

Kansas Multi-Tier System of Supports (MTSS) model: Using DIBELS Data to Drive Instruction

DIBELS Summit
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What is MTSS?

- A coherent continuum of evidence based, system-wide practices to support
- a rapid response to academic and behavioral needs
- with frequent data-based monitoring for instructional decision making
- to empower each Kansas child to achieve high standards.

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MTSS Materials & Supports

- MTSS Documents
 - Innovation Configuration Matrix (ICM)
 - Research Base
 - Structuring Guide
 - Implementation Guides
- Training Support
 - Recognized trainers across Kansas

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MTSS Framework



- Leadership
 - Identified Teams
 - Buy-In/Consensus
 - Communication
 - Professional Development
 - Empowering Culture
- Professional Development
 - Initial Training
 - Support for Implementation
 - Monitoring for Fidelity
 - Providing ongoing Support
- Empowering Culture
 - Involving all Staff
 - Involving Parents
 - Informing All

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MTSS Framework




- Assessment
 - Screening
 - Diagnostic
 - Progress Monitoring
 - Outcomes
- Curriculum
 - Core
 - Supplemental
 - Intensive
- Instruction
 - Core
 - Supplemental
 - Intensive


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MTSS Framework



- All (Core)
 - Core Curriculum
 - Core Instruction
 - Screening Assessment
- Some (Supplemental)
 - Protocol Based Curriculum
 - Protocol Based Instruction
 - Diagnostic Assessment
 - Progress Monitoring Assessment
 - Problem Solving Teams
- Few (Intensive)
 - Problem Solving Teams
 - Intensive,
 - Customized Supports



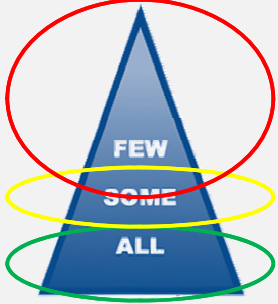
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Hybrid Model used in MTSS

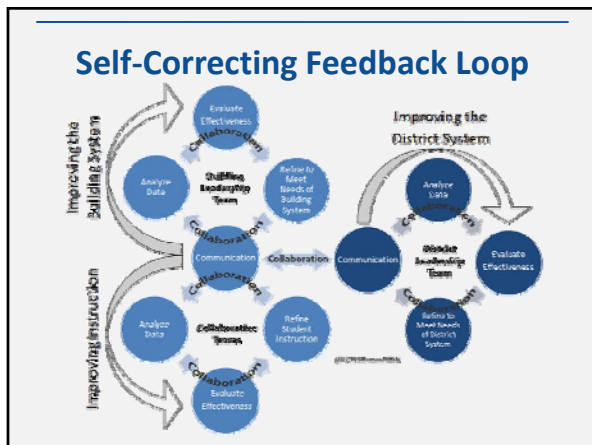
Individual Student Problem Solving to customize Interventions

Group Problem Solving with Protocol Interventions

General Education Curriculum & Instruction



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Roles of Assessment in MTSS

Teachers should utilize assessment to determine:

- student strengths and weaknesses;
- student groups;
- effective small-group lessons;
- student growth; and
- when to regroup students.

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4 Types of Assessments

TYPE	USE	PURPOSE
Universal Screening (Formative)	Identify students who need more intense assessment to determine the potential for intervention.	"First Alert"
Progress Monitoring (Formative)	Determine student progress and to plan differentiated instruction.	"Growth Charts"
Diagnostic (Formative)	Plan instruction, including intensive intervention strategies.	"In-depth View"
Outcome (Summative)	Evaluate student performance after instruction is completed.	"Reaching our goals"

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Comprehensive Assessment System

Steps in developing a MTSS comprehensive assessment system:

1. select assessments
2. determine who will get the assessments
3. determine who will conduct assessments
4. establish an assessment schedule
5. establish decision rules
6. establish a data management system

