An Analysis of Norms for Early Reading CBMs

NCME – 2014 Philadelphia, PA

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Our Querr Lingo

When the English Tongue we speak
Why is *break* not rimed with *freak?*
Will you tell me why it's true
We say *sew*, but likewise *few?*
And the maker of a verse
Cannot rime his *horse* with *worse*?
Beard sounds not the same as *heard*;
Cord is different from *word*;
Cow is *cow* but *low* is *low*;
Shoe is never rimed with *foe*.
Think of *hose* and *dose* and *lose*;

And think of *goose* and yet of *choose*.
Think of *comb* and *tomb* and *bomb*,
Doll and *roll* and *home* and *some*.
And since *pay* is rimed with *say*
Why not *paid* with *said*, I pray?
Think of *blood* and *food* and *good*;
Mould is not pronounced like *could*.
Wherefore *done*, but *gone* and *lone* –
Is there any reason known?
To sum up all, it seems to me
Sounds and letters don't agree.

Anonymous

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A nod to Mark Twain

"What is needed is that each letter of the alphabet shall have a perfectly definite sound, and that this sound shall never be changed or modified without the addition of an accent, or other visible sound…But the English alphabet is pure insanity. It can hardly spell any word in the language with any degree of certainty" (Twain, 1942, pp. 168-169)

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Executive Numbered Memo: 010-2012-13 – OAR 581-022-2130 - Kindergarten Assessment

In 2012, the Legislature directed the Early Learning Council and the Department of Education…

- Arriving at kindergarten ready to learn?
- Is their level of school readiness improving or declining over time?
- Are there disparities (geographical, cultural, racial, and socio-economic) between groups of children that must be addressed?
- Are there particular areas of school readiness that Oregon must target?
- What children need to know and are able to do upon entering kindergarten.

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Kindergarten Literacy Measures

Student Copy   **Form K-1**

Student Copy   **Form K-1**

Letter Names

o	X	A	s	O	B	E	a	T	x
e	r	Z	S	L	t	R	N	p	C
m	D	P	n	F	I	M	f	K	i
k	c	G	v	z	W	U	h	Q	u
w	y	l	V	d	J	b	j	q	A
T	a	O	s	X	o	B	x	A	E
Z	L	N	r	S	p	t	e	C	R
K	M	F	P	m	i	f	I	n	D
W	h	u	v	c	k	G	z	U	Q
A	y	q	j	b	d	J	V	I	A

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Letter Sounds

D	m	M	H	b	o	k	S	c
h	e	Z	O	U	z	n	A	T
J	t	G	N	l	a	r	L	y
f	I	th	Sh	Ch	z	qu	sh	wh
w	v	Th	ch	V	Ph	E	g	F
ph	s	i	X	R	Y	K	u	P
c	k	S	o	H	b	M	D	m
n	T	A	U	z	O	e	Z	h
y	r	L	g	l	G	t	N	J
sh	qu	wh	z	Ch	th	I	Sh	f
V	u	E	g	F	w	v	Th	ch

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Assessor Copy   **Form K-1**

Student Name: _____   Date: _____

Phoneme Segmenting

Procedures

This test is administered entirely orally. Do NOT show the student this scoring sheet. There is no student copy of this test because the student is listening and responding to the words supplied by the assessor.

Directions

Say to the student: "I am going to say a word, and you will give me the sounds you hear in that word. If I say *cap*, you will say /c/ /a/ /p/. If I say *it*, you will say /i/ /t/. If I say *top*, you will say /t/ /o/ /p/. Let's try."

Note: This is a 60 second timed test.

Scoring

- Underline each phoneme the student says correctly.
- Put a slash through each phoneme the student misses.
- Students are NOT penalized for saying extra phonemes.

Item	Teacher Says	Student Says	Number Correct	Item	Teacher Says	Student Says	Number Correct
1	paid	/p/ /ai/ /d/	__ / 3	11	strap	/s/ /t/ /r/ /a/ /p/	__ / 5
2	shirt	/sh/ /ir/ /t/	__ / 3	12	futile	/f/ /u/ /t/ /i/ /le/	__ / 5
3	tail	/t/ /ai/ /l/	__ / 3	13	bold	/b/ /o/ /l/ /d/	__ / 4
4	soak	/s/ /oa/ /k/	__ / 3	14	mean	/m/ /ea/ /n/	__ / 3
5	mint	/m/ /i/ /n/ /t/	__ / 4	15	pack	/p/ /a/ /ck/	__ / 3
6	metal	/m/ /e/ /t/ al/	__ / 4	16	mass	/m/ /a/ /ss/	__ / 3
7	smile	/s/ /m/ /i/ /le/	__ / 4	17	bent	/b/ /e/ /n/ /t/	__ / 4
8	send	/s/ /e/ /n/ /d/	__ / 4	18	home	/h/ /o/ /me/	__ / 3
9	spouse	/s/ /p/ /ou/ /se/	__ / 4	19	bide	/b/ /i/ /de/	__ / 3
10	clink	/c/ /l/ /i/ /n/ /k/	__ / 5				

