

# Identifying Kindergarteners at-risk for CCSS Standards

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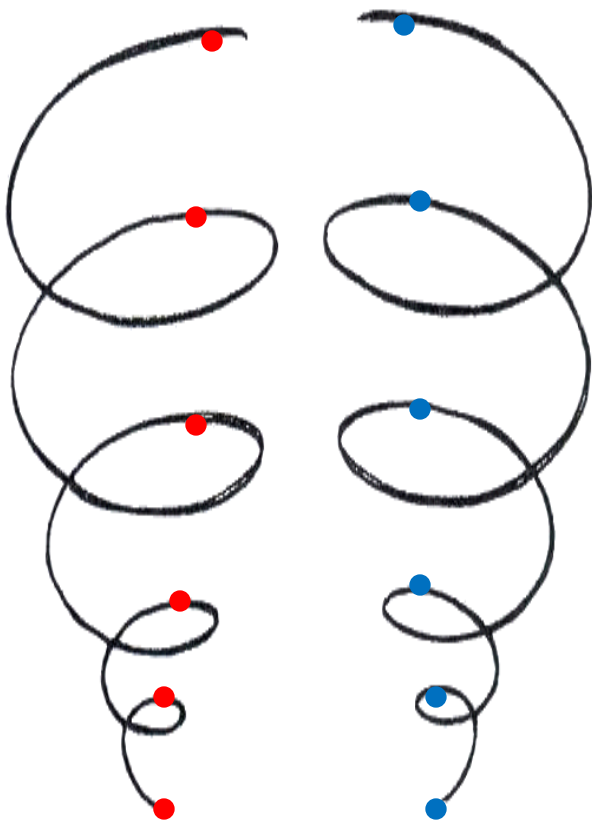
Jan Norris, Ph.D.

# Goals of this Project

- Identify the language deficits known to underlie reading failure
- Use the scope and sequence of language skills profiled on the CCSS
- Begin efforts in kindergarten which provides the foundation for all other grade levels
- Develop an instrument that can help us identify at-risk students and most delayed language skills

# college & career requirements

## 12<sup>th</sup> Grade



ELA

Math

- Aligned grade by grade
  - Define a progressive spiral from K-12
  - Build grade-by-grade towards college & career readiness
- same skill at progressively higher levels

**Kindergarteners:****Key Ideas and Details**

1. **With prompting and support**, ask and answer questions about key details in a text.

**Grades 1 students:****Key Ideas and Details**

1. **Ask and answer questions** about key details in a text.

**Grades 2 students:****Key Ideas and Details**

1. Ask and answer such questions as *who, what, where, when, why, and how* **to demonstrate understanding** of key details in a text.

**Grades 3 students:****Key Ideas and Details**

1. Ask and answer questions to demonstrate understanding of a text, **referring explicitly to the text as the basis for the answers.**

**Grades 4 students:****Key Ideas and Details**

1. Refer to details and examples in a text **when explaining what the text says explicitly and when drawing inferences from the text.**

**Grades 5 students:****Key Ideas and Details**

1. **Quote accurately from a text** when explaining what the text says explicitly and when drawing inferences from the text.

**Grades 6–8 students:****Key Ideas and Details**

1. **Cite specific textual evidence to support analysis of science and technical texts.**

**Grades 9–10 students:****Key Ideas and Details**

1. Cite specific textual evidence to support analysis of science and technical texts, **attending to the precise details of explanations or descriptions.**

**Grades 11–12 students:****Key Ideas and Details**

1. Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to **any gaps or inconsistencies in the account.**

# ELA Organized by 4 Areas

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(1) reading,

(2) writing,

(3) speaking and listening,

(4) Language

(i.e., conventions such as capitalization, punctuation, spelling, grammar, word knowledge, including word origins, affixes, subordinate categories)

Strand: Vocabulary acquisition and use

# Speech-Language Related Goals on Kindergarten level of CCSS

## **Key Ideas and Details**

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.
3. With prompting and support, identify characters, settings, and major events in a story.

