

**Promising RTI Interventions
for Early Childhood:
Print-Knowledge Instruction during
Shared Reading**

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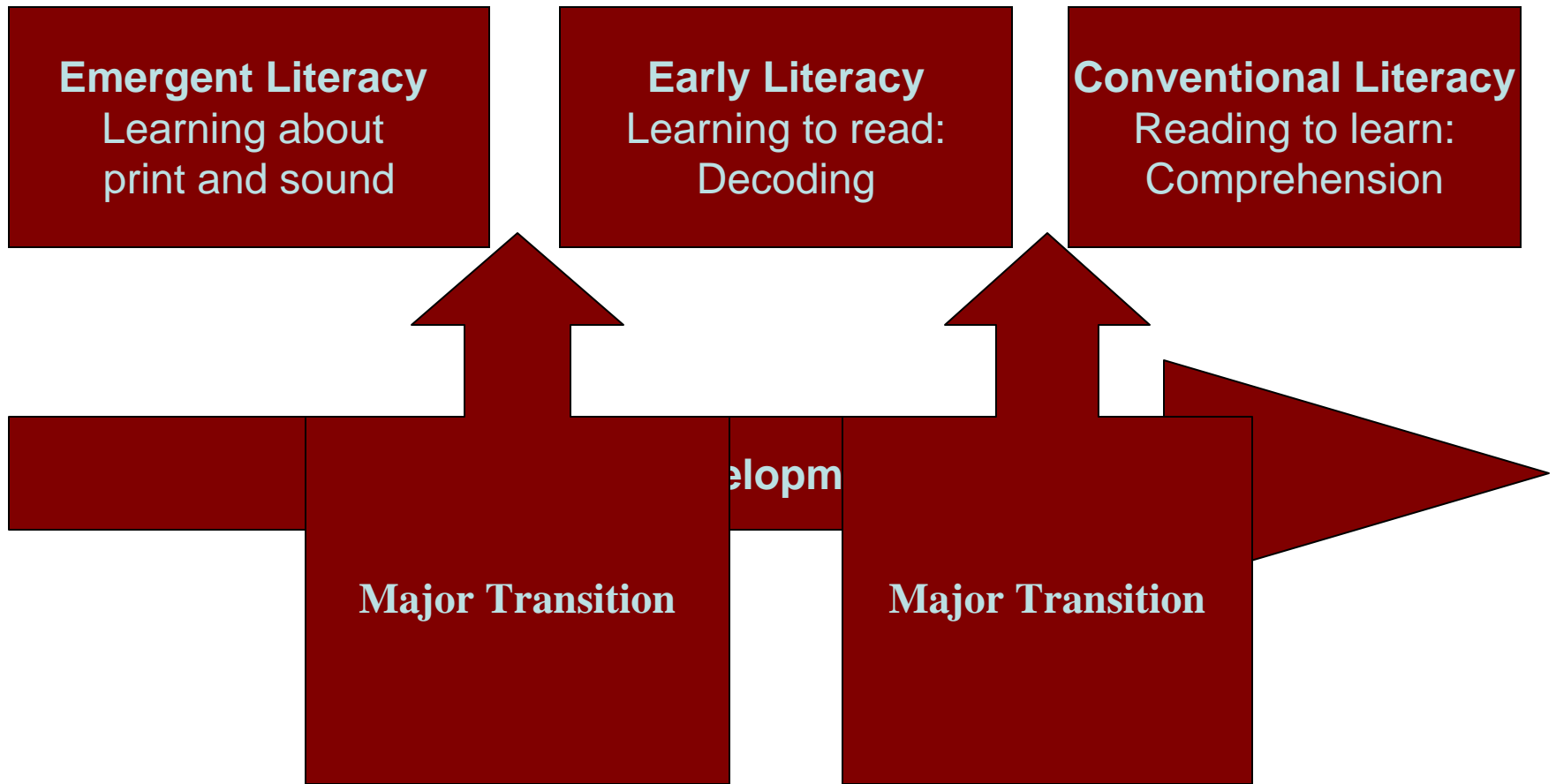
Promising Interventions

1. ***Embedded*** in meaningful, contextualized learning experiences
2. ***Explicit*** in scope, sequence, methods, and materials
3. ***Feasible, adaptable, and cost-effective*** for use
4. ***Efficacious and/or effective***: Empirically validated with direct effects on teachers' practices (or other caregivers) and meaningful child outcomes

With Respect to RTI

- Increase precision with which we identify disabilities (in part by reducing *mis*-identification)
- Reduce children's immediate and future risks for academic (and possibly other) difficulties

Reading Development as a Continuum



Instructional Targets

Code-Based Skills (Decoding Precursors)

Print Knowledge

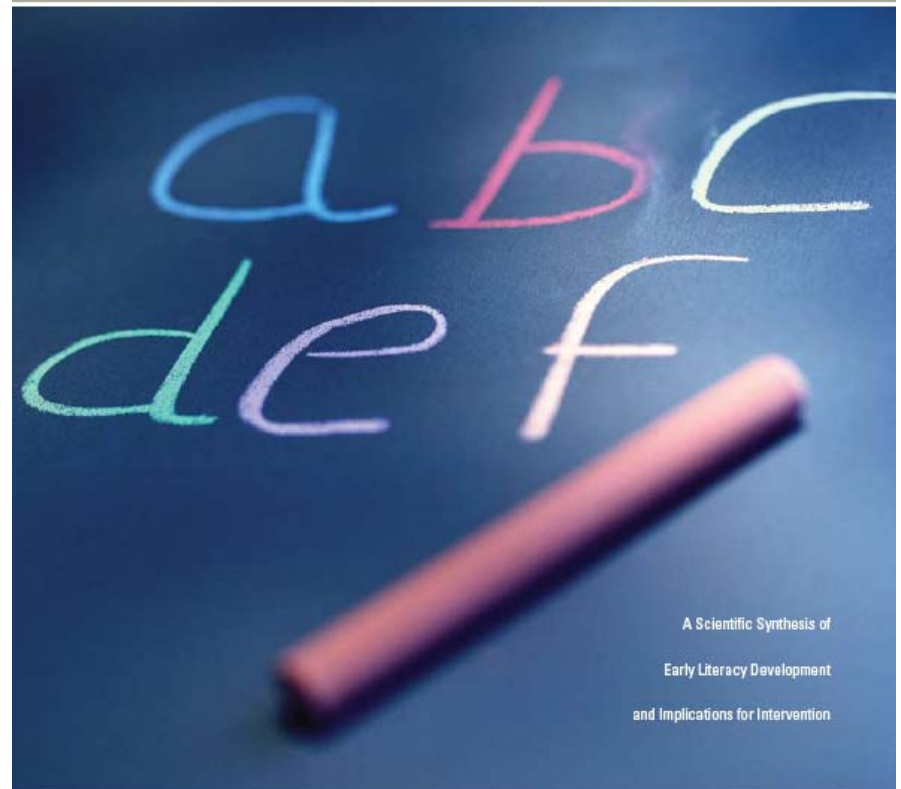
Phonological Awareness

Meaning-Based Skills (Comprehension Precursors)

