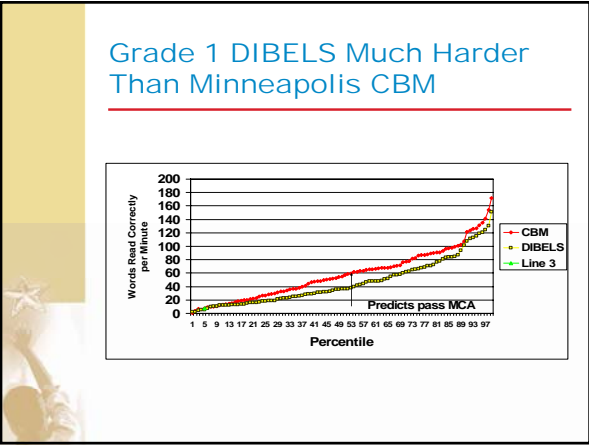




Not All Curriculum-Based Measures Are Created Equal (Grade 1 MPS-CBM vs. DIBELS)

	Words Correct Per Minute (wcpms)	DIBELS oral reading
Valid	193	193
Missing	0	0
Mean	58.89637	46.47668
Median	55	37



- ### In Order to Set Grade Level Benchmarks You Need:
- A good state test that actually measures reading.
 - Reliable curriculum-based measures which are calibrated to be equally difficult across each passage and time period. (i.e. employing standardized procedures by trained staff)
 - At least 60 students per grade level (preferably 100) who have taken the CBM measures and the State Test

For Example: Read Naturally Benchmark and Progress Monitoring Passages With the MCA Minnesota Comprehensive Assessments

- Does the State Test measure reading?
 - MCA in Grade 3 measures reading comprehension and vocabulary:
 - Correlation with NWEA levels test = .864
 - MCA and CBM Correlations (n = 1792 students)
 - Correlation with 3rd grade CBM fall = .733
 - Correlation with 3rd grade CBM winter = .746
 - Correlation with 3rd grade CBM spring = .739

Measuring Within a Fluency Program

- Show Read Naturally CD

Progress Monitoring Passages Aligned With Benchmark Assessments

Grade	Passage Name	Difficulty*	Benchmark Correlation	Other Monitoring Passage Correlation
1	I Like Fall—Revised	-2.1	.97	.98
1	Pets	1.8	.95	.95
1	My Big Sister Revised 1	-2.1	.95	.92
1	Jill's First Bike	0.5	.94	.92
1	Meg's Race	-.9	.99	.99
1	Colors	.6	.98	.99
1	My Baby Sister	1.0	.98	.99
1	My New Puppy	-1.9	.97	.95
1	Pennies for Pine Cones	-4.0	.96	.96
1	My Camera	2.4	.96	.97
1	Art	3.9	.98	.97
1	Pigs	-5.1	.91	.94
1	Sugar Cookies	-.8	.94	.94
1	Grandpa	-4.1	.97	.96
1	Bubble Gum	-2.8	.96	.97
1	Making Lunch	-2.3	.95	.95

Reliability of Read Naturally Benchmark Assessments (Stability Across Time)

Grade	N	Fall to Winter	Winter to Spring	Fall to Spring
1	69	.88	.88	.78
2	70	.86	.92	.82
3	98	.92	.92	.88
4	101	.91	.94	.90
5	110	.90	.83	.85
6	98	.87	.84	.87
7	82	.91	.91	.92