## **Craft and Structure**

4. Ask and answer questions about unknown words in a text.

## **Integration of Knowledge and Ideas**

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

## **Phonological Awareness**

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - a. Recognize and produce rhyming words.
  - b. Count, pronounce, blend, and segment syllables in spoken words.
  - c. Blend and segment onsets and rimes of single-syllable spoken words.
  - d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.\* (This does not include CVCs ending with /l/, /r/, or /x/.)
  - e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

## **Comprehension and Collaboration**

2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

## **Presentation of Knowledge and Ideas**

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.

## **Conventions of Standard English**

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
  - A.
    - a. Use frequently occurring nouns and verbs.
    - c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes*).
    - d. Understand and use question words (interrogatives) (e.g., *who, what, where, when, why, how*).
    - e. Use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by, with*).
    - f. Produce and expand complete sentences in shared language activities.

## **Vocabulary Acquisition and Use**

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*.
  - a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*).
  - b. Use the most frequently occurring inflections and affixes (e.g., *-ed, -s, re-, un-, pre-, -ful, -less*) as a clue to the meaning of an unknown word.
5. With guidance and support from adults, explore word relationships and nuances in word meanings.
  - a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
  - b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
  - c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).
  - d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings.
6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

# CCSS in Kindergarten

## STANDARDS

### SDS LEVELS



#### Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.
3. With prompting and support, identify characters, settings, and major events in a story.

#### Craft and Structure

4. Ask and answer questions about unknown words in a text.

#### Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

#### Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - a. Recognize and produce rhyming words.
  - b. Count, pronounce, blend, and segment syllables in spoken words.
  - c. Blend and segment onsets and rimes of single-syllable spoken words.
  - d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.\* (This does not include CVCs ending with /l/, /r/, or /x/.)
  - e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

#### Comprehension and Collaboration

2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

#### Presentation of Knowledge and Ideas

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.

Label	Describe	Attribute	Interpret	Inference	Evaluation	Analogy	Metalinguage
X	X	X					
	X	X	X				
X	X	X	X	X	X		
		X	X				
	X	X	X	X			
					X	X	
							X
							X
							X
							X
							X
	X	X	X	X			
	X	X	X	X			
	X	X					
	X	X					



# CCSS in Kindergarten cont.

## STANDARDS

### SDS LEVELS



#### Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

A.

b. Use frequently occurring nouns and verbs.

c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes*).

d. Understand and use question words (interrogatives) (e.g., *who, what, where, when, why, how*).

e. Use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by, with*).

f. Produce and expand complete sentences in shared language activities.

#### Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*.

a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*).

b. Use the most frequently occurring inflections and affixes (e.g., *-ed, -s, re-, un-, pre-, -ful, -less*) as a clue to the meaning of an unknown word.

5. With guidance and support from adults, explore word relationships and nuances in word meanings.

a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).

c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).

d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings.

6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Label	Describe	Attribute	Interpret	Inference	Evaluation	Analogy	Metalinguage
							X
X	X						
		X					
who	what	where	when	how	why		
		X					
Simple NP	+ VP	+ PP Adj Adv	compound conj	complex embed	complement,		
					X	X	X
	X	X					
						X	X
							X
		X					
						X	
			X	X	X	X	
	X	X					
generalization							
X	X	X	X	X	X	X	X



# Questions:

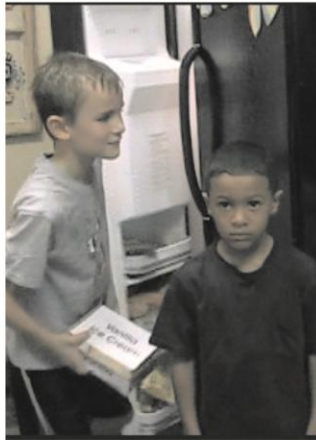
Can we design a test that will assess the language-based CCSS standards at kindergarten?

Will the test provide a distribution of scores that can be used to identify those at-risk for achieving the standards?

Will the test help us develop appropriate goals and objectives?

# Parts I, II, III: The Ice Cream Story

*[Show children the photographic sequence and read the accompanying text for each picture. Point to the children as you read the first two sentences to assure children know which child is Alex and which is Kaleb.]*



1

Alex and Kaleb are in the kitchen. Alex got the ice cream out of the refrigerator.

## The Ice Cream Cone



2

Alex made an ice cream cone. He gave the cone to Kaleb.



3

Kaleb took his cone outside. Kaleb was happy.



