Using Data to Make Decisions

A Presentation of RMC Research



PRESENTER: Lexie Domaradzki

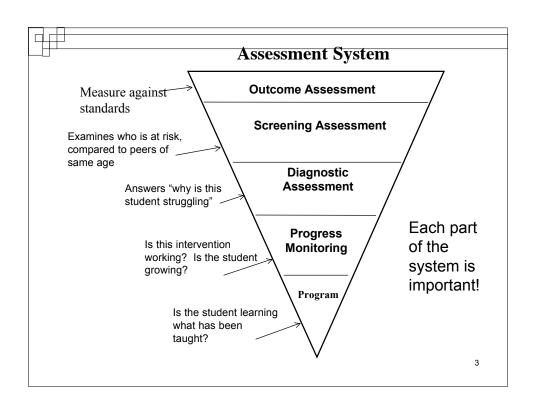
DATE: June 2, 2010

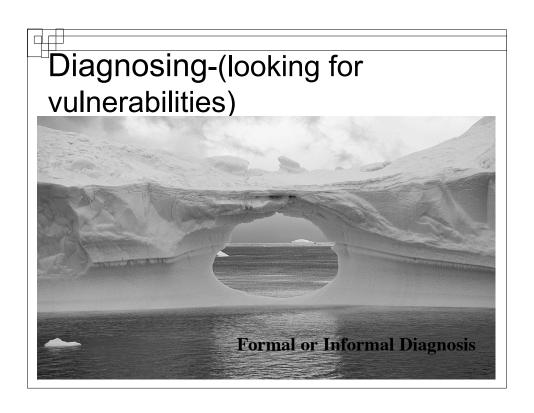


4

Goals for Session

- Increase skill with using Diagnostic measures
- Increase skill with understanding rate and accuracy issues
- Continue to build fluency with analyzing AIMSweb data





Schools Often Use Only Six Steps

- 1. <u>Establish an evidence-based core reading or language arts program</u> appropriate to student and teacher population. Use DATA to determine if the core programs are effective.
- Screen students and use DATA from screening assessment to identify those who may not be reading as well as expected for a grade level.
- 3. <u>Group students</u> with similar instructional needs based on the screening DATA.
- 4. Plan instruction based on DATA acquired during screening.
- 5. <u>Teach</u> students in small, homogenous groups. Use progress monitoring DATA to adjust instruction.
- 6. <u>Progress monitor</u> students and use DATA to adjust instruction accordingly.

Seven Steps to Achieve the Best Results

- Establish an evidence-based core reading or language arts program
 appropriate to student and teacher population. Use DATA to determine if the
 core programs are effective.
- Screen students and use DATA from screening assessment to identify those who may not be reading as well as expected for a grade level.
- 3. <u>Diagnose weaknesses</u> and use diagnostic assessment DATA to pinpoint the specific weaknesses of students identified during screening who are not performing as expected.
- Group students with similar instructional needs based on the screening and diagnostic DATA.
- 5. Plan instruction based on DATA acquired during screening and diagnosis.
- Teach students in small, homogenous groups. Use progress monitoring DATA to adjust instruction.
- 7. Progress monitor students and use DATA to adjust instruction accordingly.

Two Types of Diagnostic Assessments

Formal

- □ Administered by experts
- Given to students with significant and unexplained reading weaknesses
- Most often are normed and provide percentiles for each skill measured
- □ Often used to place students for special services
- □ Examples are: Woodcock-Johnson, GORT

Informal

- □ Do not have to be given by experts
- Provide information about strengths and weaknesses for specific skills
- □ Designed to be used to guide instruction
- □ Most often do not provide norms

Decoding Is Essential for Reading Comprehension at All Ages

- Assess decoding abilities first.
 - If students cannot decode well and easily, reading fluency and comprehension will be hindered even if the students have strong vocabularies and comprehension abilities.