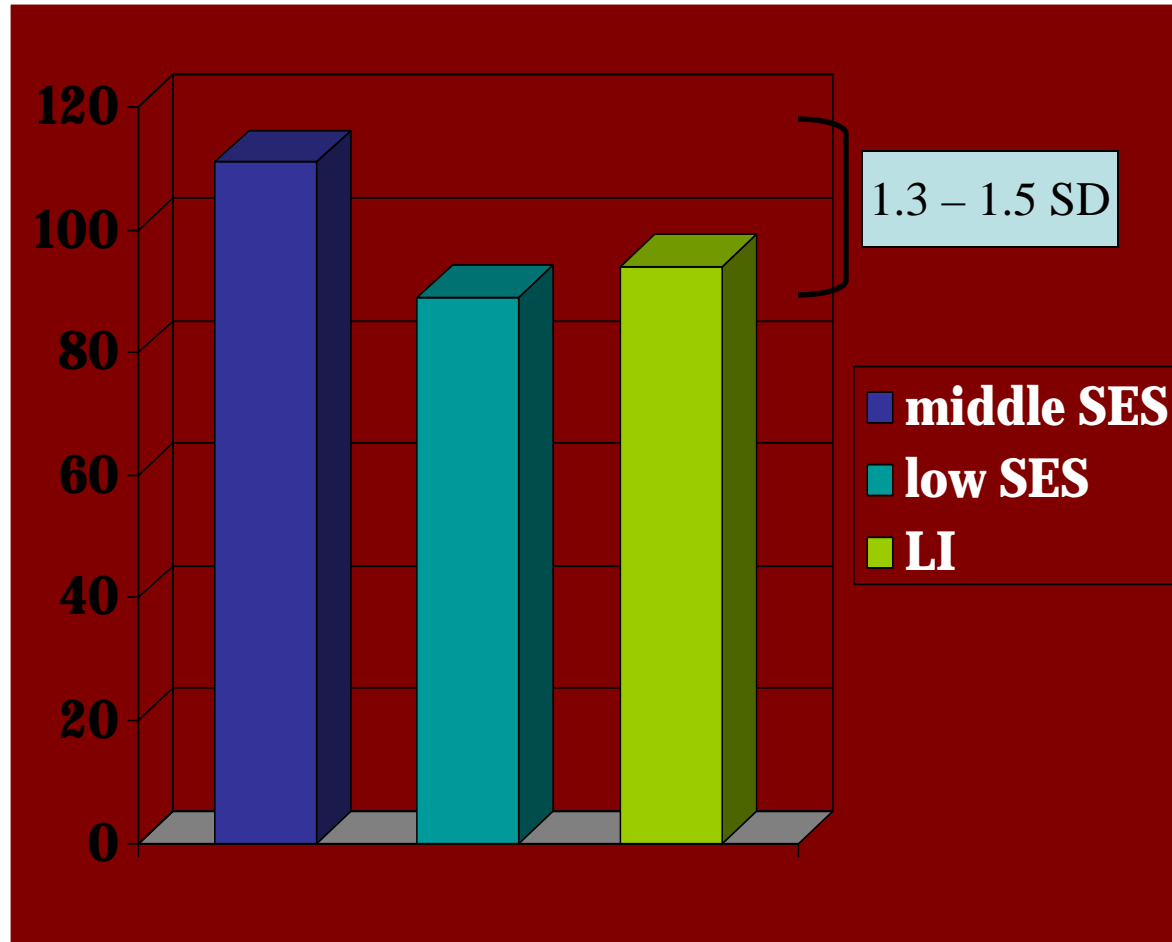
Oral language

Developing Early Literacy

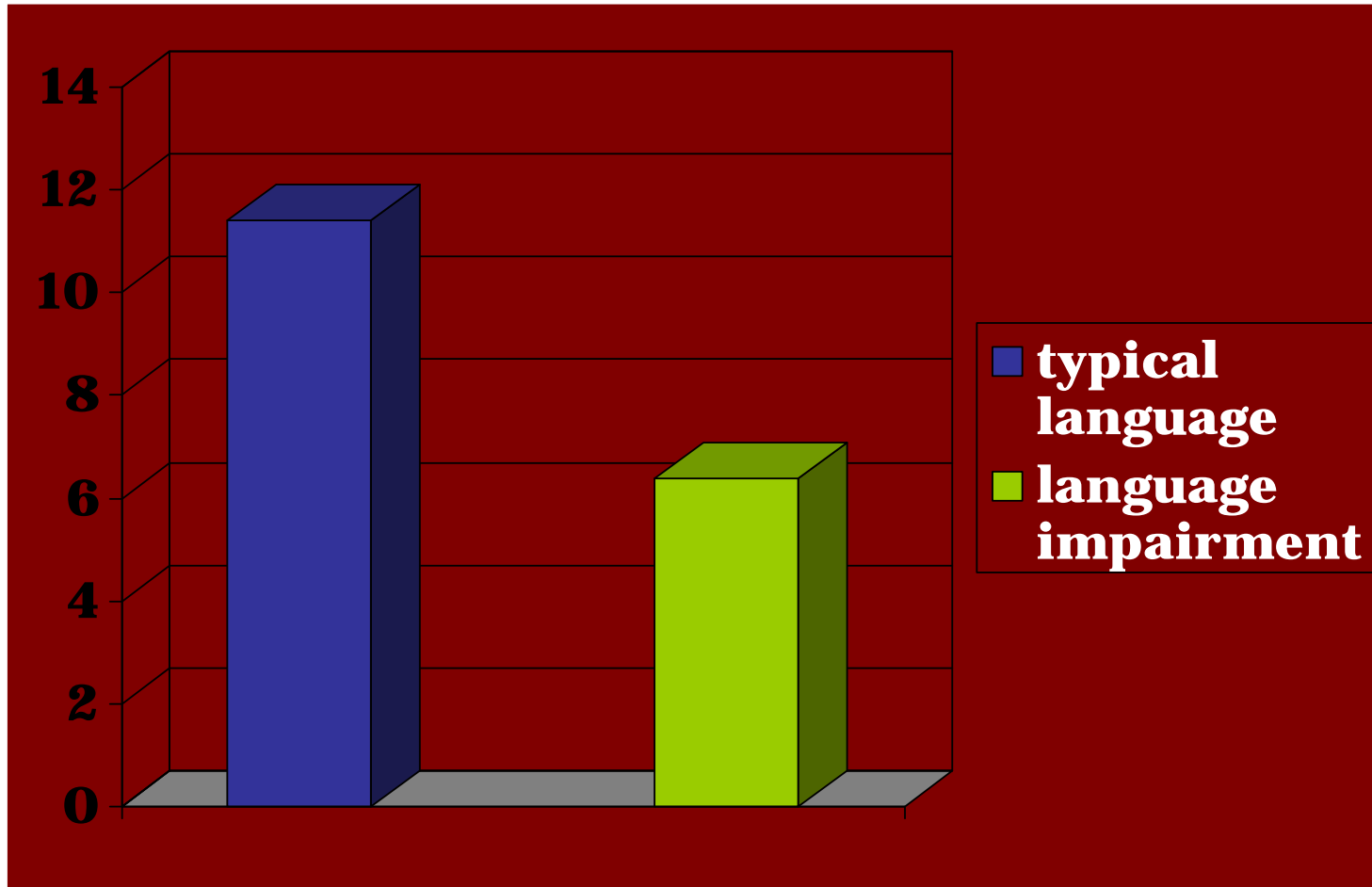
REPORT OF THE NATIONAL EARLY LITERACY PANEL



Risk and Print Knowledge at 4 Yrs



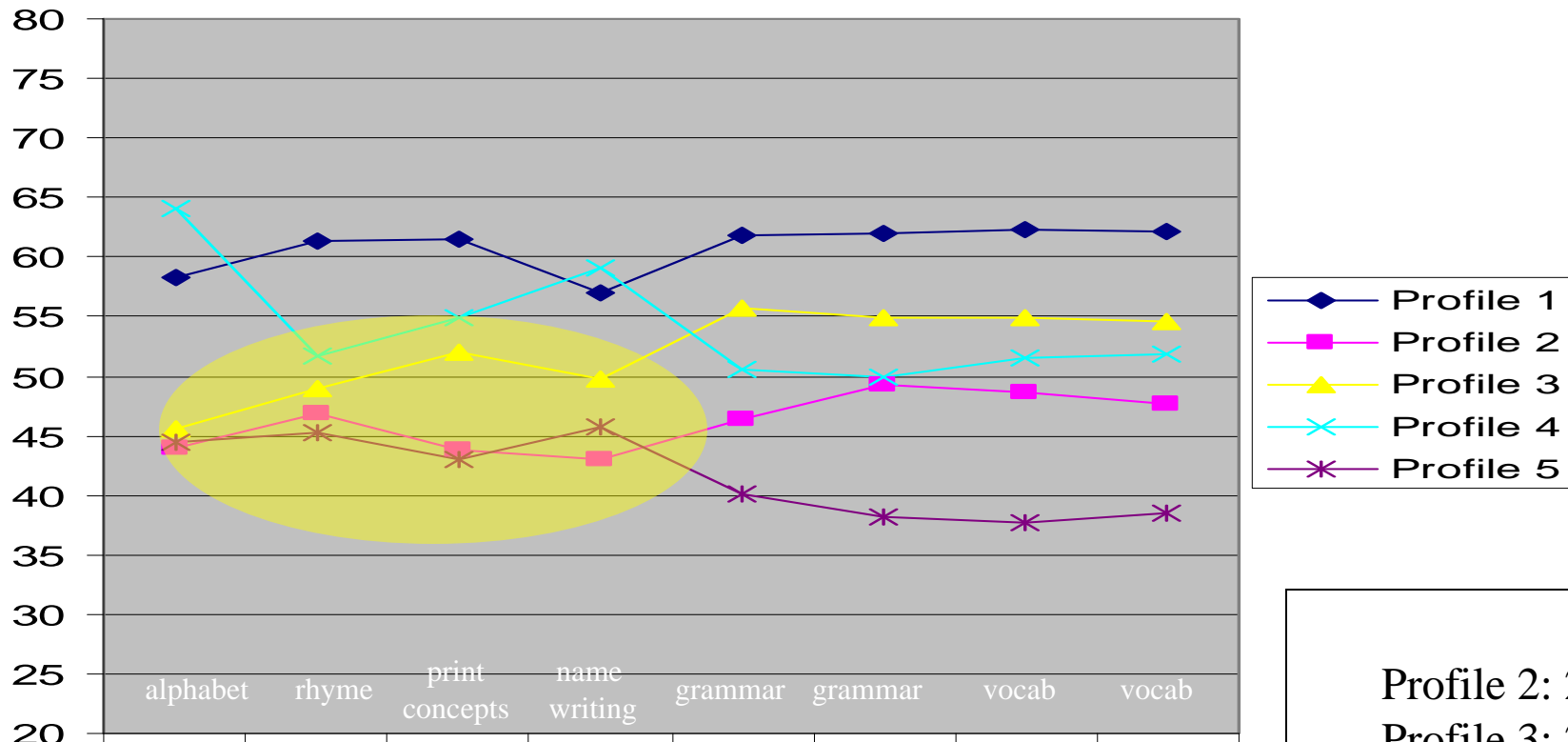
Specific Language Impairment and Emergent Writing at 4 Yrs