4

A dog named Buddy wanted the ice cream. Buddy zooged Kaleb.

5

Kaleb's ice cream cone fell. Buddy ate the ice cream. Kaleb was mad. Buddy was bad!



## I. Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.  
*[Do not show the pictures. Ask the following questions about the story.]*  
\_\_\_\_\_ *What kind of ice cream did Alex eat? (vanilla, white)*  
\_\_\_\_\_ *Who made the ice cream cone? (Alex, the white boy)*  
\_\_\_\_\_ *What happened to the ice cream? (fell or dog ate it)*
2. With prompting and support, retell familiar stories, including key details.  
*[Do not show the pictures. Say, "Tell me what happened in the story." NUMBER the order in which the child mentions any of the key ideas below. Ignore additional ideas. If the child stops before telling the whole story, prompt only with "What happened next?" or "Tell me more."]*  
  
\_\_\_ *Alex got ice cream from the refrigerator*  
\_\_\_ *Alex gave a cone to Kaleb*  
\_\_\_ *a dog/Buddy zooged Kaleb (accept zooged or any logical verb like scared/bumped/licked/bit)*  
\_\_\_ *Alex dropped his cone*  
\_\_\_ *Buddy/the dog ate the ice cream*  
\_\_\_ *Kaleb was sad/mad.*
3. With prompting and support, identify characters, settings, and major events in a story.  
\_\_\_\_\_ *Name the 3 characters in the story ( Alex, Kaleb, Buddy/dog) [must name 2 for credit]*  
\_\_\_\_\_ *Where were the children when they made ice cream (in the house/kitchen).*  
\_\_\_\_\_ *Where was Kaleb when the dog came up to him? (outside)*

## II. Craft and Structure

4. Ask and answer questions about unknown words in a text.  
*[Show the story and point to picture 4.]*  
\_\_\_\_\_ *"Listen to this sentence: Buddy zooged Kaleb. What does "zooged" mean?*  
  
*[Show the Smarty card. Explain that the talking bubble means Smarty needs to ask something. You (point to child) need to help Smarty.]*  
\_\_\_\_\_ *Smarty doesn't know what the word "zooged" means. What should he ask?*  
  
*[if the child gives Smarty a definition, say, "First he has to ask the question."]*

## III. Integration Knowledge & Ideas

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).  
  
\_\_\_\_\_ *Point to Kaleb's face in picture 3. "What part of the story should we tell when we see his face?"*
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.  
  
\_\_\_\_\_ *Kaleb was mad in this story. Was Alex mad? Why?*

# Part IV: Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

a. Recognize and produce rhyming words.

\_\_\_\_\_ Listen while I read these sentences (point to the words accompanying picture 5):  
"Buddy ate the ice cream. Kaleb was mad. Buddy was bad." Which words rhyme?  
[Read the three choices and circle the child's choices] mad ice cream bad

b. Count, pronounce, blend, and segment syllables in spoken words.

\_\_\_\_\_ Clap the syllables heard in these words [model the word "hap - py"] \_\_\_\_\_ outside \_\_\_\_\_ kitchen,  
\_\_\_\_\_ What word am I saying? [say the syllables 1 second apart] \_\_\_\_\_ prob-lem \_\_\_\_\_ re-frig-er-a-tor

c. Blend and segment onsets and rimes of single-syllable spoken words.

\_\_\_\_\_ What is the first sound in the word "mad"? (m) \_\_\_\_\_ What word am I saying: "m-ade"? (made)

d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.\* (This does not include CVCs ending with /l/, /r/, or /x/.)

\_\_\_\_\_ What is the first sound in the word "cone"? \_\_\_\_\_ What is the last sound? \_\_\_\_\_ What is the middle sound?  
\_\_\_\_\_ What is the first sound in the word "got"? \_\_\_\_\_ What is the last sound? \_\_\_\_\_ What is the middle sound?

e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

\_\_\_\_\_ Change the /m/ in "mad" to an /s/. What is the new word? (sad)  
\_\_\_\_\_ Change the /f/ in "fell" to a /b/. What is the new word? (bell)

# Part V: Comprehension & Collaboration

1. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

*[Hold up the Smarty card. Point to the bubble and say, "You need to help Smarty ask some questions" ]*