Beginning Decoding Skills

- Beginning decoding skills include the ability to read words with:
 - □ short vowels
 - □digraphs
 - □ blends.
- The Beginning Decoding Survey also includes high frequency words that do not have short vowels.

Why Students in Higher Grades

Have Decoding Problems



High school students tell us what they did when they didn't know a word.

- Problems often don't show up until higher grades because students guessed successfully in the early grades when words are easy to guess.
- Older students experience less and less success with guessing as text becomes more difficult.

Appropriate Ages for the Beginning Decoding Survey

- Beginning Decoding Surveys are appropriate from the middle of first grade on.
- For all students, ALWAYS start with a Beginning Decoding Survey
 - ☐ Short vowels are a problem for many students of all ages who do not read proficiently.
 - ☐ The Beginning Decoding Survey will identify almost all short vowel difficulties.

What Do Your Students Do When They Don't Know How to Decode?

- Skip words
- Add words
- Misread vowels (bench for bunch)
- Guess based on context (mom for mother)
- Misread multi-syllabic words
- Misread or skip articles (*in, of, the, to, etc.*)

These errors will lead to comprehension mistakes not always, but sometimes.

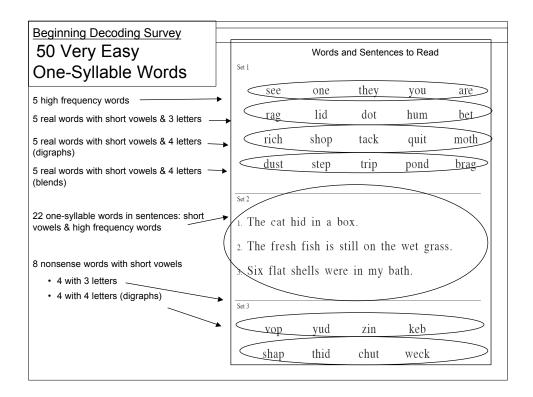
Digraphs and Blends

Digraphs are two letters that spell one sound.

- □ Common consonant digraphs on the Surveys:
 - sh s h e
 - ch ch a p
 - \blacksquare wh whip
 - \blacksquare th th en or thumb
 - ck back

Blends are two consonant letters together, each with its own sound.

- ☐ A few blends on the Surveys are:
 - st must, stop
 - tr-trap
 - nd b a <u>n</u> d
 - br <u>b</u> <u>r</u> a t



Error Types

Error types are listed at the top and bottom of the columns on the *Error Grid*.

No Try – Mark only when a student does not attempt to read a word.

Sight Word – Mark when a student misreads a sight word.

Sound Added or Omitted – Mark when a student attempts to read a word, but adds or omits a sound. This is a "guesser" column because students only add or omit sounds when they are guessing.

Initial Consonant – Mark when a student misreads or omits the initial consonant.

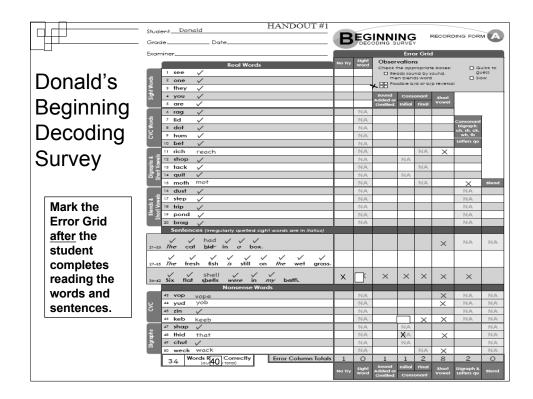
Final Consonant – Mark when a student misreads or omits the final consonant. This is a guesser column because students who are confused by the vowel often guess at the final consonant sounds.

Short Vowel – Mark when a student misreads a short vowel.

Consonant Digraph & qu – Mark when a student misreads or omits a digraph or qu.

Blend – Mark when a student misreads or omits reading any part of a blend.

