



Development and Validation of the Bloomington Early Kindergarten Assessment (EKA)

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Initial Discussion and Design

May 23, 2001- Kindergarten teachers met to discuss the feasibility of developing a kindergarten assessment for district-wide use.

- Many kindergarten teachers already use some kind of individualized screening tool in the beginning of the school year.
- These screening tools typically include early literacy measures (i.e., letter recognition, letter names, word recognition, etc.) and early math concepts (i.e., shape names, number identification, counting, etc.)
- Most of the time, these assessments are completed by the teacher within the first few weeks of school, and are conducted one-on-one while other students are engaged in play time.

Initial Discussion and Design

While these individual screening tools provide useful information to the teacher, the group also believed there would be additional value in using a common, district-wide instrument.

- A common information source for students who may move from building to building
- Having a familiar assessment tool for teachers who may move from building to building
- Ease of training for teachers new to the district or to the grade
- A consistent baseline of information over time
- The ability to conduct well-controlled, district program evaluations

Structure of the EKA

- Literacy Concepts
 - Writing Name
 - Letter Recognition (Upper and Lower)
 - Sound Recognition
 - Concepts of Print
 - Phonemic Awareness
 - Rhyming Words
 - Beginning Sounds
 - Sight Words
 - Fluency

Structure of the EKA

- Math Concepts
 - Number Counting
 - Colors
 - Shapes
 - Counting Objects
 - Patterns
 - Number Recognition

2004 EKA Results by Ethnicity

Group	2003 Percent	2004 Percent	Reading Score	Math Score
Am. Indian	1%	<1%	44.5	50.8
Asian	10%	9%	54.7	51.5
Hispanic	8%	10%	42.5	41.4
Black	14%	15%	48.6	49.0
White	67%	66%	53.5	53.7

Comparison of Kindergarten and CALT Results Two Years Later by Ethnic Group

Ethnic Group	Percent Stability	Mean EKA Reading Score 2002	Mean Reading CALT 2004	02-04 Reading Gain *
Am. Indian	50%	49.4	47.5	-.12
Asian	80%	49.2	49.5	.02
Hispanic	55%	39.7	44.4	.40
Black	42%	49.1	45.8	-.33
White	84%	51.2	51.1	.00