\_\_\_\_\_ *Smarty thinks the dog scared Kaleb. What could Smarty ask Kaleb to find out if he was scared?*

*[Are you scared of the dog?/Did the dog scare you? or other logical question]*

3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

\_\_\_\_\_ *Smarty doesn't know what Buddy is doing (point to picture 5). What should Smarty ask?*

*[What is Buddy/the dog doing? Is the dog eating the ice cream? or other logical question]*

# VI. Presentation of Knowledge and Ideas

5. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

\_\_\_\_\_ *Tell me about making an ice cream cone at your house. (correct = 3 relevant ideas)*

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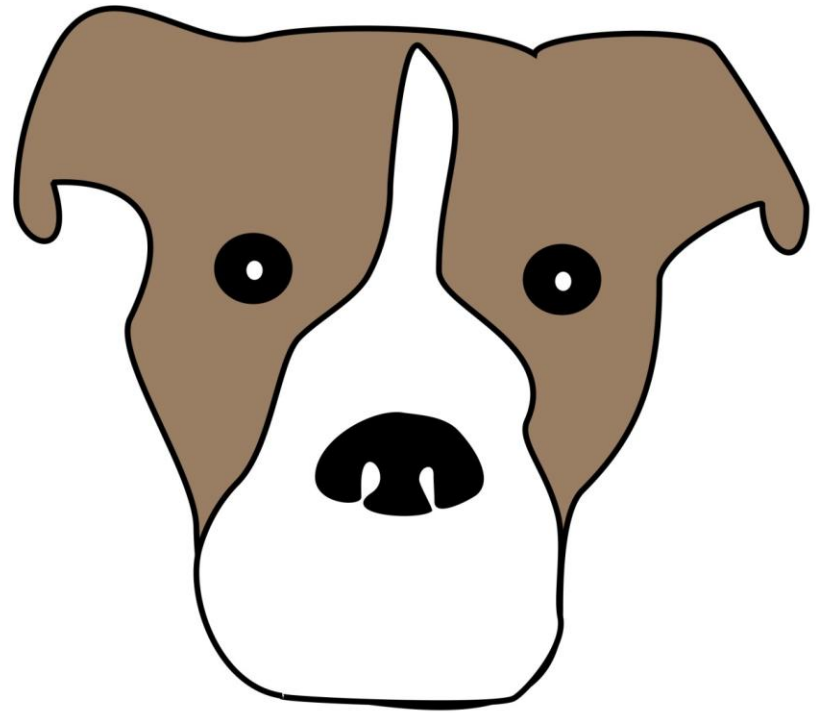
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6. Add drawings or other visual displays to descriptions as desired to provide additional detail.

\_\_\_\_\_ *Draw a picture of the dog's face after he ate the ice cream. [Use picture on last page of test]*



# VII. Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- b. Use frequently occurring nouns and verbs. *(circle words used by the child or add other logical nouns or verbs)*

\_\_\_\_\_ what did Alex do in the kitchen?    got    made    ice cream    cone    refrigerator    boy  
\_\_\_\_\_ what did Alex do with the cone?    gave    ice cream    cone    boy    handed  
\_\_\_\_\_ what did Kaleb do after he got his cone?    went    outside    door    took    boy    opened  
\_\_\_\_\_ what did the dog do?    scared    pushed    bit    licked    boy    elbow    arm

- c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).

\_\_\_\_\_ What if another dog joined Buddy? There would be two \_\_\_\_\_ (dogs)  
\_\_\_\_\_ This time Kaleb wants his ice cream in a dish. Alex wants some in a dish too.  
Alex went to the cupboard and got two \_\_\_\_\_ (dishes)

- d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).

**Answers Questions**      *[Accept any logical answers that fit the story]*

_____ Who is in the story?	_____ When did the dog come over?
_____ What did Buddy want?	_____ Why did the dog come over?
_____ Where did Buddy go?	_____ How did the dog get the ice cream?