Calibrated Difficulty

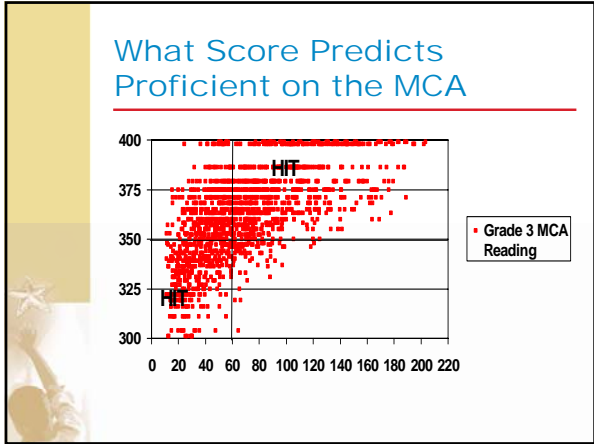
Grade	Number of studies	Passage A – Passage B	Passage A – Passage C	Passage B – Passage C
1	3	-1.9	-2.1	+.2
2	3	.4	2.0	-1.6
3	3	.4	-2.3	2.7
4	3	1.4	-.4	1.8
5	3	1.5	2.5	-1.0
6	3	-2.7	0	-2.7
7	4	5.5	5.8	-.3
8	3	1.1	-3.1	4.2

What Does a Correlation Look Like on a Scatter-Plot?

Grade 3 MCA Reading

Linear (Grade 3 MCA Reading)

$R = 0.64$



What Does the "Hit Rate" Table Look Like?

Classification Results^a

	Proficient on MCA Grade 3 Reading	Predicted Group Membership		Total
		.00	1.00	
Original Count	.00	343	66	409
	1.00	361	696	1057
Ungrouped cases		0	3	3
%	.00	83.9	16.1	100.0
	1.00	34.2	65.8	100.0
Ungrouped cases		.0	100.0	100.0

a. 70.9% of original grouped cases correctly classified.

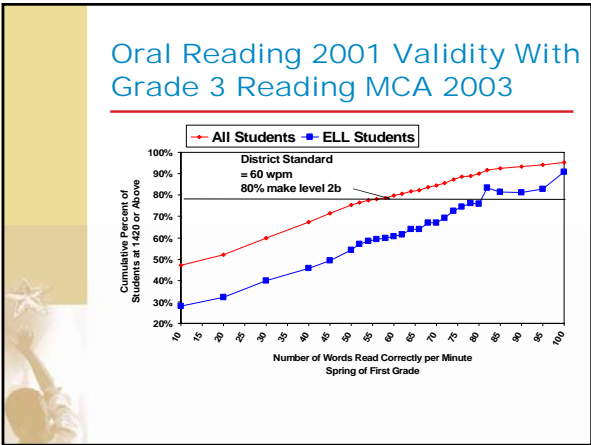
Equipercentile Linking Example: Grade 3

Statistics

	FallWPM	WinterWPM	SpringWPM	2005 MCA Scale Scores - Reading
N	1526	1526	1526	1526
Valid	0	0	0	0
Missing	45.15	70.10	90.74	1447.01
Mean	35.00	63.00	68.50	140.00
Median				
Percentiles 1	.00	4.27	9.00	975.40
2	.00	7.00	15.54	1010.00
19	15.00	29.13	49.00	1250.00
20	15.00	31.00	50.00	1250.00
21	16.00	32.00	52.00	1260.00
22	16.00	33.00	53.94	1260.00
23	17.00	34.00	55.00	1270.00
24	17.48	35.00	56.00	1280.00
25	18.00	36.00	57.00	1280.00
26	19.00	37.00	58.00	1300.00
27	20.00	38.00	59.00	1300.00
28	20.00	38.00	60.56	1310.00
29	21.00	39.00	62.00	1320.00
30	21.00	41.00	63.00	1320.00
31	22.00	42.17	64.00	1340.00
32	22.00	44.00	65.00	1340.00
33	23.00	45.00	66.00	1350.00
34	23.00	46.00	67.00	1350.00
35	24.00	47.00	68.00	1360.00
36	25.00	48.00	69.00	1360.00
37	26.00	49.00	70.00	1370.00
38	26.00	50.00	72.00	1380.00
39	27.00	51.00	72.00	1390.00
40	28.00	53.00	73.00	1390.00
41	28.00	54.00	75.00	1400.00
42	29.00	55.00	76.34	1410.00
43	29.00	56.61	78.00	1420.00
44	30.00	58.00	78.00	1430.00
45	31.00	59.00	79.15	1430.00
46	31.00	60.00	81.42	1430.00
47	32.00	61.00	83.00	1430.00