No Try	Sight Word	Obser Check!	the app ads sou	9	ukik to meta ow		
866		sound Added or Omitted	-	onant	Short		
		Omitted	Initial	final	Vowel		
1000	NA.	0.000			0.000		1
	NA					Consonant	1
10000	NA.	100000	2000	2000	44000	Digraph: ch, sh, ck, wh, th	l
	NA.					wh, m Letters qu	1
00000	NA NA	44000		NA			
	NA.		NA	NA			-
00000	NA NA	440000	NA	NA	44000		1
	NA.		NA	NA			_
000000	NA	Late Control	COMPAC	NA	.4400	250000000000000000000000000000000000000	Blend
	NA.			1975			
	NA					NA.	NA
	NA		NA				NA
	NA		NA				NA
	NA		NA				NA
	NA			NA			NA
No Try	Sight Word	Sound Added or Omitted	Irifici Com	Final	Short Vowel	Digroph & Letters qu	Mend



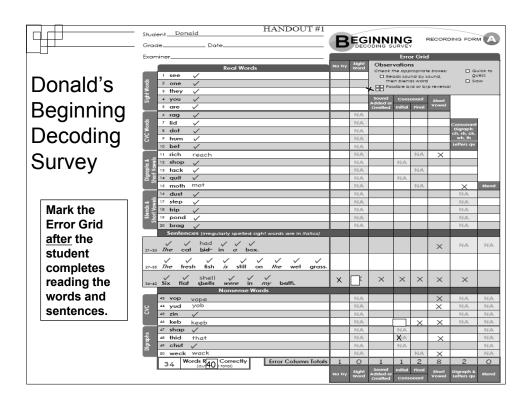
What Do We Know about Donald?

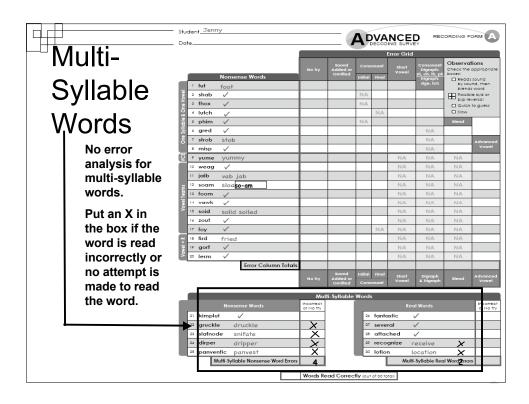
Strengths

- ☐ He reads beginning and ending consonants, blends, and digraphs well.
- □ He reads real words quite accurately. (Missed one vowel: read *reach* for *rich*.)

Weaknesses

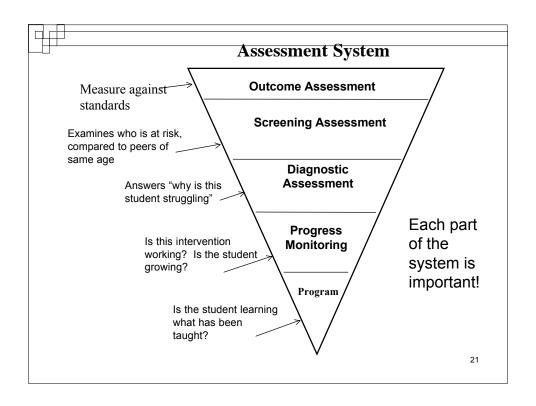
- ☐ Short vowels are his most basic difficulty.
- $\hfill\Box$ He guesses when he reads even very simple sentences.
- ☐ His lack of ability to read nonsense words tells us he does not understand basic letter-sound correspondences, especially with vowels.





Secondary Reading System

- What steps should be taken to assess reading skills in older students?
 - ☐ How do we use the Assessment triangle to help us know where to start?
 - ☐ How can we be efficient with assess at risk students?
 - ☐ How do we really find the root cause of our Secondary students reading difficulty?