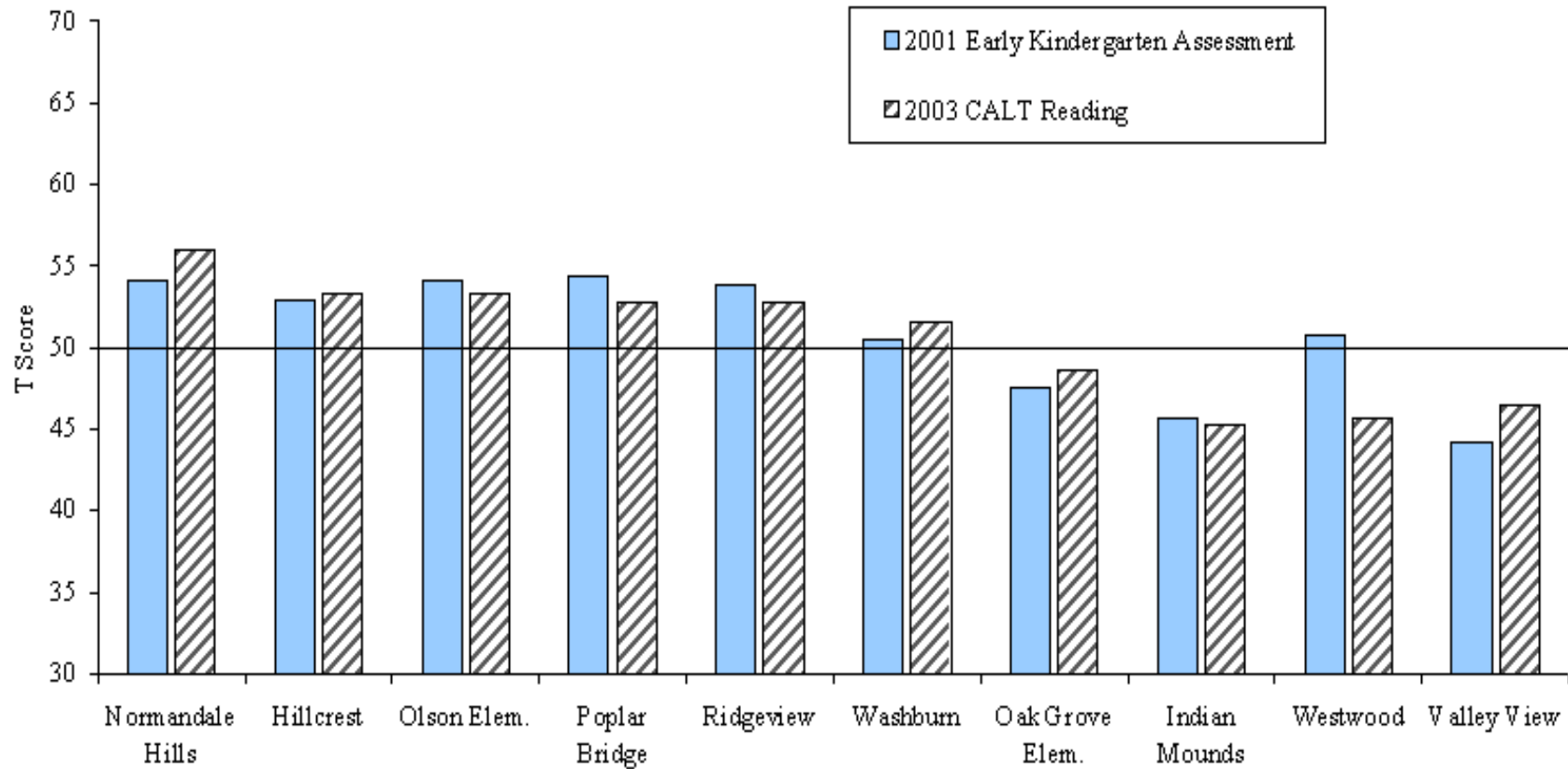
* This number is the average change in standard deviation units from the student's score in Kindergarten to the Reading CALT score in Fall Grade 2. Positive numbers mean the students increased relative to the mean from Kindergarten.

Correlations for EKA

	Sp. Gr K Reading Report Card	Sp. Gr 1 Reading Report Card	Fall Gr 2 NWEA Reading	Sp. Gr 2 NWEA Reading	Sp. Gr 3 MCA Reading
Fall EKA Total Reading	.61	.58	.57	.53	.51
Sp. Gr K Reading Report Card		.73	.58	.59	.53
Sp. Gr 1 Reading Report Card			.74	.72	.61
Fall Gr 2 NWEA Reading				.76	.74
Sp. Gr 2 NWEA Reading					.77

Source: BPS 2006 – 2010 Data. N = 654. All correlations significant at the 0.01 level (2-tailed).