(Cabell, Justice, Zucker, & McGinty, 2009)

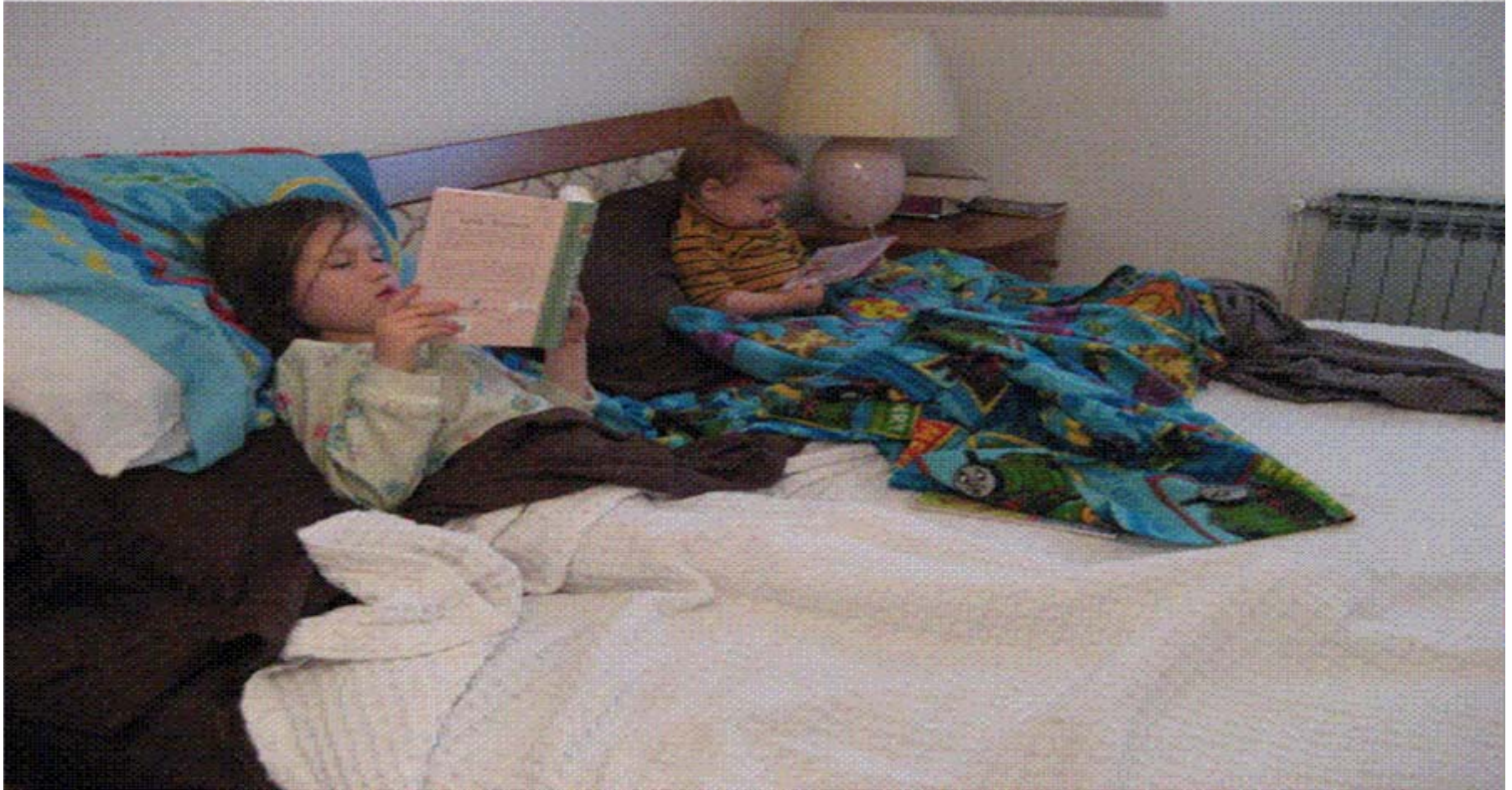
Profiles of Emergent Literacy and Language Skill: “At-Risk Populations”

Profiles



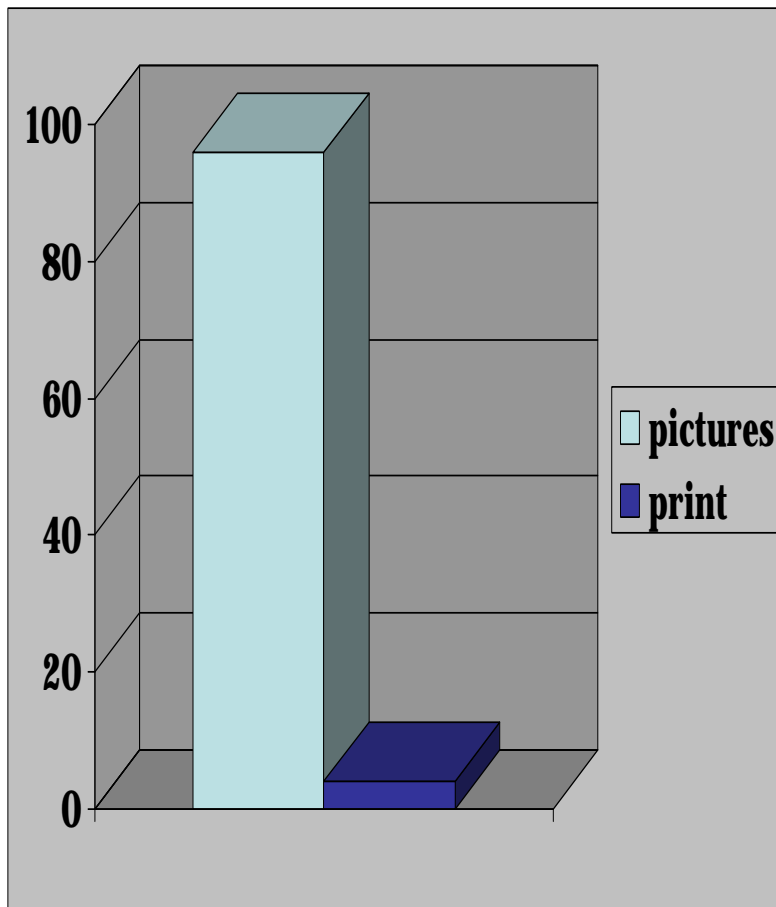
Profile 2: 23%
Profile 3: 24%
Profile 5: 23%