Secondary Reading System

- Identify students at risk:
 - □ State outcome assessment
 - □ Program/district assessments
 - ☐ Give students a Grade Level Fluency assessment
- Give students who did not score well a fluency assessment 2-3 grades below grade level
- Give students who didn't meet the target a diagnostic assessment

	ning for Secondary Students	Target Fall 127 weem	4
Student Names	6th Grade score		┸
Janie	78		
Marcus	135		
Sunshine	93		
Roy	110		Т
Johnathen	104		
Daisy	57		
Lola	111		Т
James	99		Т
Roger	43		
Brandon	102		Т
Jamila	152		T
Susan	147		T
Franklin	94		T
Walter	101		Т
Betsy	121		T
Kerny	134		T
	ning for Secondary Students	Target-Fall 95 wcgm	
Student Names	6th Grade score	3rd Grade Score	┸
Jamila	152		
Susan	147		
Marcus	135		8
Kerry	134		3
Betsy	121		8
Lola	111	126	
Roy	110	137	
Johnathon	104	118	
Brandon	102	126	
Walter	101	104	
James	99	100	
		102	
Franklin	94	102	
	94	96	8
Franklin		·	H
Franklin Sunshine	93	96 82 73	
Franklin Sunshine Janie	93 78	96 82	

New Research Findings!!!!

Pay Attention to Accuracy Percentage as an Indicator of Reading Competency

A new study, presented at the 2008 DIBELS Summit, by Marcia Davidson and colleagues indicates that accuracy may be as important or more important then WCPM as a predictor of reading abilities.



Calculating Accuracy

Percentage

- To calculate Accuracy Percentage:
 - □ Divide WCPM by total words attempted.

■ Example:

- ☐ Susan attempts 100 words, makes 4 errors, and has a score of 96 WCPM.
- \Box 96 ÷ 100 = 0.96 or 96% accuracy percentage

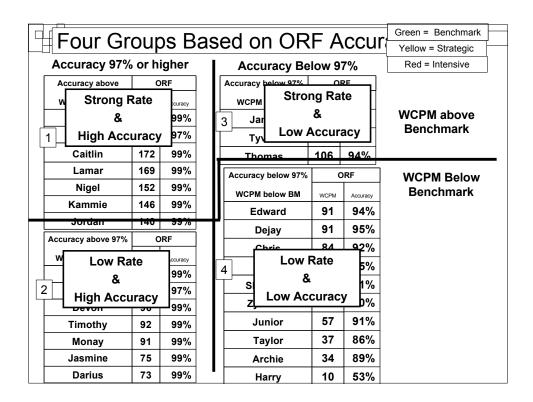
Recommended Accuracy Benchmarks End-of-Year Grade-Level Materials

	Time of Year						
Grade	Beginning	Middle	End				
1	NA	80%	90%				
2	92%	95%	97%				

Until more research is conducted on accuracy percentage, consider using the accuracy benchmarks above as part of oral reading fluency screening data.

Students who do not meet *BOTH* the WCPM and Accuracy Percentage benchmarks should be diagnosed for specific weaknesses that are the cause of the student not meeting benchmark.

The benchmarks are based on the Davidson study and on experience of the authors of the Diagnostic Decoding Surveys.



What Do Screening Data Tell Us?

- WCPM and accuracy scores below benchmark, screening data <u>indicate</u> that a student might not be reading well enough to have strong comprehension.
- Screening data answer the question: "Is the student reading with appropriate rate and accuracy to indicate adequate comprehension?"