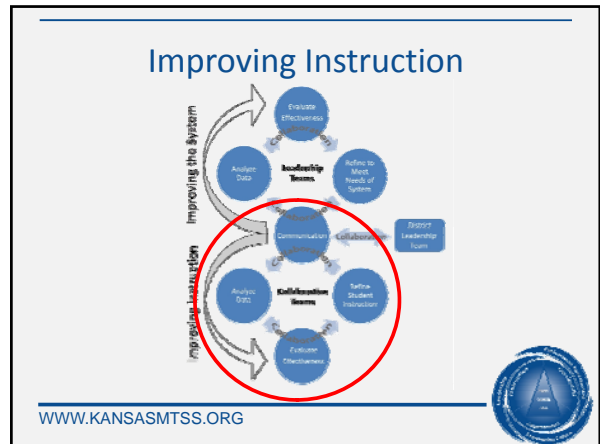
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Tool #
Assessment Plan 1

Comprehensive Assessment Plan

Screening Assessment				
Assessment Used	Which Students	Cut Points	Areas Assessed	Who is responsible for administration

Diagnostic Assessments				
Assessment Used	Which Students	Decision Rules	Areas Assessed	Who is responsible for administration



Students Have Different Types of Needs

Accuracy

- **Phonics**
 - ORF is low
 - Phonics Assessment show issues
- **Phonemic Awareness**

Fluency

- Slow readers with poor fluency skills
- Advanced decoding shows word level skills are low

Comprehension

- Excellent ORF scores, but poor comprehension

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Why Analyze Data?

Analyze data to:

- determine student instructional focus
- form groups,
- plan instruction, and
- go back “down” the skill continuum when needed

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Steps to Determine Instructional Focus

1. Score oral reading fluency passage
2. Determine accuracy percentage
3. Students with Accuracy problems
 - Give PA/Phonics Assessment/Error Analysis
 - Go down continuum and give NWF or PSF
4. Students with Fluency problems
 - Use fluency rubric
5. Students with Comprehension problems
 - Give additional comprehension assessments
6. Determine instructional focus

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Determining Small Group Instructional Focus

Oral Reading Fluency

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Miss Jone's Class Report –Fall –4th Grade Oral Reading Fluency

Student	Score	Title	Status	Instructional Recommendation
Lee	89	11	At Risk	Strategic
Eric	87	11	At Risk	Strategic
Carol	91	24	Some Risk	Strategic
Dan	91	24	Some Risk	Strategic
Jamela	92	22	Some Risk	Strategic
Phan	92	22	Some Risk	Strategic
Mike	84	28	Some Risk	Strategic
Holly	85	30	Some Risk	Strategic
Jack	86	31	Some Risk	Strategic
Brenda	100	35	Some Risk	Strategic
Sharon	100	35	Some Risk	Strategic
Lara	101	37	Some Risk	Strategic
Melissa	103	39	Some Risk	Strategic
Neal	104	41	Some Risk	Strategic
James	105	42	Low Risk	Benchmark
Kevin	108	46	Low Risk	Benchmark
Jane	109	48	Low Risk	Benchmark

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Adapted from DIBELS Distribution Report

Using Data for Grouping

Oral Reading Fluency Scores are not enough!

- Need to drill down and look at skills
- You may have to go back “down” the skill continuum
- Will need to analyze all scores and any other available data to form groups and plan instruction

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Oral Reading Fluency

I ~~w~~anted to take my ~~s~~tepmother out to dinner for her ~~b~~irthday and pay for our ~~d~~inner with my own ~~m~~oney. I wanted it to be a ~~s~~urprise and I wanted it to be just from me. The ~~p~~roblem was, I didn't have any ~~m~~oney!

I went out to try to find ways to earn money. The lady who lives in the apartment upstairs said she wanted to get rid of all her empty soda cans and bottles. She said I could keep the money for the deposit if I took all of the cans and bottles back to the store. It

12
27
41
45
60
74
87
102

Two Steps to Scoring:

1. Record number of words at end of final line read	102
Subtract number of words not read in last line	-12
Calculate total number of words attempted	90
2. Subtract number of words missed	-15
Calculate total number of words read accurately	75

Total = 75

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Oral Reading Fluency

I ~~w~~anted to take my ~~s~~tepmother out to dinner for her ~~b~~irthday and pay for our ~~d~~inner with my own ~~m~~oney. I wanted it to be a ~~s~~urprise and I wanted it to be just from me. The ~~p~~roblem was, I didn't have any ~~m~~oney!