Correct _____ / 70

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Figure 2. Kindergarten Distributions for Letter Sounds and Phoneme Segments from Fall to Winter to Spring Performances

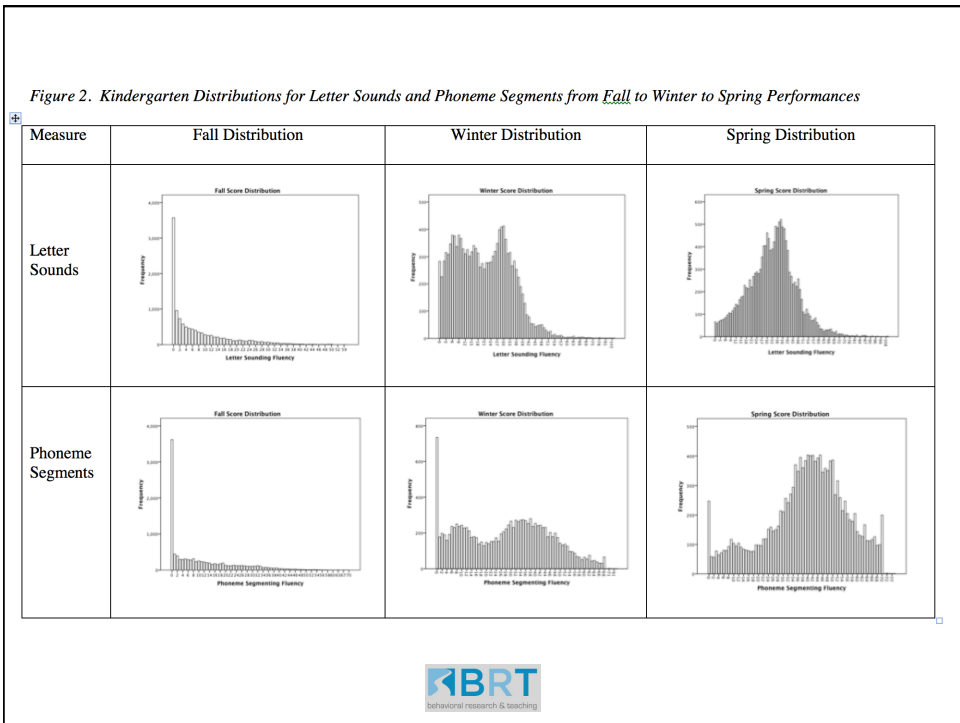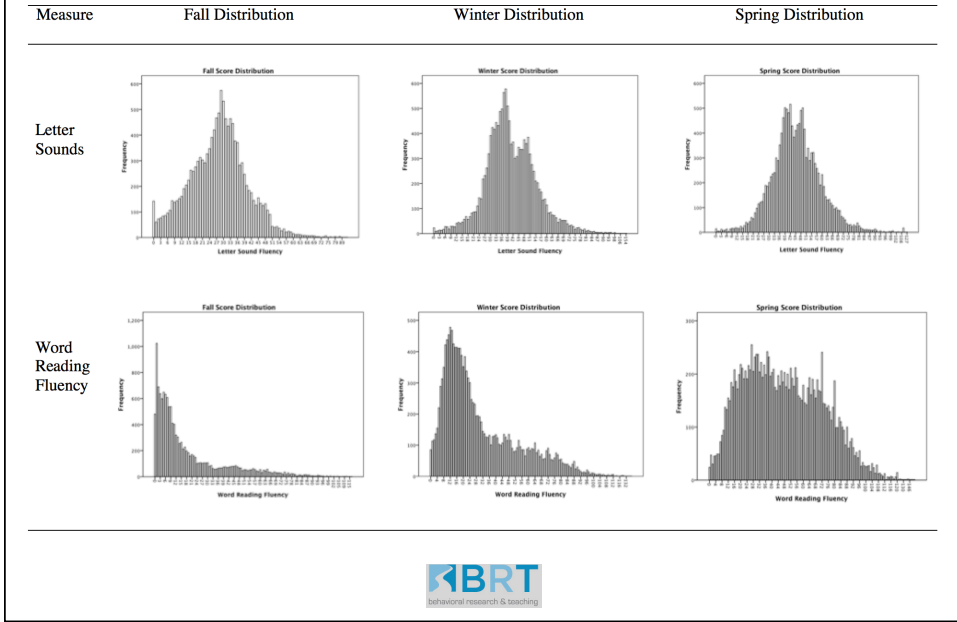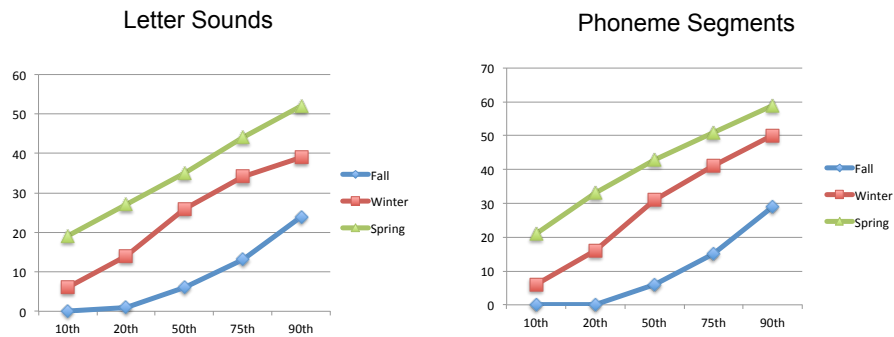| Measure	Fall Distribution	Winter Distribution	Spring Distribution
Letter Sounds			
Phoneme Segments			