**Asks Questions**

*[Now you ask Smarty those questions (point to relevant parts of the pictures to elicit the questions)]*

Ask Smarty a \_\_\_\_\_ question (use this prompt for each question)

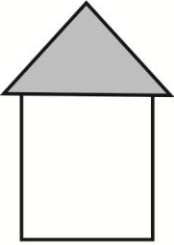
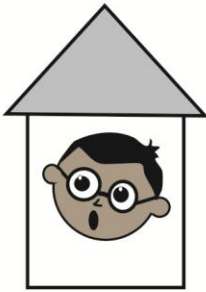
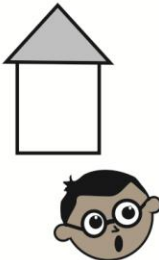
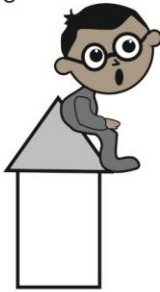
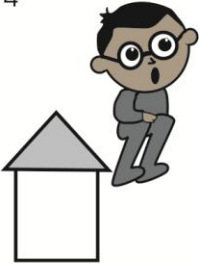
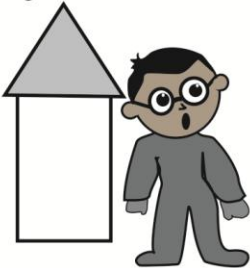


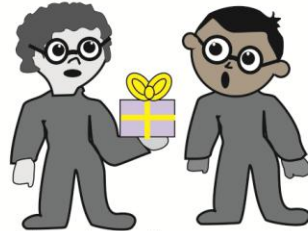
_____ who	_____ when
_____ what	_____ why
_____ where	_____ how



e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).

*Use the Smarty Preposition pictures (on back of story pictures) to help elicit responses.*

*Use phonemic cues if necessary.*

Prepositions				
 <p>This is Smarty's house.</p>	1  <p>Where is Smarty?</p>	2  <p>He was in, but now he is ____</p>	3  <p>Where is Smarty sitting?</p>	4  <p>Smarty was sitting on his house. Now he is jumping ____</p>
5  <p>Where is Smarty standing?</p>	6  <p>Is Smarty by himself? No he's ____</p>	7  <p>Which boy wears glasses? Cue: Both ____</p>	8  <p>Jeff is giving the present ____ Smarty. Where will Smarty get a present? Cue: /ff/ ____ Jeff</p>	

## Conventions of Standard English continued

- f. Produce and expand complete sentences in shared language activities.

\_\_\_\_\_ *Point to picture 4. Tell me what happened. Can you tell me again using a bigger sentence?*

\_\_\_\_\_

*[accept a grammatically correct sentence, in the child's dialect, that has 6 or more words]*

# VIII. Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
  - a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).

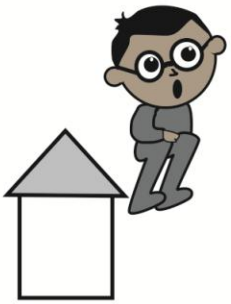
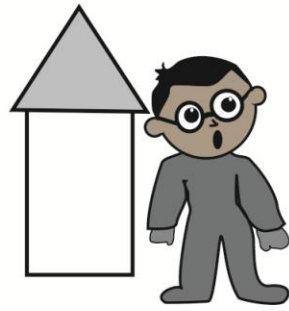
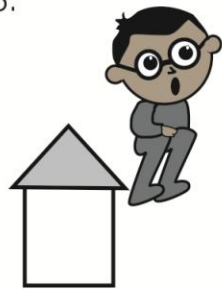

*A sick dog that is “mad” is a dog that is crazy and dangerous. A mad dog could mean a sick dangerous dog.*

- \_\_\_\_\_ *What does it mean in the story when it says Kaleb was mad?*
- \_\_\_\_\_ *What would it mean if the story said the sick dog was mad?*

# Vocabulary Acquisition and Use continued

Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.

*Use the pictures to help elicit responses*

Common Affixes			
1.  Smarty was sitting on his house. Now he is ____	2.  Smarty is done jumping. He already ____	3.  Smarty is not afraid to jump off the roof. How can I end the word "fear" to mean "not afraid. He is fear ____	4.  Jeff is too scared to jump. How can I end the word "fear" to mean "is afraid." He is fear ____

# Vocabulary Acquisition and Use

## continued

With guidance and support from adults, explore word relationships and nuances in word meanings.

- a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

\_\_\_\_\_ *Ice cream is a dessert. Name two more desserts.* \_\_\_\_\_  
\_\_\_\_\_

- b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).