THE						
		Re			nter 2009-2010 n Based Measuremer	nt
ID	Name	Corrects	Errors	Accuracy	Performance Summary	Potential Instructional Action
134612	H	175.0	1.0	99.4%	Established	Continue Current Program
				Target	t = 132.0	
				Establish	ed >= 131.1	
163619	125_10.00	131.0	4.0	97.0%	Nearly Established	Continue Current Program and Differentiate Instruction
134625		122.0	4.0	96.8%	Nearly Established	Continue Current Program and Differentiate Instruction
134622		118.0	2.0	98.3%	Nearly Established	Continue Current Program and Differentiate Instruction
134623	<u> </u>	118.0	2.0	98.3%	Nearly Established	Continue Current Program and Differentiate Instruction
134621		111.0	1.0	99.1%	Nearly Established	Continue Current Program and Differentiate Instruction
138504		103.0	2.0	98.1%	Nearly Established	Continue Current Program and Differentiate Instruction
163620		83.0	0.0	100.0%	Nearly Established	Continue Current Program and Differentiate Instruction
138505		81.0	5.0	94.2%	Nearly Established	Continue Current Program and Differentiate Instruction
			N	early Estab	olished >= 76.1	
134618	Ĺ ·	73.0	3.0	96.1%	Emerging	Further Assess and Consider More Intensive Instruction
138506		72.0	0.0	100.0%	Emerging	Further Assess and Consider More Intensive Instruction
138509		71.0	5.0	93.4%	Emerging	Further Assess and Consider More Intensive Instruction
134624		69.0	3.0	95.8%	Emerging	Further Assess and Consider More Intensive Instruction

D Name	
220062 57.0 Established Continue Current Progression	Action
221450 56.0 Established Continue Current Progression	ram
221440 56.0 Established Continue Current Program 222879 54.0 Established Continue Current Program 224942 53.0 Established Continue Current Program Target = 49.0 Established >= 47.1 221442 47.0 Emerging Further Assess and Consider Management 213037 47.0 Emerging Further Assess and Consider Management 221453 46.0 Emerging Further Assess and Consider Management 221439 44.0 Emerging Further Assess and Consider Management 237379 41.0 Emerging Further Assess and Consider Management 221444 41.0 Emerging Further Assess and Consider Management 221444 41.0 Emerging Further Assess and Consider Management 221444 41.0 Emerging Further Assess and Consider Management 221447 38.0 Deficient Begin Immediate Problem	ram
222879 54.0 Established Continue Current Program 224942 53.0 Established Continue Current Program Target = 49.0 Established >= 47.1 221442 47.0 Emerging Further Assess and Consider Manstruction 213037 47.0 Emerging Further Assess and Consider Manstruction 221453 46.0 Emerging Further Assess and Consider Manstruction 221439 44.0 Emerging Further Assess and Consider Manstruction 237379 41.0 Emerging Further Assess and Consider Manstruction 221444 41.0 Emerging Further Assess and Consider Manstruction Emerging >= 38.1 Emerging >= 38.1 224447 38.0 Deficient Begin Immediate Problem	ram
224942 53.0 Established Continue Current Program	ram
Target = 49.0	ram
Established >= 47.1	ram
221442 47.0 Emerging Further Assess and Consider Matruction 213037 47.0 Emerging Further Assess and Consider Matruction 221453 46.0 Emerging Further Assess and Consider Matruction 221439 44.0 Emerging Further Assess and Consider Matruction 237379 41.0 Emerging Further Assess and Consider Matruction 221444 41.0 Emerging Further Assess and Consider Matruction Emerging Further Assess and Consider Matruction Instruction 221444 38.0 Deficient Begin Immediate Problem	
221442 47.0 Emerging Instruction 213037 47.0 Emerging Further Assess and Consider Manager 221453 46.0 Emerging Further Assess and Consider Manager 221439 44.0 Emerging Further Assess and Consider Manager 237379 41.0 Emerging Further Assess and Consider Manager 221444 41.0 Emerging Further Assess and Consider Manager Instruction Instruction 224447 38.0 Deficient Begin Immediate Problem	
221453	lore Intensive
221453 46.0 Emerging Instruction 221439 44.0 Emerging Further Assess and Consider Management 237379 41.0 Emerging Further Assess and Consider Management 221444 41.0 Emerging Further Assess and Consider Management 222444 41.0 Emerging Further Assess and Consider Management 224447 38.0 Deficient Begin Immediate Problem	lore Intensive
221439 44.0 Emerging Instruction 237379 - 41.0 Emerging Further Assess and Consider M Instruction 221444 - 41.0 Emerging Further Assess and Consider M Instruction Emerging >= 38.1 224447 38.0 Deficient Begin Immediate Problem	lore Intensive
23/379 41.0 Emerging Instruction 221444 - 41.0 Emerging Further Assess and Consider Management Emerging >= 38.1 224447 38.0 Deficient Begin Immediate Problem	lore Intensive
221444	lore Intensive
224447 38.0 Deficient Begin Immediate Problem	lore Intensive
221449 37.0 Deficient Begin Immediate Problem	Solving
	Solving
222184 35.0 Deficient Begin Immediate Problem	Solving
222262 31.0 Deficient Begin Immediate Problem	Solving