How to Find the Cut Score

- 1) Discriminant Function (moving the bar up and down the scale and calculating the hit rate)
- 2) Equipercentile (use SPSS or do by hand)
 - Use only student with both CBM and State test scores
 - Put the scores in order for both CBM and State test right next to each other in long columns
 - Find the state score
 - CBM score next to it is the cut score



2007 Summer Institute


on Student Progress Monitoring

Beginning of Kindergarten Assessment (BKA) Alignment to State Standards

Student Achievement Institute | IREAD in Work | Educational Technology and Research


Literacy Items on the BKA

- Includes:
 - Picture vocabulary
 - Oral comprehension
 - Letter names
 - Letter sounds
 - Rhyming
 - Alliteration (initial sounds)
 - Concepts of Print
 - Total Composite Score



BKA Predicts Reading Well by Grade 3 (3 and ½ Years Later!)

- Correlation between BKA composite and NALT Grade 3 Reading= .67
- Correlation between BKA composite and MCA Grade 3 Reading= .61
- A BKA composite score of 85 or higher predicts with 75% accuracy that students will score at level 3 (1420) on the MCA Reading in 3rd grade





2007
Summer Institute
on Student Progress Monitoring

BKA & EKA to 1st Grade OR

Data Utilized:
Kindergarten from SY0102
OR from SY0203
NALT from SY0304





End of Kindergarten Correlated With First Grade Oral Reading

	1st Grade Oral Reading	1st Grade Reading Comprehension
EKA Early Literacy Composite	.80**	.66**
EKA Verbal Literacy	.73**	.63**
EKA Quantitative Literacy	.45**	.49**
EKA Concepts of Print	.40**	.42**
EKA Oral Fluency	.73**	.49**

** . Correlation is significant at the 0.01 level (2-tailed).

End of Kindergarten Predicting 2nd Grade Computer Adaptive Levels Tests

	2nd Grade NALT Reading	2nd Grade NALT Math
Early Literacy Composite	.66**	.60**
Verbal Literacy	.62**	.56**
Quantitative Literacy	.50**	.44**
Concepts of Print	.44**	.40**
Oral Fluency	.51**	.47**

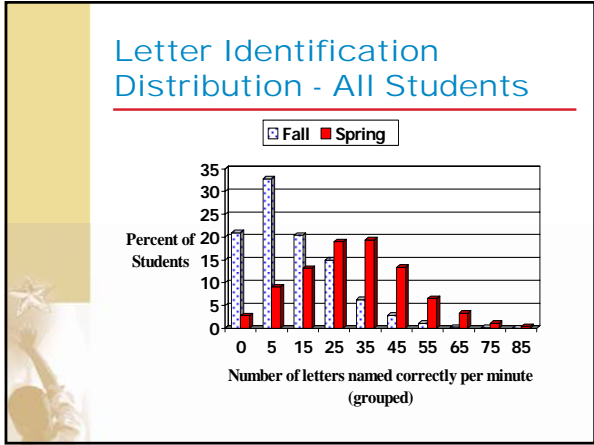
** . Correlation is significant at the 0.01 level (2-tailed).

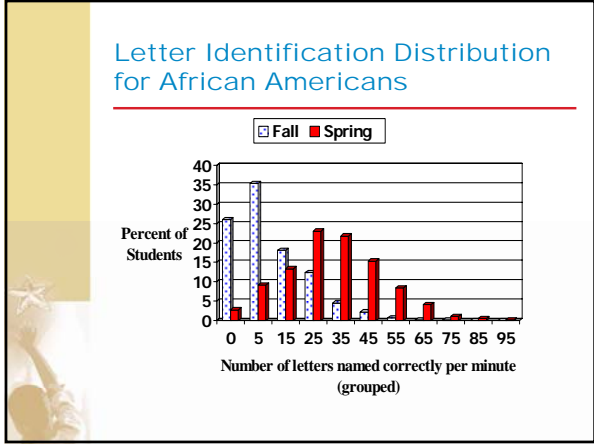
Individual Growth and Development Indicators (IGDIs) for Ages 3-5