Storybook Reading Context: Familiar and Engaging

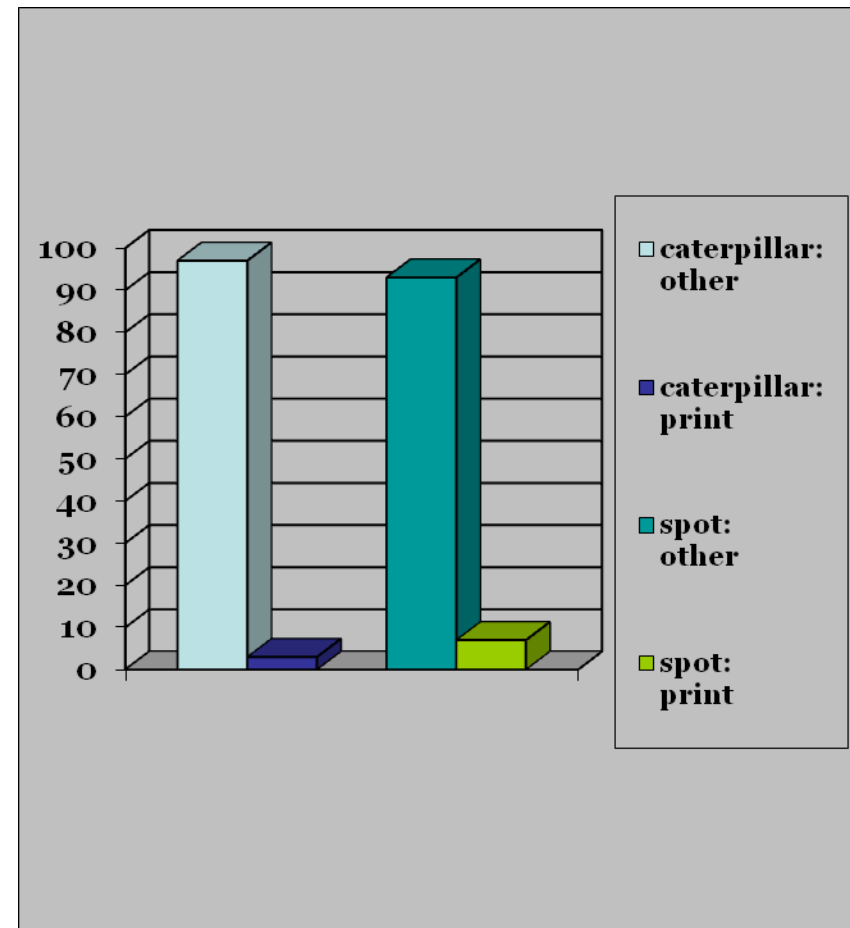


Child Verbalizations

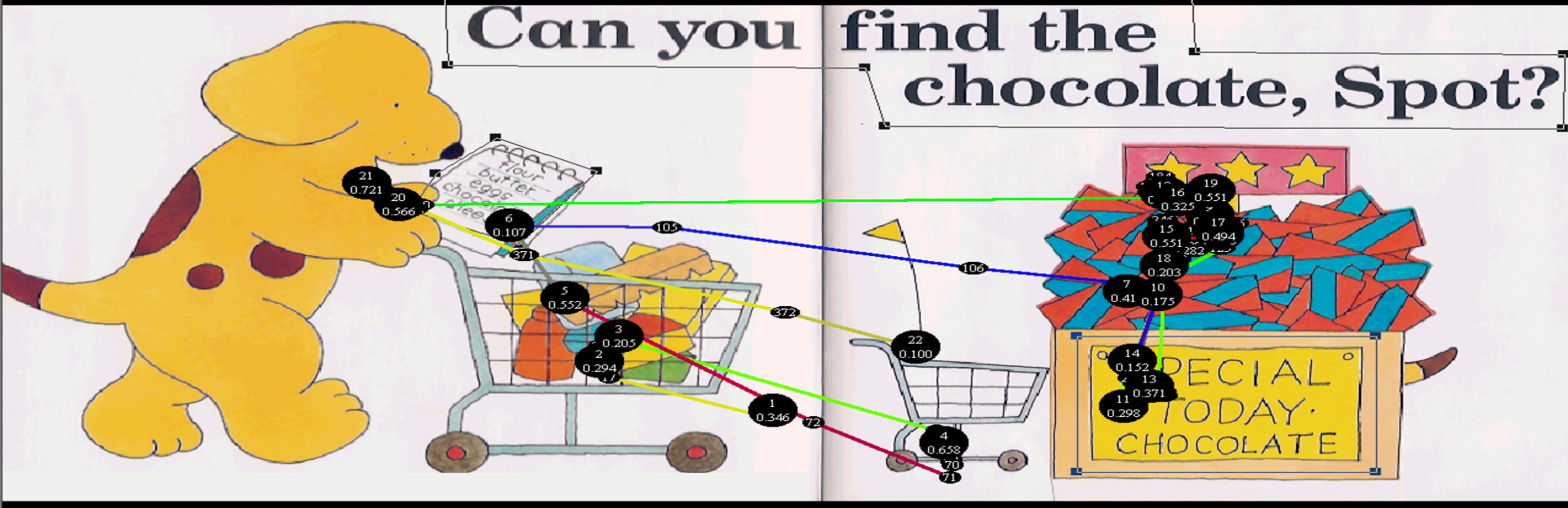
(spot bakes a cake)



Child Fixations

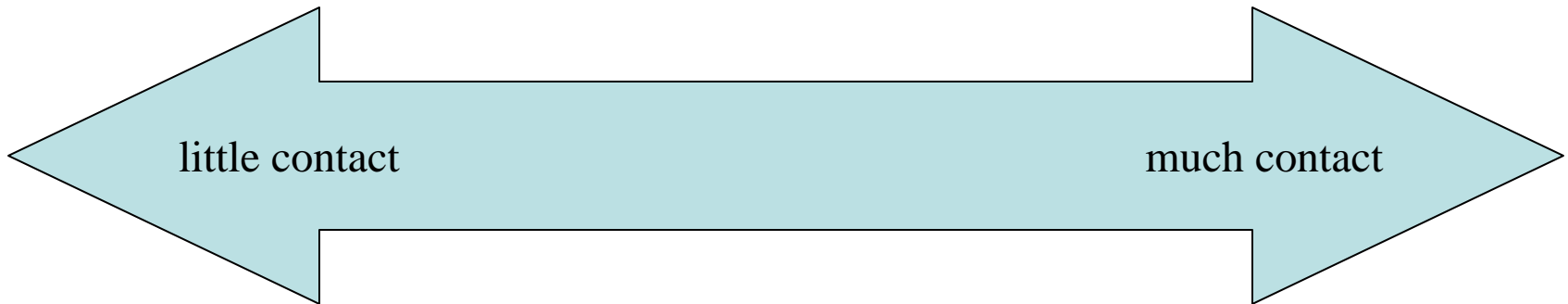


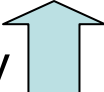
Can you find the chocolate, Spot?



Print Contact during Shared Reading

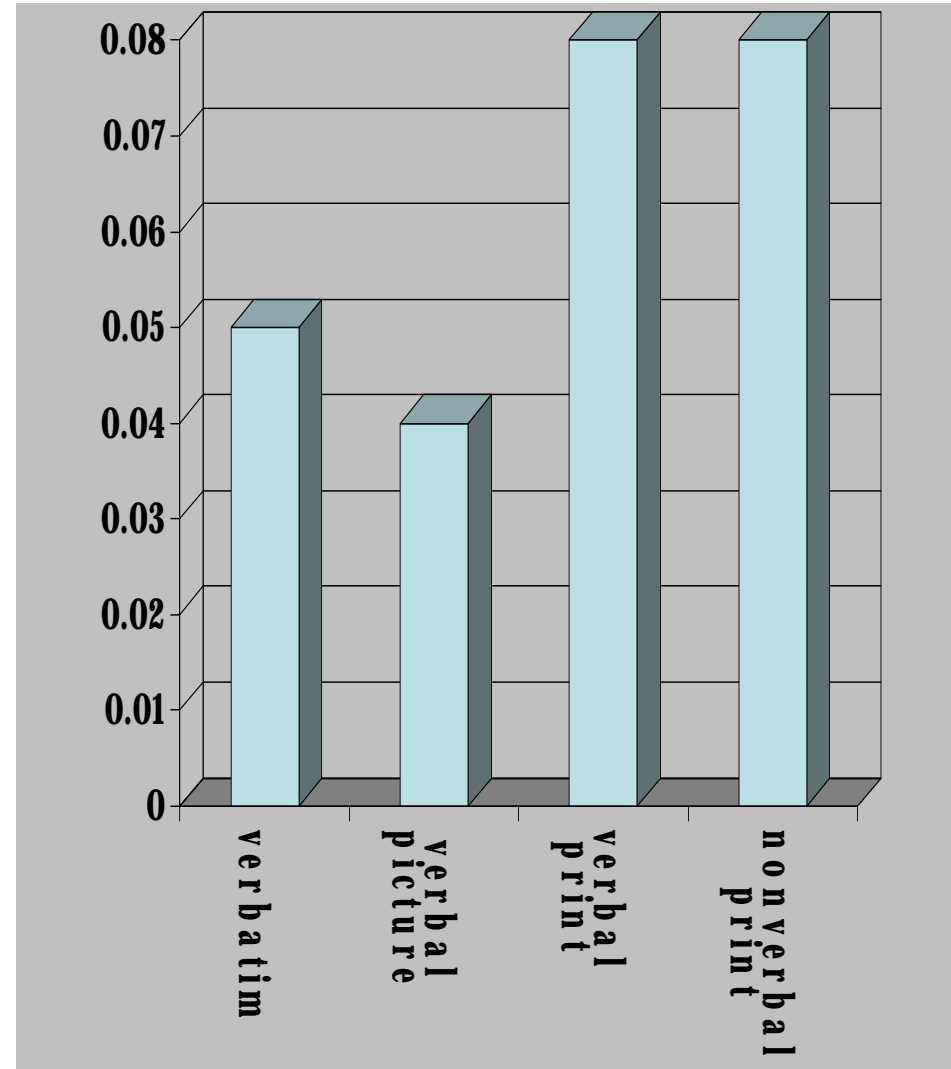
- Children's contact with print varies along a continuum