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12
27
41
45
60
74
87
102

Two Steps to Scoring:

1. Record number of words at end of final line read	87
Subtract number of words not read in last line	-9
Calculate total number of words attempted	78
2. Subtract number of words missed	-3
Calculate total number of words read accurately	75

Total = 75

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CBM Practice Activity

and

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Data Summary

3rd Grade Class- Fall DIBELS: ORF=> 77

Student	Words per Minute Correct	Accuracy
Tommy	60 wpmc	80%
Jane	80 wpmc	85%
Mac	65 wpmc	98%
Claire	90 wpmc	98%
Liz	67 wpmc	100%

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Organizing Data Activity



Group 1: Accurate and Fluent 95% accuracy =>77	Group 2: Accurate but Slow Rate 95% accuracy < 77
Group 3: Inaccurate and Slow Rate <95% accuracy < 77	Group 4: Inaccurate but High Rate <95% accuracy =>77

ACTIVITY:
Based on criteria for the grade level, place each student's name into the appropriate box.

Tommy

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Check Your Answers Organizing Data



Fall Target
>77 wcpm
and
95% acc.

Group 1: Accurate and Fluent claire	Group 2: Accurate but Slow Rate Liz Mac
Group 3: Inaccurate and Slow Rate Tommy	Group 4: Inaccurate but High Rate Jane

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Determining Instructional Focus

Group 1: Accurate and Fluent	Group 2: Accurate but Slow Rate
Group 3: Inaccurate and Slow Rate	Group 4: Inaccurate but High Rate

Group 1: Dig deeper in the areas of reading comprehension including vocabulary and specific comprehension strategies.
Group 2: Build reading fluency skills. If fluency is below 70 wcpm, complete error analysis or Phonics screener.
Group 3: Conduct a Phonics screener or error analysis
Group 4: Teach student to self-monitor reading accuracy. If reader cannot self-correct errors, complete an error analysis or Phonics screener

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Group 1

Assessment questions:

Benchmark Students

Group 1: Accurate and Fluent	Group 2: Accurate but Slow Rate
Group 3: Inaccurate and Slow Rate	Group 4: Inaccurate but High Rate

- Is the student performance on an every day basis consistent with this data? (The student is an accurate and fluent reader)
 - If NO- further assess (e.g. Check fluency and accuracy, interest level, motivation, background knowledge, etc.)
 - If YES- Dig deeper into comprehension issues
- Does the student have problems with reading comprehension on a regular basis?
 - If YES- Assess using Comprehension Rubrics or Assessments
 - If NO- Continue to develop areas of reading comprehension including vocabulary and specific comprehension strategies.

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Grouping by State Assessment Indicators

GR	LNAME	FNAME	Proficiency	SCORE	IND1 3.3 (91) 4 Barms 70%	IND2 1.3 (93) 4 Barms 80%	IND3 3.3 (94) 4 Barms 80%	IND4 1.4 (92) 4 Barms 70%	IND5 1.4 (93) 4 Barms 80%	IND6 1.4 (94) 4 Barms 80%	IND7 1.4 (95) 4 Barms 80%	IND8 1.4 (96) 4 Barms 80%
11		AS	84	100	80	33.3	75	83.3	60	18.7	0	0
11		AS	84	75	33.3	33.3	60	83.3	60	66.7	80	80
11		AS	84	75	18.7	33.3	75	66.7	66.7	80	80	80
11		MS	88	80	0	0	0	0	0	0	0	0
11		MS	88	100	100	33.3	60	80	80	80	80	80
11		AS	85	100	100	100	60	80	80	66.7	33.3	33.3
11		JWP	87	0	33.3	18.7	60	18.7	66.7	33.3	33.3	33.3
11		MS	87	60	0	0	33.3	0	0	0	0	0
11		JAW	89	25	83.3	33.3	75	66.7	33.3	18.7	33.3	33.3
11		MS	89	25	0	0	75	83.3	0	40	75	75
11		MS	89	25	18.7	33.3	60	66.7	18.7	0	0	66.7
11		MS	87	100	33.3	66.7	75	66.7	83.3	50	66.7	66.7
11		JFW	88	25	50	33.3	25	18.7	33.3	100	100	100
11		MS	87	100	0	0	0	83.3	0	0	0	0
11		AS	83	25	0	0	50	0	0	40	60	60
11		MS	82	75	75	0	83.3	0	0	60	60	60
11		MS	81	75	0	0	25	66.7	0	40	75	75
11		MS	82	80	0	75	63.3	0	0	60	75	75
11		JAW	83	80	0	18.7	0	0	0	0	0	0
11		MS	88	100	75	33.3	0	0	0	60	25	25