Figure 3. Grade 1 Distributions for Letter Sounds and Phoneme Segments for Fall, Winter, and Spring Performances

Random Sample (500) in F-W-S: Percentile Ranks

Letter Names (LN):
Stratified Random Sample (500)

Region	N	Ave	SD
MW	500	25.0	15.7
NE	500	22.8	14.3
SE	500	27.3	16.7
W	500	19.2	15.0

Students	N	Ave	SD
White Females	500	21.0	14.2
White Males	500	19.2	14.9
Non White Females	500	13.8	13.7
Non White Males	500	14.7	15.6

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LN for Risk (Fall):
Percentile Ranks (500)

Region	5th PR	10th PR	15th PR	20th PR	25th PR	30th PR	50th PR	75th PR	90th PR
MW	2	3	5	8	11	14	25	35	45
NE	2	4	7	8	11	13	23	33	42
SE	0	3	6	9	14	17	29	39	46
W	0	2	3	5	8	8	17	31	44
MEDIAN		3			11		24	34	45

Students	5th PR	10th PR	15th PR	20th PR	25th PR	30th PR	50th PR	75th PR	90th PR
White Females	1	3	5	7	8	10	20	32	41
White Males	1	2	4	5	7	8	15	29	39
Non White Females	0	0	1	2	3	4	9	22	36
Non White Males	0	0	1	2	2	3	9	25	38
MEDIAN		1			5		12	27	39