\_\_\_\_\_ *Alex **gave** the cone to Kaleb and Kaleb \_\_\_\_ (took) the cone.*

\_\_\_\_\_ *The ice cream cone was **full** but now it is \_\_\_\_.*

- c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).

\_\_\_\_\_ *Name some places in school where children are happy.*

- d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.

\_\_\_\_\_ *Kaleb is going back to the kitchen to get more ice cream. Show me how he would*  
\_\_\_\_ *walk* \_\_\_\_ *march* \_\_\_\_ *skip* \_\_\_\_ *tiptoe*

Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

*[Point to picture 4 and reread the sentences. Then say, "Now you use the word "zooged" in a sentence."]*

# Establish CCSS-Based Goals

- Goal 1: Child will acquire a continuum of new vocabulary words and uses as defined by objectives 4a,b, (new word meanings and inflections); 5a,b,c,d (verbs, adverbs, shades of meaning, real life connections from Vocabulary Acquisition and Use), Ask and answer questions about unknown words in a text (objective 4 Craft and Structure) and 7 (learn words from context) of the Common Core State Standards (Vocabulary Acquisition and Use)
- Goal 2: Child will demonstrate command of the Conventions of Standard English (Common Core State Standards) grammar and usage including high frequency nouns and verbs (1b), morphemes (objective 1c), question words (1d), prepositions (1e), and complete sentences (1e)
- Goal 3: Child will show Integration of Knowledge and Ideas (Common Core State Standards) by describing the relationship between illustrations and the story in which they appear (objective 7), asking and answering questions about key details in a text (Key Ideas and Details objective 1), with prompting and support, retell familiar stories, including key details (objective 2), and comparing and contrasting the events to other experiences (objective 8).
- Goal 4: Child will demonstrate understanding of Phonological Awareness (Common Core State Standards), including reflection on words, syllables and sounds or phonemes, as specified by objective 2 a,b,c,d and e.
- Goal 5: Child will decrease speech production errors through emphasis on phonemic awareness, recasting for speech production, and feedback on phoneme production (objective 2 a,b,c,d and e)

# **CCSS: Adding Another "S"...the SLP**

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# Disclosure

Some of slides show intervention materials developed by Jan Norris and commercially available at [www.elementOry.com](http://www.elementOry.com).

# Crisis in Education

- Illiteracy is one of the biggest problems in the US
- More than 30 million people in the US cannot perform functional literacy tasks
  - reading job advertisements
  - past due notices (US Dept of Ed, 2013).
- Louisiana ranks 45<sup>th</sup> in the nation
- School-age children score comparably, ranking 43<sup>rd</sup>
- only 53% of 4<sup>th</sup> graders read above a basic level (i.e., partial mastery)
- By high school we rank 50<sup>th</sup> in number of graduates

# Who are These Children?

Research conducted by Catts and Kamhi (2005) showed those at-risk for reading failure are largely:

1. Children raised in poverty,
2. children with dyslexia, or
3. children with oral speech and language impairments

# We Know That ...

children with learning disabilities have deficits in a wide range of language skills, including

(e.g., Catts & Kahmi, 2005; Gough & Tunmer, 1986; Justice, 2006; Nation, Adams, Bowyer-Crane, & Snowling, 1999)

- problems with phonological processing
- particular difficulty with phonemic awareness
- history of articulation problems (24%)
- Adding prefixes and suffixes
- Complex syntactic structures
- Irregular forms and constructions
- Metalinguistic skills