- Many children's experience with print is at "little contact" end of continuum – at home and classroom
- Certain texts and behaviors may  print contact

Facilitating Children's Print Contact

- 44 preschoolers
- Very good preliteracy skills
- Four print-salient Spot books



“Print-Rich” Storybooks

Environmental print



“Print-Referencing Intervention”

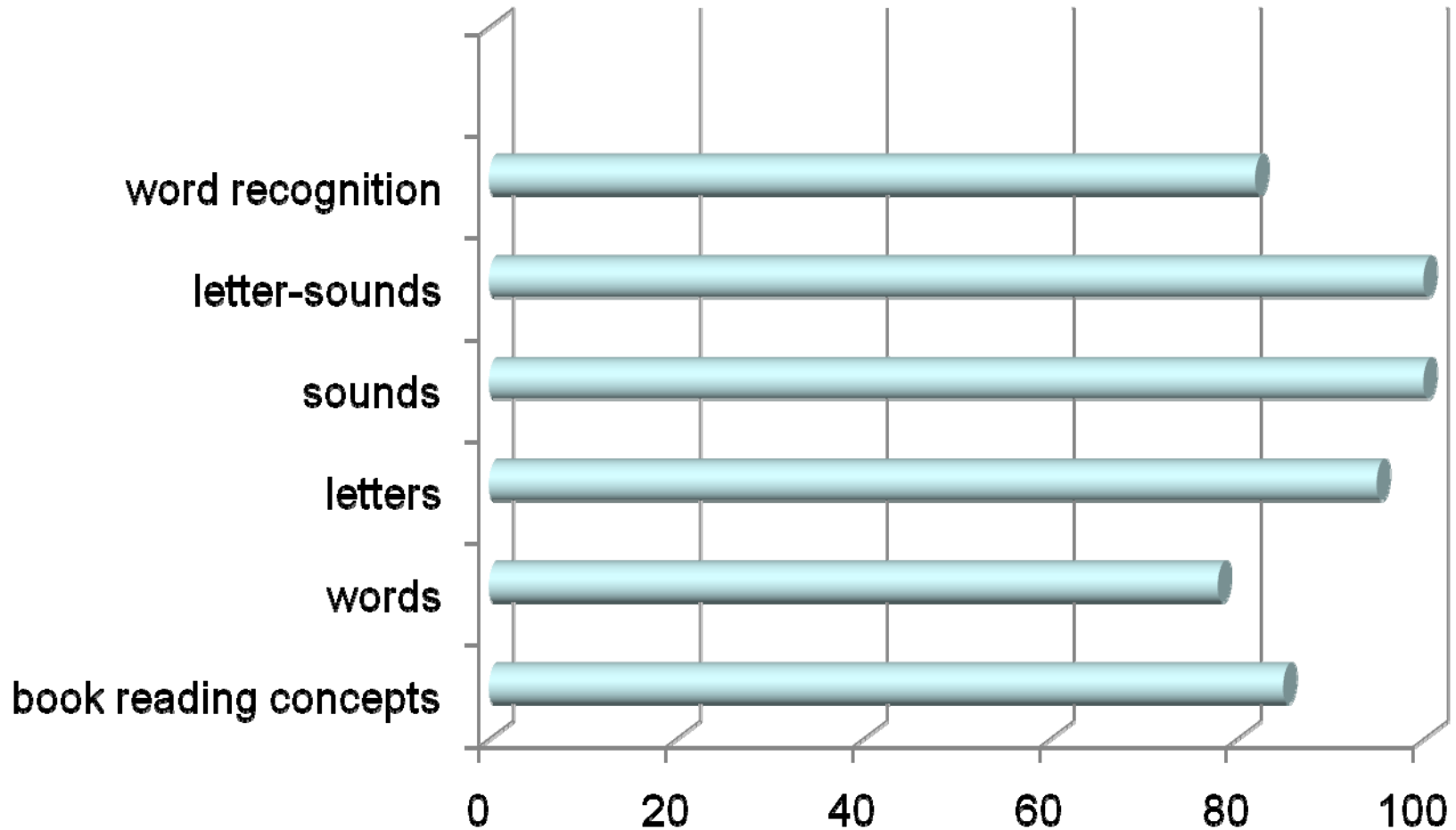
- Print is an **explicit focus** in shared reading
- Use print-rich texts
- Recruit the child’s attention and interest
 - Verbal and nonverbal references
 - Address a four-fold scope:
 - Print meaning
 - Book and print organization
 - Letters
 - Words
 - Follow a **recycling** sequence of 15 objectives



Preschoolers' Responsiveness to Print References

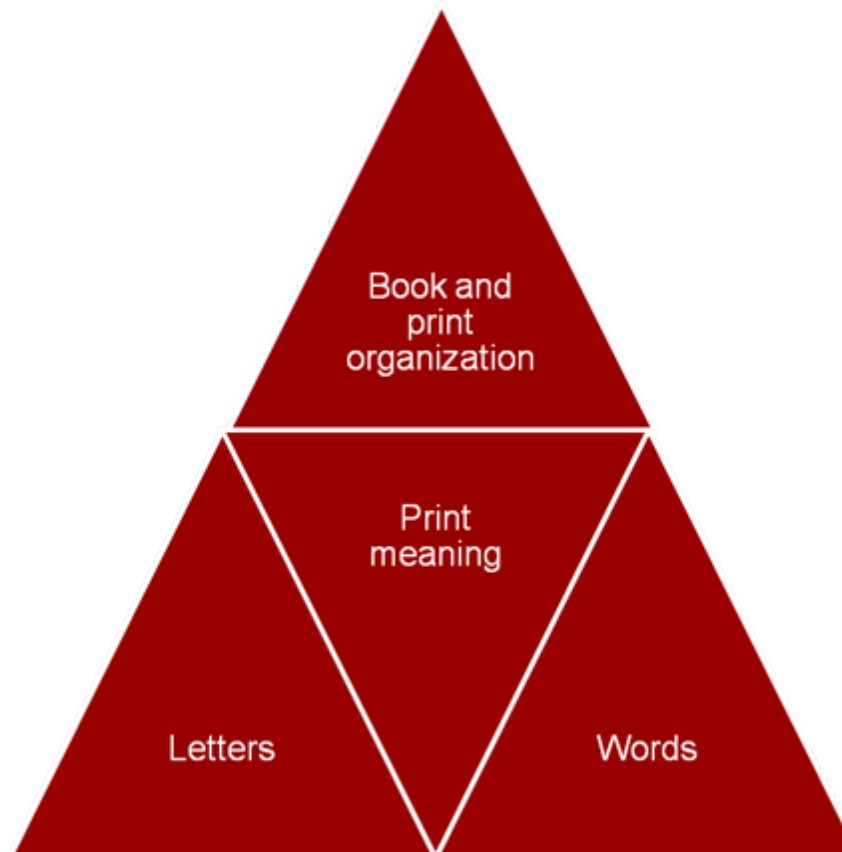
(Justice, Ezell, Mattingly, & Bakeman, 2003)

Child Responses (Percentage)



Print Knowledge

Key areas of understanding during early years



Scope and Sequence

Instructional Domain 1	
Book and Print Organization	
Objectives	Sample Print Reference
1. Page Order: Knows the order in which pages are read in a book	I am going to read this page first and then this page over here next.
2. Author: Knows the role of the author.	The author, Eric Carle, wrote all the words in this book.
3. Page Organization: Knows that reading occurs from the top of the page to the bottom of the page.	This is the top of the page. This is where I begin reading.
4. Title of Book: Knows the role of the title of the book.	This is the title of the book. It tells us the name of the book
5. Print Direction: Knows that reading occurs from left to right.	I start reading here and I read this way.
Instructional Domain 2	
Print Meaning	
Objectives	Sample Print Reference
1. Print Function: Understands the relationship between meaning and print.	Here are the penguin's words. He says, 'thank you.'
2. Environmental Print: Knows the purpose of print embedded within the environment.	This is a box of cereal. It says, 'Corn Flakes.'
3. Metalinguistic Concept of Reading: Understands the meaning behind reading and the contexts in which reading occurs	We're going to read these words; what will these words tell us?
Instructional Domain 3	
Letters	
Objectives	Sample Print Reference
1. Upper-and Lower-Case Letters: Knows letters come in upper- and lower-case forms.	This M is an upper-case letter. See how its bigger than these lower-case letters?
2. Names of Letters: Knows the names of the majority of upper-case letters.	What is this letter?
3. Metalinguistic Concept of Letter: Knows that letters are a symbol used in written language.	Do you see a letter that is in your own name?
Instructional Domain 4	
Words	
Objectives	Sample Print Reference
1. Word Identification: Identifies some written words in familiar contexts.	This word is "the" –this word is in this book all the time, can you help me find it?
2. Short v. Long Words: Knows that words can contain various numbers of letters.	This word is lollapalooosh. It is a long word. It has a lot of letters in it! Let's count all the letters.
3. Letters v. Words: Knows that letters make up words.	This is the letter K. K is in the words kangaroo and kick.
4. Concept of Word in Print: Represents the systematic relationship between spoken words and written words.	Let's point to each word as I read it. Ready?

