRICT	36%			18%			46%		
Bill Campus	36%			17%			47%		
B/2 Campus	57%			21%			22%		
BiB Campus	51%			18%			31%		
Bi4 Campus	37%			19%			44%		
Bi5 Campus	81%			11%			8%		
High1 Campus	17%			14%			60%		
High2 Campus	14%			18%			68%		
High3 Campus	3005			22%			48%		
Campus1	25%			29%			46%		
Campus2	46%			18%			36%		
Campus3	47%			19%			34%		
Camput-4	24%			17%			59%		
Campus5	34%			12%			54%		
Campus6	24%			1756			50%		

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#### **Combining Screening Data With Summative Assessment Data: Example**

- Column 1: Grade level and number of students
- Column 2: Correlation between oral reading fluency (ORF) and STAAR
- Columns 3-5:
  - Number of students scoring 86% to 100% on STAAR
  - Number of students reading below a specific EOY ORF benchmark
  - These students' actual ORF scores
- Columns 6-7:
  - Number of students scoring between 70% and 85% on STAAR
  - Number of students reading below a specific EOY ORF benchmark
- Columns 8–10:
  - Number of students scoring less than 50% on STAAR
  - Number of students reading below the two EOY ORF benchmarks

#### **Combining Screening Data With Summative Assessment Data: Grade 3 Example**

- Column 1: Grade 3 has 869 students.
- Column 2: The correlation between fluency scores and STAAR scores was .70.
- Columns 3-5:
  - 68 students scored between 86% and 100% on STAAR.
  - Of these, 4 read less than 100 words correct per minute (WCPM) on EOY ORF.
  - 1 read significantly below 100 WCPM while scoring above 85% on STAAR.
- Columns 6-7:
  - 172 students scored between 70% and 85% on STAAR.
  - Of these, 12 read less than 80 WCPM on EOY ORF.
- Columns 8–10:
  - 355 students scored less than 50% on STAAR.
  - Of these, 223 read less than 80 WCPM on EOY ORF.
  - 318 read less than 100 WCPM.

#### **Examining the Example Data**

- What do the data tell you about the relationship between ORF and STAAR Reading in this district?
- How can these data be used to improve students' reading achievement?
- What type of professional development might help teachers improve students' reading achievement?

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#### Using Progress-Monitoring Data for Intervention Group and Student-Level Analyses

- Intervention group analysis:
  - Examining a line graph with all students from an intervention
  - Comparing students' progress within intervention
- Student-level analysis:
  - Examining individual student progress in comparison to the group's progress
  - Examining places in the data where an intervention was adjusted and how this change affected a student's progress

# Intervention Group and Student-Level Analysis:

Examine the line graphs. What do they show about student progress and the effectiveness of the different interventions?



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#### Using Progress-Monitoring Data for Setting Goals and Evaluating Progress

- Line graphs:
  - Benchmark goals (benchmark line)
  - Individual student goals (aim line)
  - Trendline: Compared to benchmark and aim lines to evaluate progress
- Questions to consider:
  - Have we set appropriate goals for the student?
  - Does the trendline approximate the aim line?
  - Is the gap between initial skill level and benchmark skill level closing?

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#### Setting Goals and Evaluating Progress: Example

- What do the data show about Julia's progress?
- What do they show about the goals the teacher had set for Julia?



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## Supporting Teachers Using Data

#### **Using Data to Improve Core Instruction**

- Consider what the data say about the entire class.
- Help teachers use data to differentiate based on students' strengths and needs.
- Show teachers how to use data to form different instructional groups.



#### Using Data to Improve Core Instruction: **Example**



#### **Informing Whole-Class Instruction**

- Use screening and progress-monitoring data to evaluate instruction students have received.
- Use these data to plan instruction for the entire class.
- Within this planning process, think about where differentiation may be necessary to meet different students' needs.



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MOY and BOY Data: Two Class

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#### **Differentiating Instruction**

- Aspects of instruction to differentiate:
  - Instructional delivery
  - Materials
  - Time
- Other considerations:
  - How does the class perform as a whole on specific skills?
  - What do the data say about individual student needs to address in whole-class lessons, small-group instruction, and cooperative learning opportunities?

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#### **Using Data to Form Different Grouping Formats**

- Model how to use data to create student groups, including the following:
  - Teacher-led same-ability small groups
  - Cooperative learning mixed-ability groups
  - Pairs for partner work
- Provide teachers time to examine data and form different groups based on data.



#### **Making Decisions About Intervention Participation**

- Use screening and progress-monitoring assessment goals to set entry and exit criteria for Tiers 2 and 3.
- Conduct structured data meetings to decide which students should receive Tier 2 and Tier 3 interventions.
- Resource: <u>www.elitetexas.org/resources-sl/implementing-structured-data-meetings-f</u> <u>or-english-learners</u>

#### **Conclusion: Your To-Do List**

- Choose research-based assessments.
- Provide training and support in assessment administration.
- Create an assessment calendar.
- Manage the data.
- Use data to examine campus MTSS implementation.
- Support teachers in using data.