School Level Means



Source: BPS 2001 – 2003 Data. N = 598

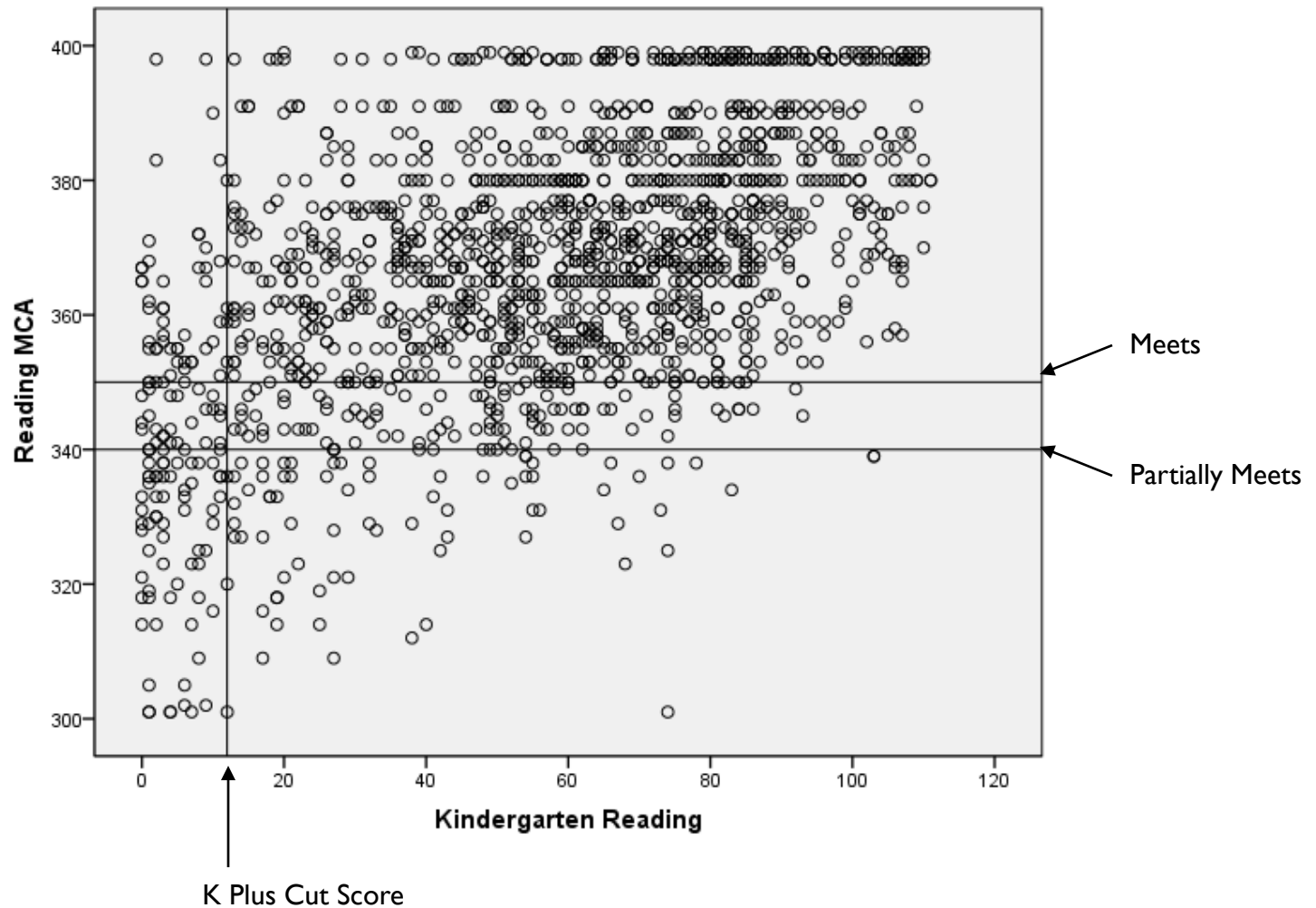
3rd Grade Reading Performance by Kindergarten Proficiency for Two Measures

Grade 3 Reading MCA	K Proficient		K Not Proficient	
	WSS 75% Standard	Bloomington EKA	WSS 75% Standard	Bloomington EKA
Not Met or Partially Met	14%	4%	33%	36%
Meets or Exceeds	86%	96%	67%	64%

False Positives

False Negatives

Scatter Plot of EKA Reading and Gr. 3 MCA Reading (N=1608)



Kindergarten Benchmarks

	Letter ID Upper Case	Letter ID Lower Case	Beginning Sounds	Sight Words	Total EKA Reading
Prior Spring	8	4	2	0	13
Fall	13	9	4	0	32

Distinguishing Features

- Fall District Norms
 - 2002 in year 2 based on combined '01 and '02
- Collection of Results into Data Warehouse
- Used as part of Rtl Multiple Measures Benchmark
- Reported as one of district's Success Measures for Strategic Plan



Student Data Warehouse (SDS)

Success Measure – “Ready to Learn”

Beginning Kindergarten Percent meeting both Reading and Math R-T-L target					
Ethnic Group	Meets Reading	Meets Math	Meets Both	Ready to Learn Gap-2011	Ready to Learn Gap-2010
Caucasian	95.5	95.5	94.1	27.6	24.4
Hispanic/Black	73.8	71.1	66.5		
Total	87.8	87.2	84.5		