NWF Accuracy

age 3

These are sample Nonsense Word Fluency (NWF) Assessments given in the Fall of First Grade. Jaycob, on the left, attempted to "blend" many of his nonsense words (denoted by the solid line drawn underneath). However, what observations do you make about his Accuracy % and error patterns? Raquel's test, on the right, shows that she was reading sound-by-sound (short line under each letter). The rate scores for these two students are similar, but what support is indicated for each of these students?

	First	Grade	e tall	- Jaye	ob
	DIBEI	S TM Nonsen	<u>nark I</u> ise Word Flu	ency	
d	DIDE.	110110011	3	-	a
N K	d o-j	i k	VMS	n x k	8/14
и 1	z & 1	fgg	wuj	h i z	10/14
ı i n	røs	k M K	jAf	d y z	10/15
`a j	a d	k e d	ig	e l	/12
ој	e t	yat	o l	t o v	/13
u f	ral	ер	k a b	vif	/13
: i c	dev	dop	zac	d o c	/15
: i 'k	s i j	zoj	mig	z u t	/15
fоj	i b	jud	zek	v o v	/14
· u z	huf	s i b	a k	јес	/14
			43-15	5 ⊂ Total:	_Z8
				à	

Accuracy: 65% (28:43)

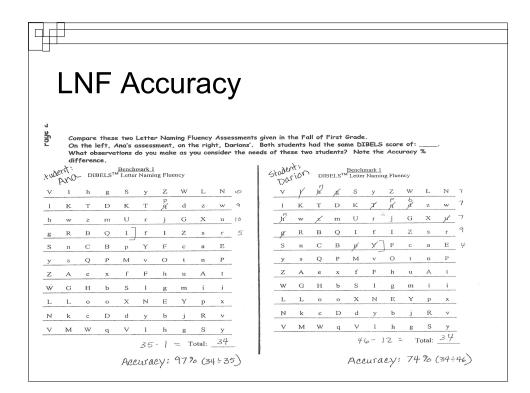
First Grade Fall - Raquel

Benchmark I

DIBELSTM Nonsense Word Fluency

w u b u l	doj zel	<u>i k</u> f <u>e</u> b	v <u>us</u> wūj	$\frac{n}{h}\frac{u}{z}$	14/14
min	ros	kub	jaf	d u z	/15
faj	a d	k e d	i g	e l	/12
loj	e t	yat	o l	t o v	/13
u f	r a l	ер	kab	v i f	/13
tic	dev	dop	гас	doc	/15
t i k	s i j	zoj	mig	z u t	/15
fоj	iЬ	jud	z e k	v o v	/14
ruz	huf	sib	a k	јес	/14
			28-1	= Total:	27

Accuracy: 96% (27:28)



AIMSweb- different ways to examine performance ...