- Developed at the University of Minnesota by Dr. Scott McConnel (smcconne@umn.edu) and Dr. Mary McEvoy
- In the public domain and can be found at <http://ici2.coled.umn.edu/ecri/>

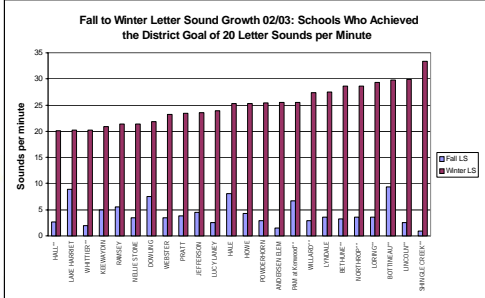
IGDI Example: Alliteration (2 minutes)

- **Training**
 - "We're going to look at some pictures and find the ones that start with the same sound."
 - "Listen to me. I'm going to say the names of these pictures, and find 2 that start with the same sound." Point to and name **d-door, d-dice**
- **Sample Items**
 - "Now lets do one together. First, it's my turn."
 - **Hold Sample 2 in front of the child, Point to the one that starts with the same sound as h-hat.**
- **Test Administration**
 - "Now let's do some more..."





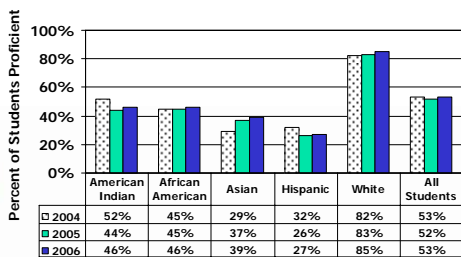
Winter Kindergarten Assessment Results



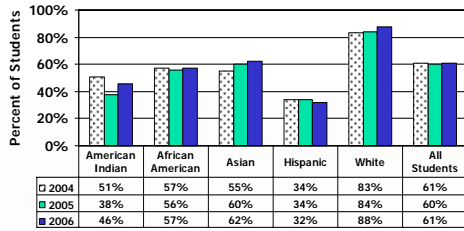
District Level Reports on Early Literacy Gaps and Progress

- Go live to: <http://rea.mpls.k12.mn.us/>

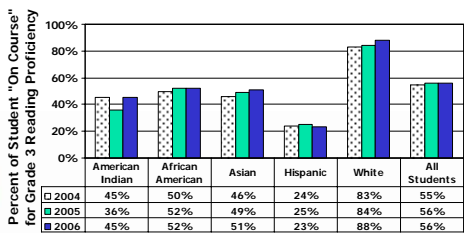
Beginning of Kindergarten Phonemic Awareness Proficiency Trends



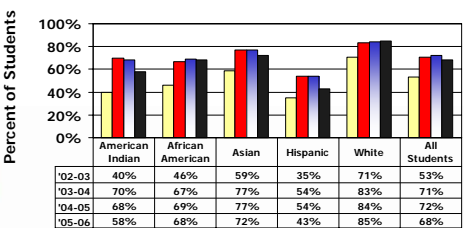
Beginning of Kindergarten Alphabetic Principle Proficiency Trends



Beginning of Kindergarten Total Literacy Proficiency Trends




End of Kindergarten Percent of Students Reading at Least 10 Words per Minute




Three Main Purposes for Value-Added Analysis in Minneapolis Public Schools

- Rewarding schools, teams and individual teachers that show exceptional improvement in achievement
- Identifying instructional strategies employed by “beat the odds teachers” to inform staff development
- Assigning “beat the odds teachers” to high-need schools (not yet)