Group 2

This group needs to build fluency skills.

Group 1: Accurate and Fluent	Group 2: Accurate but Slow Rate
Group 3: Inaccurate and Slow Rate	Group 4: Inaccurate but High Rate

• If fluency is below 70 wcpm, complete phonics assessment or error pattern analysis

• These students may need more practice with word recognition in addition to fluency practice or fluency practice in decodable text

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Groups 3 & 4

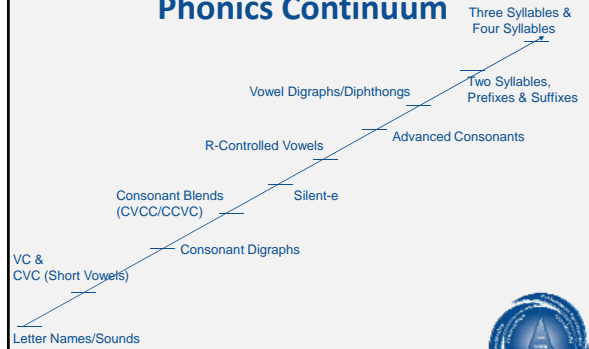
Group 1: Accurate and Fluent	Group 2: Accurate but Slow Rate
Group 3: Inaccurate and Slow Rate	Group 4: Inaccurate but High Rate

1. Give further diagnostic assessments (QPS or Error Pattern Analysis)
2. Group students according to similar needs:
 - Multi-syllabic Error Pattern
 - Basic Decoding Skills
 - Sight Word Difficulties
3. Teach to instructional needs

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by M. Hosp & W. Robinson



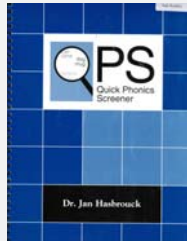
Phonics Continuum



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Phonics Assessment



Quick Phonics Screener (QPS)

Jan Hasbrouck, 2006

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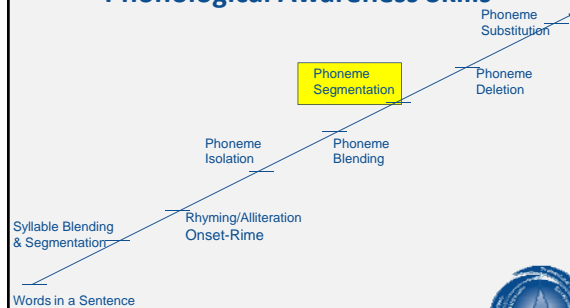
QPS Information

Task	Correct	Incorrect	Total
Task 1	10	0	10
Task 2	8	2	10
Task 3	9	1	10
Task 4	7	3	10
Task 5	6	4	10

Grouping by Phonics Continuum

Student	Letter Names	Letter Sounds	VC/CVC	Digraphs	Blends	Silent e	R-Controlled Vowels
Danny			10	7	6	5	9
Troy			7	6	9	7	5
Jenny			6	6	7	6	5

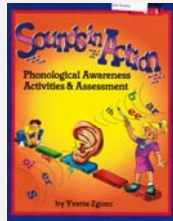
Quadrant 3 & 4 Phonological Awareness Skills



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Phonological Awareness Assessment