Local Norms and Criterion Reference

- There are ways to look at both Local Norms and Criterion Norms
- Norm reference -examine student performance compared to others in the community (local)
- Criterion Reference -examines student performance compared to others in the large norming group (national)

AIMSweb Growth Table Grade 1- PSF

Phoneme Segmentation Fluency 2008-2009 School Year

		Fall		Winter		Spring		
Grade	%IIe	Num	PC	Num	PC	Num	PC	ROI
	90		62/57		79 / 67		69 /71	0.2 / 0.4
	75		62 / 48		80 / 58		62/63	0.3 / 0.4
	50		34/38		49 / 49		68/53	0.5 / 0.4
1	25	22 / 479498	12/25	20 / 460314	29 / 38	17 / 273173	48/44	1.0 / 0.5
	10		0/9		7/27		39/35	1.8 / 0.7
	Mean		33/36		46 / 47		55 /53	
	StdDev		25/18		27 / 16		12 /15	

Num = Number of Students PC = Phonemes Correct ROI = Rate Of Improvement ROI is Spring Score minus Pail Score (or Winter minus Pail) divided by 36 weeks (or 18 weeks)

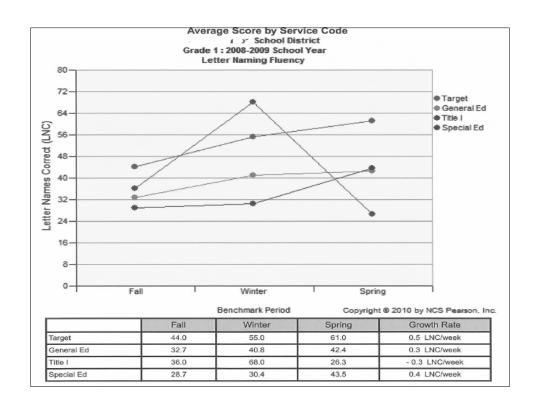
Targets-AIMSweb Growth Targets

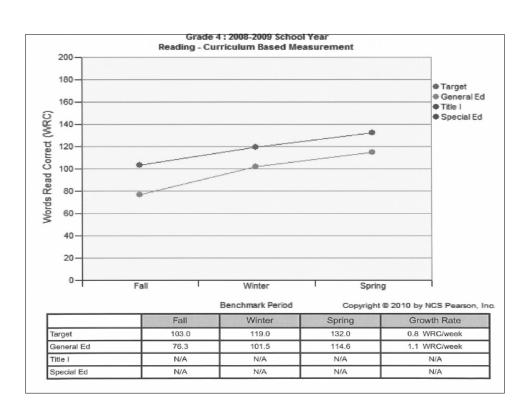
		Fall		Winter		Spring		
Grade	%lle	Num	WRC	Num	WRC	Num	WRC	ROI
F	90		18 / 64		41/92		71 / 118	1.6 / 1.5
	75		7/29		27 / 59		68/91	1.4 / 1.7
	50		5/12		16/30	l .	29 / 61	0.7 / 1.4
1	25	72 / 124908	1/5	144 / 508888	3 / 16	141 / 521951	11 / 35	0.3 / 0.8
	10		0/1		0/9		2 / 19	0.0 / 0.5
	Mean		6/23		18 / 42		34 /66	
	StdDev		8/29	17 / 34	17 / 34		26 /39	
	90		65 / 110	_	82 / 136		119 / 152	1.5 / 1.2
I	75		47 / 85		72 / 111		89 / 128	1.2/1.2
	50		20 / 60		42 / 85	160 / 511518	60 / 102	1.1/1.2
2	25	162 / 481015	8/31	167 / 487868	17/61		28/76	0.8/1.3
	10		0 / 15		2/32		0 / 53	0.1 / 1.1
	Mean		28 /61		46 / 86		60 /102	
	StdDev		28/37		34/39		41 /40	
	90		84 / 138		104 / 157		127 / 174	0.9 / 1.0
	75		65 / 111		85 / 134		102 / 147	1.0 / 1.0
_	50	1	40 / 83	l	64 / 105		73 / 120	0.9 / 1.0
3	25	173 / 452182	14 / 54	172 / 452331	24/78	173 / 472264	33/91	0.6 / 1.0
	10		0/34		5/49		9 / 62	0.2 / 0.8
	Mean		45 /84		56 / 105		69 /119	
	StdDev		36 /40		37 / 42		43 /43	
	90		106 / 154		120 / 172		132 / 189	0.8 / 1.0
I	75		90 / 128		107 / 146	l	118 / 162	0.7 / 0.9
	50		68 / 103		81 / 119	l	83 / 132	0.7 / 0.8
4	25	180 / 355764	48 / 78	172 / 367331	67 / 95	172 / 368074	70 / 105	0.6 / 0.8
I	10		28 / 54		33 / 69	l	43 / 80	0.6 / 0.7
I	Mean		68/104		80 / 120	l	91 /133	
	StdDev	ium = Number of 3	31/39		34 / 41		35 /43	