The MPS Value-Added Model

- End of Kindergarten Reading Fluency =
 - Beginning of Kindergarten Total Literacy +
 - Special Education status +
 - English Language Learner status +
 - Age group +
 - Gender +
 - Racial/Ethnic Status +
 - Free or reduced lunch status +
 - Kindergarten Teacher effects




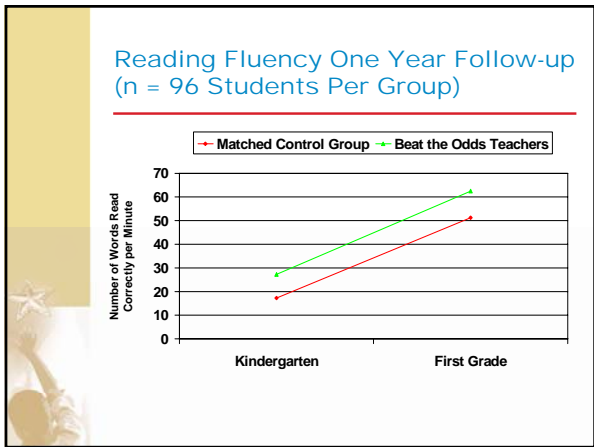
Kindergarten Teachers Who Beat the Odds

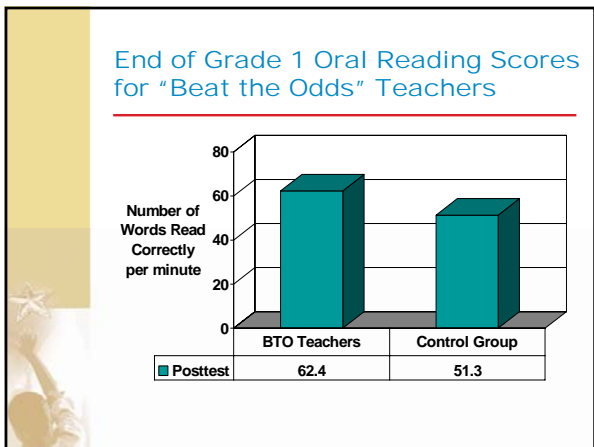
- Teachers were identified empirically using value-added analysis
 - End of Kindergarten Assessment Results as predicted from Beginning of Kindergarten, Poverty, ELL, Special Education, Gender, Age, and Racial/Ethnic background.
 - Ten top teachers were interviewed and video taped
 - These teachers worked last summer to produce an early literacy instruction video tape

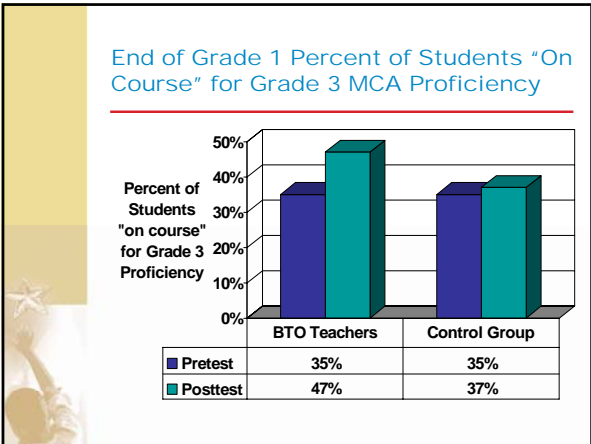


See Video Clips









Teacher Videos Are Online at <http://rea.mpls.k12.mn.us/>

Beat the Odds Teachers!

Marie Olson: Lyndale	Michele Fisher: Hall	Carolyn Bergstrom: Shingle Creek
Anna Willams: Shingle Creek	Tim Yurecko: Lucy Laney	Monica Trent: Lyndale and Whittier
Melissa (Schroeder) Burns: Kenwood	Mary Ann Theisen: Lincoln	Penny Helvey: Lincoln

Using CBM Benchmark Assessments to Identify Exceptional Teachers/ Exceptional Instruction

- See instructional CD