Phonological Awareness Skills Test (PAST)

(Sounds in Action, Zgonc, 2000)

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Grouping by Phonological Awareness Continuum

Student	Concept of Spoken Word	Rhyme Recognition	Rhyme Production	Syllable Blending	Syllable Segmentation	Syllable Deletion	Isolation of Initial Sounds
Johnny	6	5	5	3	3	3	6
Suzie	6	4	5	2	3	6	6
Carol	6	3	5	3	2	3	5

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Considerations for Finalizing Groups

- Keep group sizes small
 - Supplemental – (3-5 students)
 - Intensive – (1-3 students)
- Base small groups on instructional need with specific instructional strategies in mind
- Consider attitudes, behaviors, and motivation of each student
- Monitor the progress of high risk students more frequently

Four Quadrant Instructional Sort

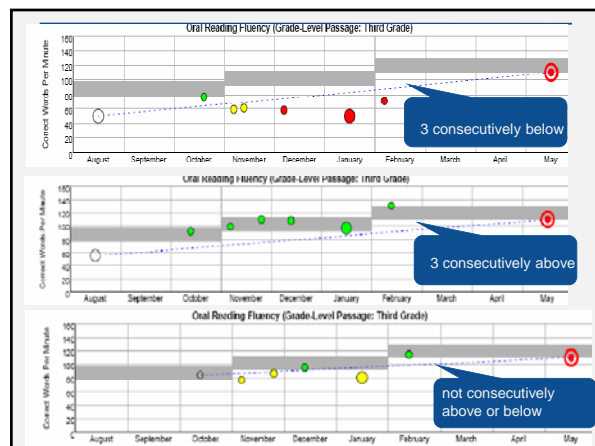
Quadrant 1 Accurate and Fluent Reader Plan of Action: <ul style="list-style-type: none"> *Instruction on monitoring for meaning *Instruction on fix-up strategies *Instruction on vocabulary strategies Intervention: <ul style="list-style-type: none"> *6-Way Paragraphs *50 Content Area Strategies 	Quadrant 2 Accurate and Slow Reader (lack of automaticity) Plan of Action: <ul style="list-style-type: none"> *Instruction on automaticity *Repeated and assisted reading of passages *Instruction on pacing and phrasing Intervention: <ul style="list-style-type: none"> *Six Minute Solution *Read Naturally
Quadrant 3 Inaccurate and Slow Reader Plan of Action: <ul style="list-style-type: none"> *Instruction on missing decoding skills *Instruction on missing sight words *Work on applying skills to connected text at instructional level *Practice reading in connected decodable text Intervention: <ul style="list-style-type: none"> *Rewards *Spiral Up *Wilson 	Quadrant 4 Inaccurate and Fluent Reader Plan of Action: <ul style="list-style-type: none"> *Teach student to adjust rate of reading to type of text and purpose for reading *Instruction on missing decoding skills *Instruction on sight words *Practice reading in connected decodable text Intervention: <ul style="list-style-type: none"> *Rewards *Spiral Up *Wilson

Adapted from Curriculum Based Evaluation: Teaching and Decision Making (1999) by Ken Howell & Victor Neiler

3-Point Decision Making Rule

Given at least 6 data points, examine the last 3 consecutive scores to determine instructional success.

- If all 3 scores fall below the aim line, an adjustment in instruction is recommended.
- If all 3 scores fall above the aim line and at or above benchmark or decrease intervention intensity.
- If neither applies, keep collecting data until the 3-point rule can be applied.



If students have 3 or more data points consecutively *above the aimline*

- Decrease intervention intensity (reduce intervention time or frequency)
- Exit supplemental intervention and continue core with periodic monitoring
- Regroup to work on new intervention skill

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If students have 3 or more data points consecutively *below the aimline*,

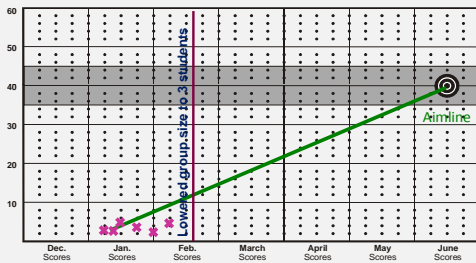
teams should consider the following questions:

- What needs to be adjusted?
- Does instruction need to be intensified?
- What have we learned works?
- What have we learned doesn't work?