Improvement Report

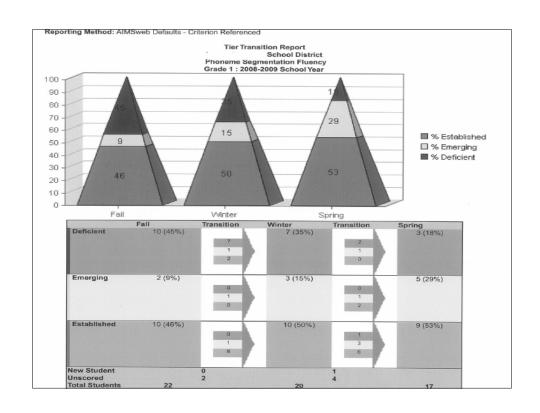
- Examines Rate of Improvement over course of year
- Examines local growth compared to national growth expectations
- Examines sub groups as well as General Ed

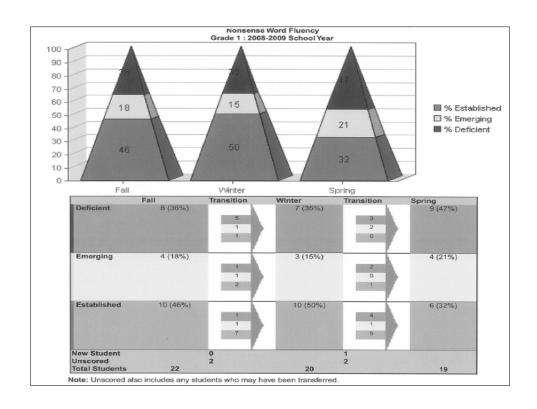


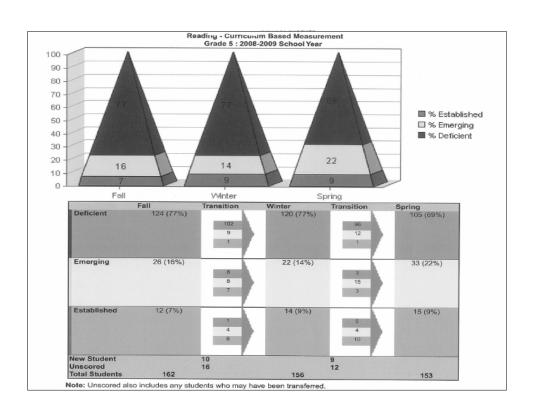


Tier Transition Report

- This report tells you ...
 - □ Data on One subskill at a time
 - □What percent of students were Well Below, Below, Average, Above Average, Well Above Average
 - ☐ Movement from one category to another from Fall to Winter, Winter to Spring







Morning wrap up



Quote ...

"There are no secrets to success.
It is the result of preparation,
hard work, and learning from
failure"

Colin Powell



#

Thank you

Lexie Domaradzki
Research Associate
RMC Research Corporation
Portland Oregon Office

Idomaradzki@rmccorp.com