Letter Name Growth

Letter Sounds Growth

Phoneme Segment Growth

Reading: Word Fluency in Spring
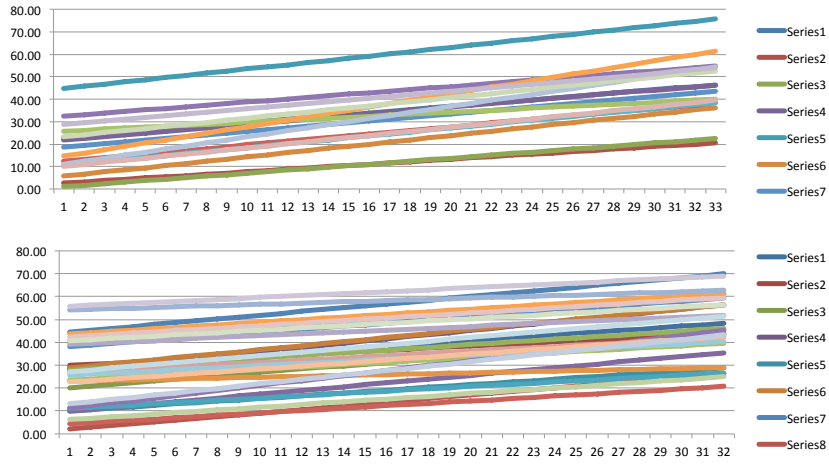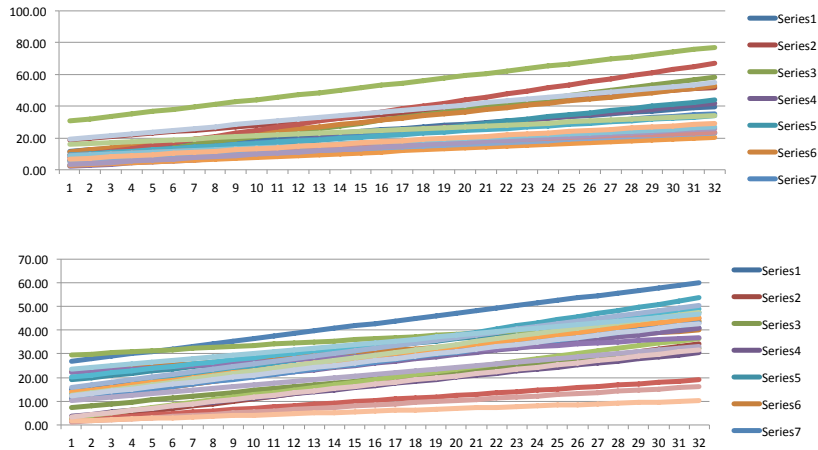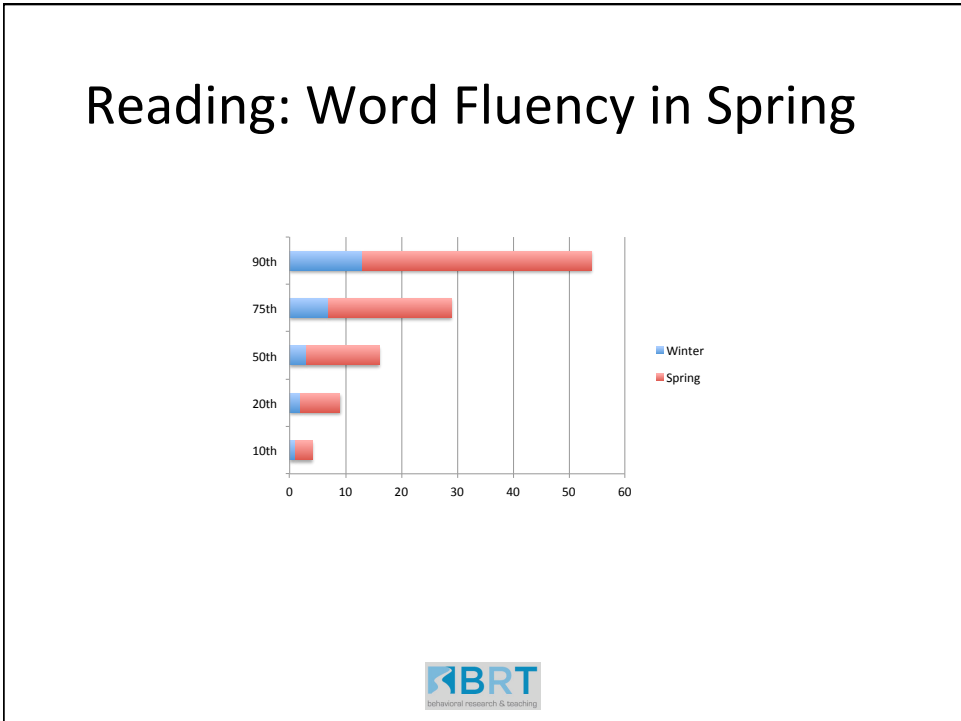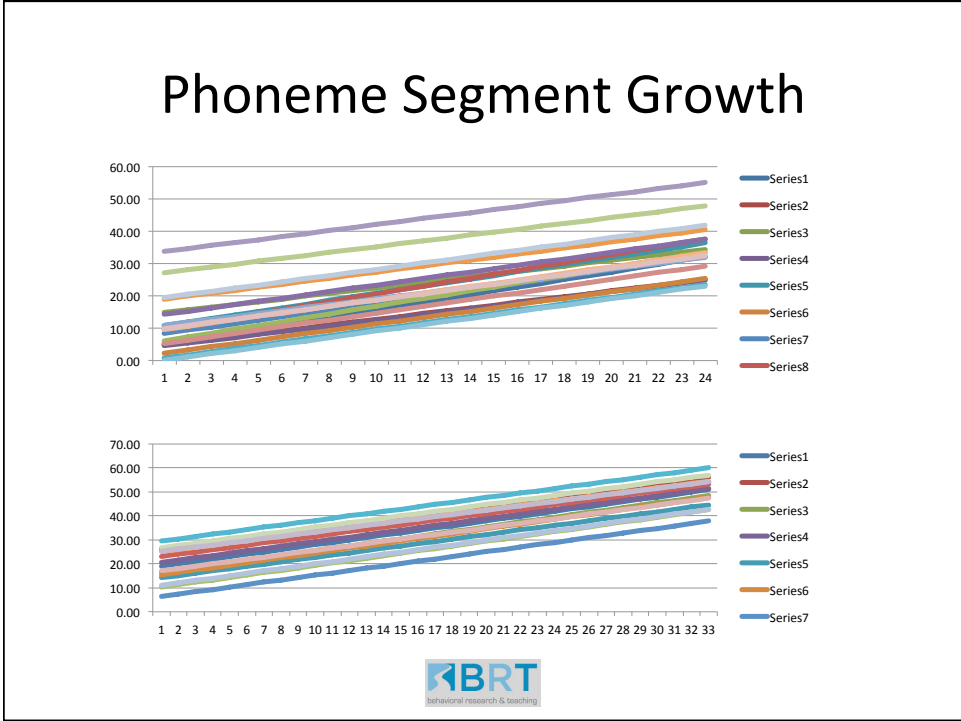
Variance of Four Models