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Monitor and Evaluate Progress: Adjust Instruction?



Use Progress Monitoring Data To Adjust Interventions

When data show that a student's scores are below the aimline, follow these steps to adjust the intervention:

1. Check what you are monitoring
2. Check fidelity of instruction
3. Increase pace of instruction
4. Change pace of intervention
5. Ensure alignment of programs
6. Adjust the instructional materials
7. Intensify instruction
8. Move the student to a different group

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Use Progress Monitoring Data To Intensify Instruction

- Increase number of student responses by reducing group size
- Provide more opportunities for error correction and feedback
- Provide more scaffolding
- Provide more modeling and guided practice (I Do and We Do)
- Increase explicit and systematic instruction
- Use more systematic curriculum)

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How Are You Tracking Interventions?

Last Name	First Name	Teacher	Date Sept. 1-Oct. 9 Intervention	Date Oct. 9-Nov. 12 Intervention	Date Nov. 12-Nov. 26 Intervention
		Poertner	DC Text	DC Text	GMS
		Poertner	S-Up	S-Up	RW
		Baker	CVC	S-Up	S-Up
		Poertner	S-Up	S-Up	S-Up
		Romeiser	GMS	GMS	GMS
		Baker	RW	RW	RW
		Poertner	AP	AP	AP
		Baker	AP	AP	AP
		Romeiser	Comp./F	Comp./F	Comp./F

GMS= 6 Minute Solution
CVC=Short Vowels
Comp./F= Comprehension and Fluency

S-Up= Spiral Up
AP= Alphabetic Phonics
RW=Rewards
DC Text=Decodable Text

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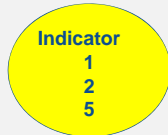
Example: Assessment Card

P-3 (gr.) Name _____ Target Score: 77+/92+/110+

NWF (50)

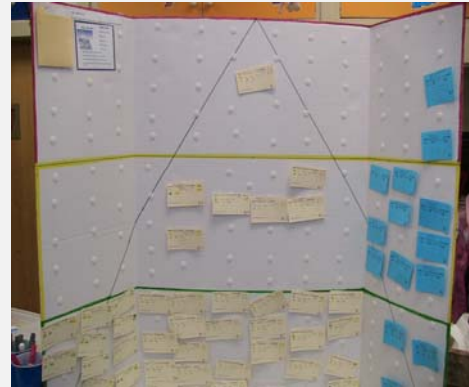
ORF (72)

RTF (15)



QPS 1 2 3 4 5 6 7 8 9a 9b 9c 10

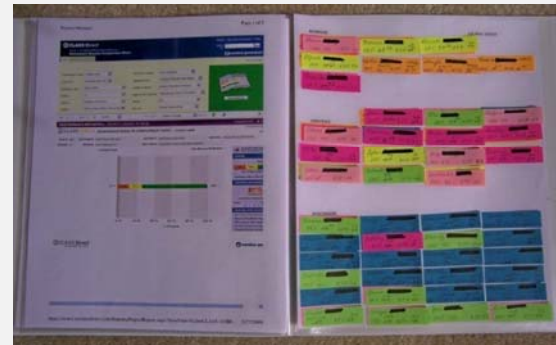
Data Boards



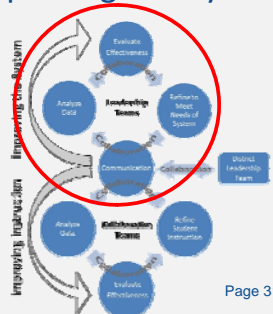
Data Folder



Data Notebook



Improving The System



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Setting Our Expectations

“The greater danger for most of us lies not in setting our aim too high and falling short; but in setting our aim too low, and achieving our mark.”

-Michelangelo



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Questions

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- Judy Rockley, judy@kansasmtss.org

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