Matching Texts with Targets

Books	Print Concepts Discussed
<i>Silver Seeds</i>	Title of book Print directionality
<i>Chicka Chicka Boom Boom</i>	Upper-case letter identification Letters versus words
<i>Mice Squeak, We Speak</i>	Print functions Long words versus short words
<i>One Duck Stuck</i>	Title of book Page organization
<i>Today is Monday</i>	Upper-case letter identification Print functions
<i>It Begins With an A</i>	Metalinguistic concept of “letter” Long words
<i>Dear Miss LaRue</i>	Beginning and end of page Print functions
<i>There’s a Monster in My House</i>	Tracking print with finger Short words

There's a dragon at my school

TARGET: Print Direction

★ High Support Examples

1) TECHNIQUE: REDUCE ALTERNATIVES/GIVE CHOICES

Teacher: Where should we start reading on this page? Here (points to first word on the page) or here (points to last word on the page)?

Child: Here! (Child points to first word.)

Teacher: Yes, that's right. We begin reading here and we finish here (runs finger along text).

2) TECHNIQUE: ELICITING THE ANSWER

Teacher: I start reading here. Who can show me where I start reading?

Child: Here?

Teacher: That is exactly right. I start right here, where the first word is, and I go this way (runs finger along top line).

★ Low Support Examples

1) TECHNIQUE: EXPLANATION

Teacher: Where do I start reading?

Child: Here!

Teacher: Right. Remember, we always start reading here and stop reading here.

2) TECHNIQUE: ENCOURAGEMENT

Teacher: Samantha, can you show me which way I should read this page? I bet you know this since you showed me last time.

Child: This way (runs finger in correct direction.)

Teacher: I knew you would remember. Good job! We read this way, just like Samantha showed us.



Active Ingredients (Mechanisms)

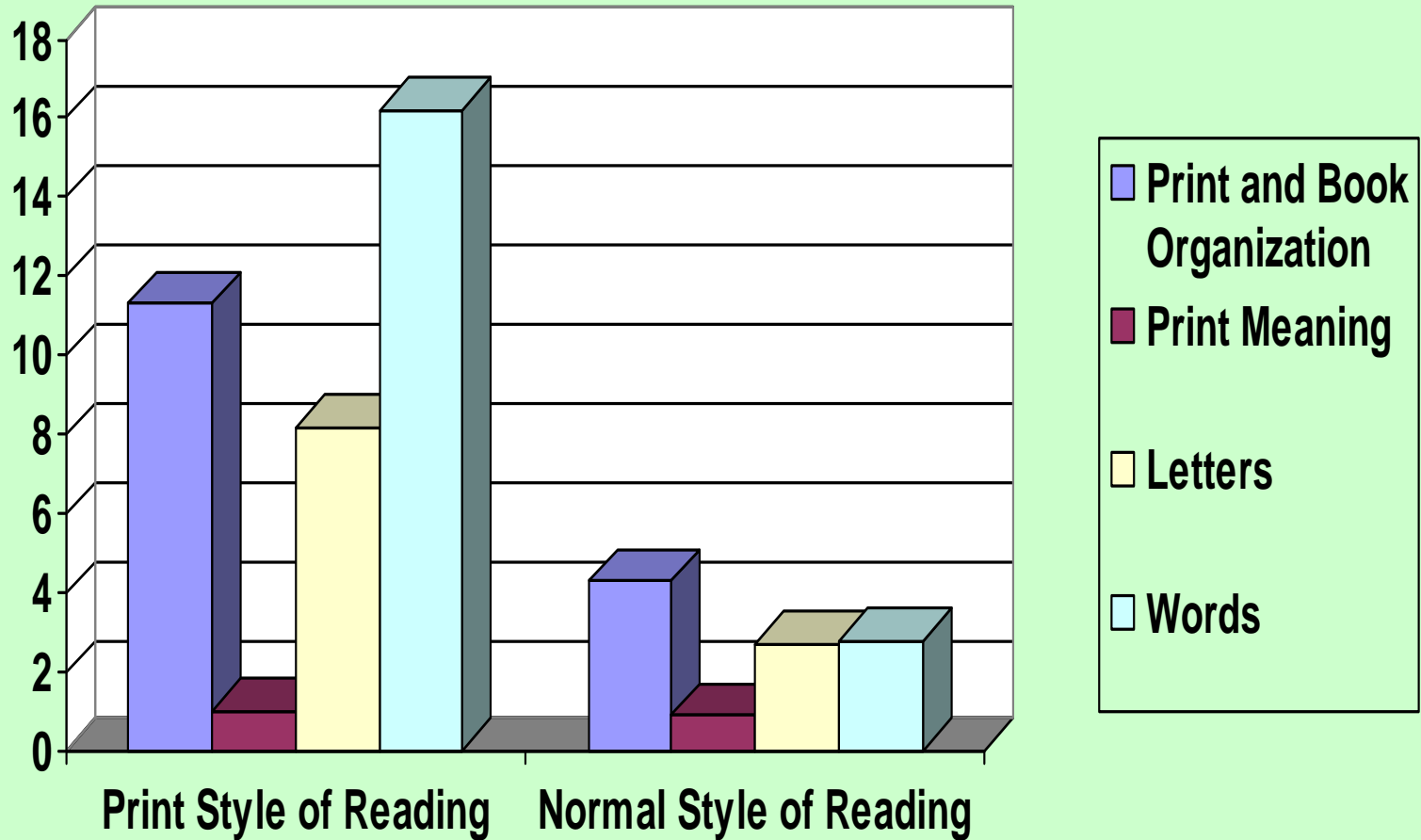
Intervention-Level Ingredients

- **Explicit** referencing (versus implicit exposure)
- Target **all four print dimensions**
- Print-rich books
- Reference volume (dosage) **within** a reading session (not sheer number of sessions)

Child-Level Ingredients

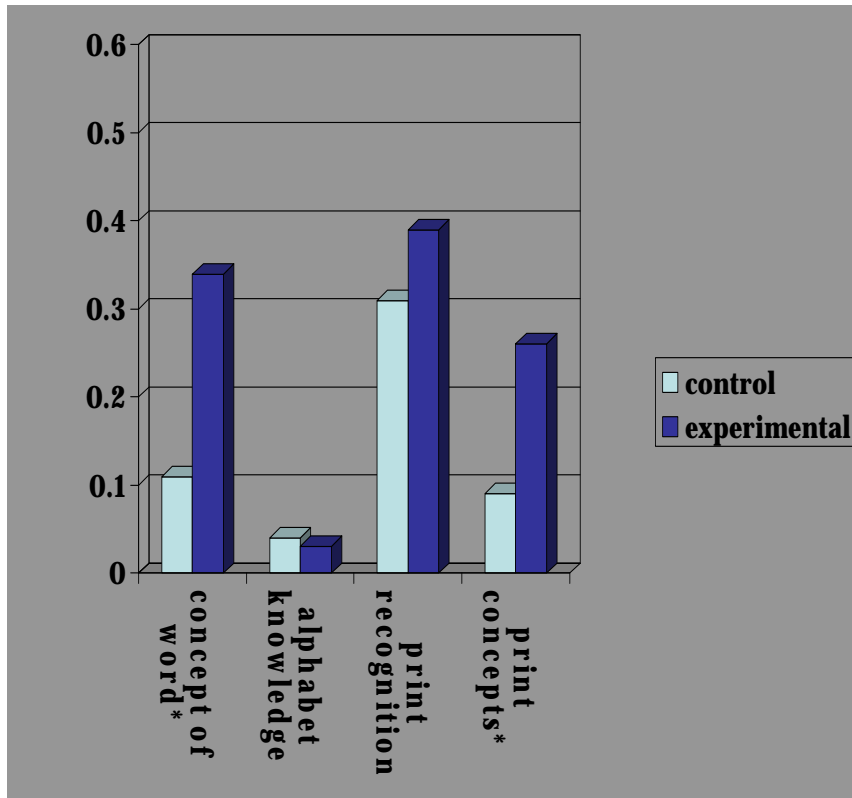
- Child engagement and attention
- Child effortful control