Model	R	R Square	Adj. R Square	SEE	R Sq Change	Change Statistics F Change	df1	df2
1	.062[a]	.004	.004	12.987	.004	16.719	2	8744
2	.487[b]	.238	.237	11.363	.234	1339.996	2	8742
3	.537[c]	.288	.288	10.980	.051	621.220	1	8741
4	.718[d]	.515	.515	9.060	.227	2049.782	2	8739

a. Predictors: (Constant), Gender and Race
b. Predictors: (Constant), Gender and Race, Centered LS Slope, Centered PS slope
c. Predictors: (Constant), Gender and Race, Centered LS Slope, Centered PS slope, LN risk
d. Predictors: (Constant), Gender and Race, Centered LS Slope, Centered PS slope, LN risk, Centered LS Intercept, Centered PS Intercept

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Comparison of Predictors
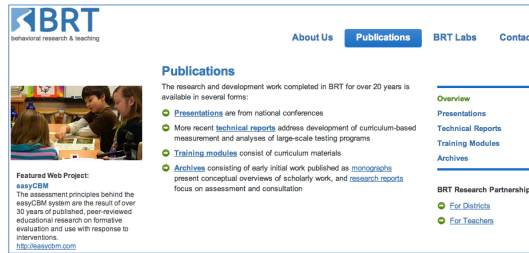
Model		Unstd. Coefficients B	SE	Std. Coefficient Beta	t	Sig.	Correlations Zero-order	Partial
1	(Constant)	16.544	0.235		70.408	< .001		
	Gender	-1.390	0.278	-0.053	-5.001	< .001	-.053	-.053
	Race	-0.825	0.280	-0.031	-2.946	.003	-.031	-.031
2	(Constant)	15.450	0.208		74.419	< .001		
	Gender	0.019	0.245	0.001	0.079	.937	-.053	.001
	Race	0.010	0.248	0.000	0.039	.969	-.031	.000
	Centered LS slope	-0.967	0.037	-0.280	-25.858	< .001	-.422	-.267
	Centered PS slope	-1.544	0.060	-0.283	-25.803	< .001	-.423	-.266
3	(Constant)	17.124	0.212		80.942	< .001		
	Gender	0.012	0.237	0.000	0.049	.961	-.053	.001
	Race	0.347	0.240	0.013	1.448	.148	-.031	.015
	Centered LS slope	-0.896	0.036	-0.259	-24.697	< .001	-.422	-.255
	Centered PS slope	-1.249	0.059	-0.229	-21.148	< .001	-.423	-.221
	LN risk	-6.977	0.280	-0.235	-24.924	< .001	-.351	-.258
4	(Constant)	15.591	0.177		88.323	< .001		
	Gender	.0108	0.195	0.004	0.554	.579	-.053	.006
	Race	-0.680	0.200	-0.026	-3.398	< .001	-.031	-.036
	Centered LS slope	-0.662	0.031	-0.192	-21.158	< .001	-.422	-.221
	Centered PS slope	0.728	0.150	0.133	4.854	< .001	-.423	.052
	LN risk	0.438	0.258	0.015	1.694	.090	-.351	.018
	Centered LS intercept	-1.161	0.020	-0.595	-56.731	< .001	-.694	-.519
	Centered PS intercept	-0.374	0.060	-0.175	-6.245	< .001	-.470	-.067

For More Information

http://www.brtprojects.org

http://easyCBM.com

http://ncaase.com