Impacts: Teacher Reading Style

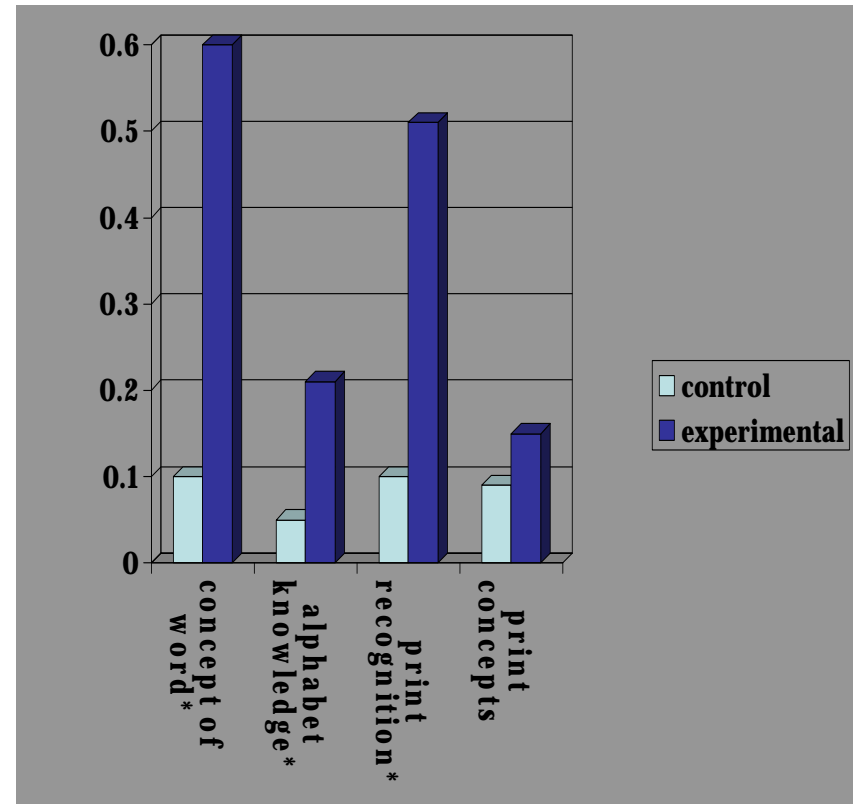


Efficacy Studies (Tightly Controlled)

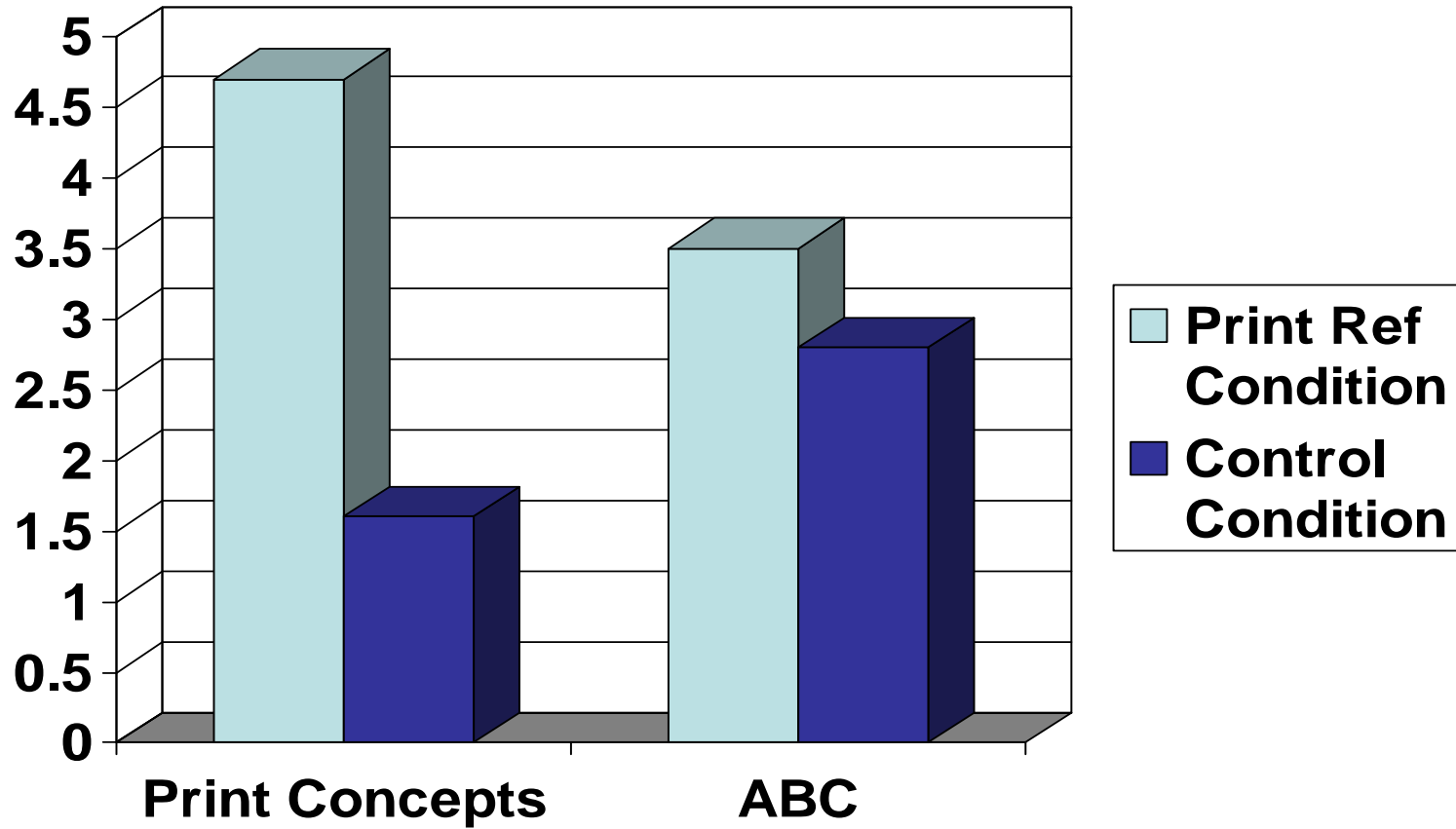
Parent Implementation:
Gain Scores on
Four Measures



Head Start Study:
Gain Scores on
Four Measures



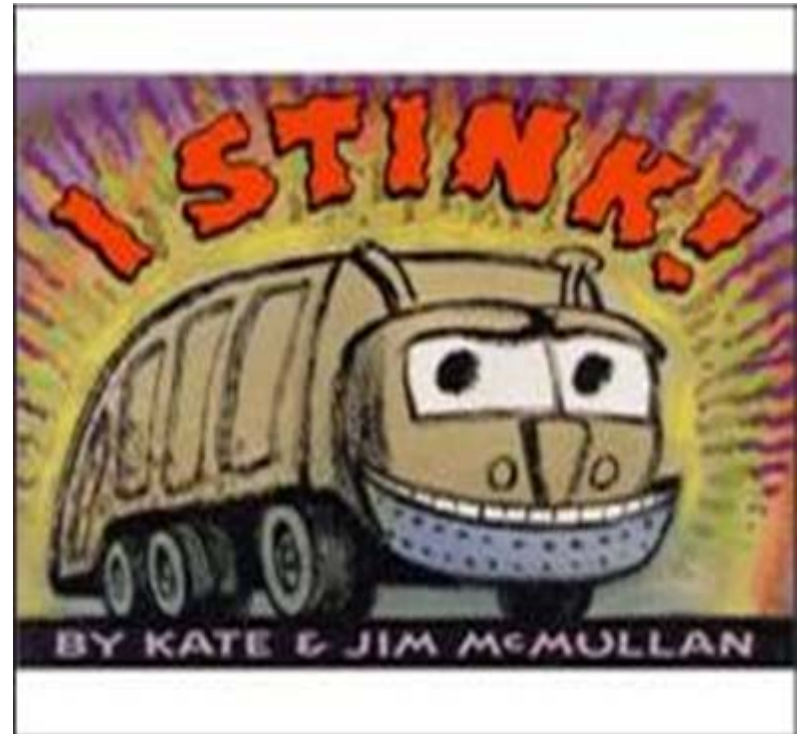
Parent-Implementation: Children with LI



+1.0 SD units for print concepts
+0.2 SD units for ABC

Sit Together and Read Preschool Program

- 30 week program (1 book per week 4X)
- Whole class reading sessions
- Systematic scope and sequence
- Sample: 84 classrooms (500 kids followed)



Effectiveness Studies

STAR-1

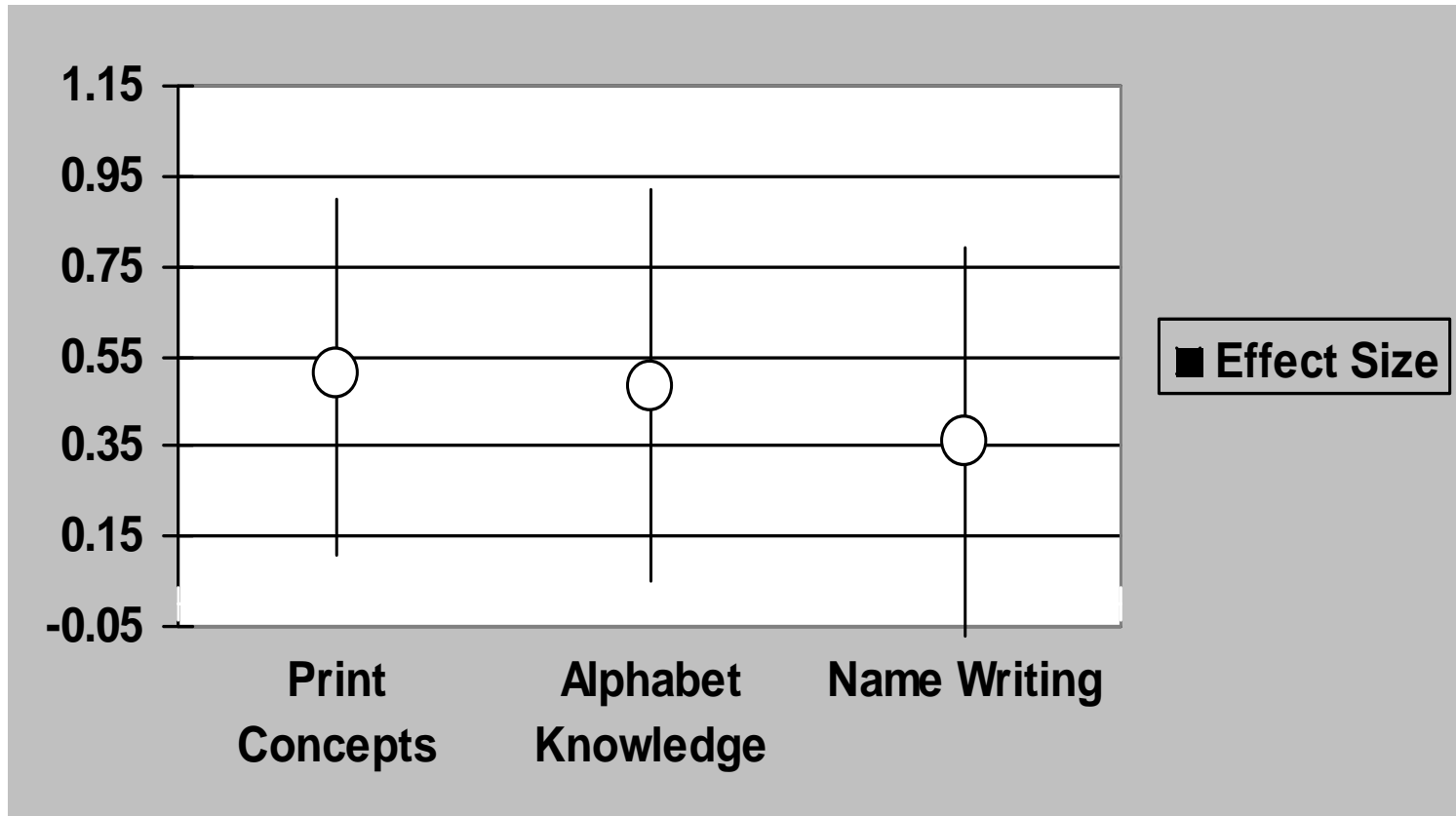
- 2005-2009
- Test effectiveness in **targeted enrollment preschool classrooms**
- Multi-site, multi-state study
- 84 classrooms in three conditions

STAR-2

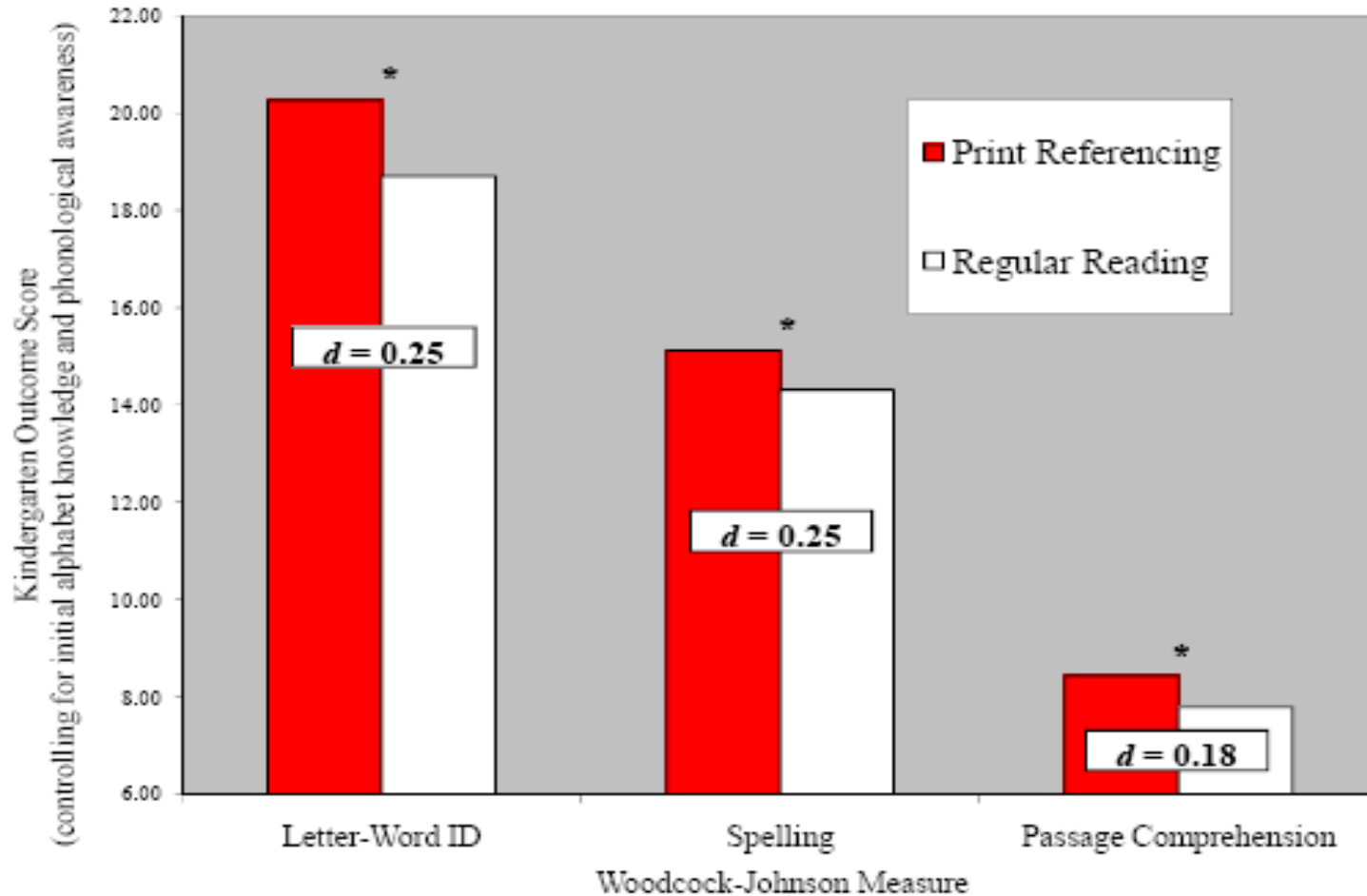
- 2008-2012
- Test effectiveness in **early childhood special education classrooms**
- Multi-site study
- 90 classrooms in three conditions

Print-Referencing and BAU Reading: PreK Impacts

(Justice, Kaderavek, Fan, Sofka, & Hunt, 2009)



End of K Impacts (n=356)



For More Information

www.preschoollab.com

(free download of
Read It Again-PreK!)

justice.57@osu.edu

Read It Again-PreK!

A Preschool Curriculum Supplement to Promote
Language and Literacy Foundations