# We also know that

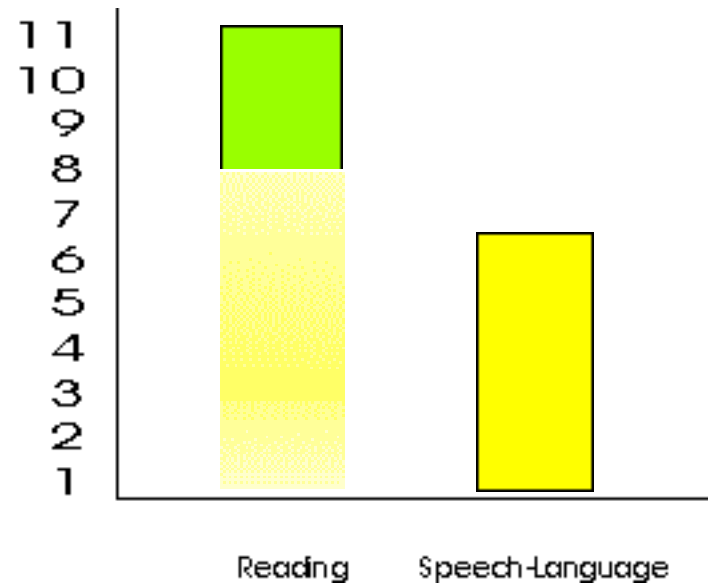
Children with speech and language delays are at-risk for literacy deficits

(e.g., Catts, Adlof, & Weismer, 2006; Gough & Tunmer, 1986; Kuhn & Stahl, 2003; Nation & Snowling, 1998; Yuill & Oakhill, 1991)

- Children with persistent speech delays (Catts, 2005)
- Children with language delays not resolved by 5 ½ (Bishop & Adams)
- Children with preschool history of SLI (Stothard et al. )
- 70% of preschool language delayed still having difficulty at adolescence

# Overlap between Speech-Language and Reading Disability

- Gosse et al. (2009) showed that between 9%-11% of kindergarten and first grade students are identified for reading problems, and 6% for speech/language.
- Of that 6%, one out of four with articulation deficits (25%) has a comorbid reading disability diagnosis.
- If the child also shows a language impairment, the rate of comorbid reading disability is 66% (Peterson, et al., 2009).



# SLPs Must Take an Active Role and Address the Underlying Language Problems of Reading

Linguistic abilities  
(morphology,  
syntax, semantics,  
phonology,  
pragmatics)

Related cognitive abilities  
(focus/attention,  
memory,  
information  
storage and  
retrieval,  
categorization,  
sequence,  
discrimination)

Metalinguistic  
abilities (explicit  
awareness of  
patterns of syntax,  
morphology etc.)



# Intervention for kindergarteners based on CCSS

Ashley Meaux, Ph.D.

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# From Results, Establish CCSS-Based Goals

- Goal 1: Child will acquire a continuum of new vocabulary words and uses as defined by objectives 4a,b, (new word meanings and inflections); 5a,b,c,d (verbs, adverbs, shades of meaning, real life connections from Vocabulary Acquisition and Use), Ask and answer questions about unknown words in a text (objective 4 Craft and Structure) and 7 (learn words from context) of the Common Core State Standards (Vocabulary Acquisition and Use)
- Goal 2: Child will demonstrate command of the Conventions of Standard English (Common Core State Standards) grammar and usage including high frequency nouns and verbs (1b), morphemes (objective 1c), question words (1d), prepositions (1e), and complete sentences (1e)
- Goal 3: Child will show Integration of Knowledge and Ideas (Common Core State Standards) by describing the relationship between illustrations and the story in which they appear (objective 7), asking and answering questions about key details in a text (Key Ideas and Details objective 1), with prompting and support, retell familiar stories, including key details (objective 2), and comparing and contrasting the events to other experiences (objective 8).
- Goal 4: Child will demonstrate understanding of Phonological Awareness (Common Core State Standards), including reflection on words, syllables and sounds or phonemes, as specified by objective 2 a,b,c,d and e.
- Goal 5: Child will decrease speech production errors through emphasis on phonemic awareness, recasting for speech production, and feedback on phoneme production (objective 2 a,b,c,d and e)

# The “Modern” SLP’s Plan

## Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.
3. With prompting and support, identify characters, settings, and major events in a story.

## Craft and Structure

4. Ask and answer questions about unknown words in a text.

## Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

## Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
- a. Recognize and produce rhyming words.

Morphology

Phonology

LITERACY CONTEXT

Semantics

Syntax

Label	Describe	Attribute	Interpret	Inference	Evaluation	Analogy	Metalinguage
x	x	x					
	x	x	x				
x	x	x	x				
		x	x				
	x	x	x	x			
					x	x	
							x
							x

							x
							x
							x
							x
	x	x	x	x			
	x	x	x	x			
	x	x					
	x	x					

- b. Count, pronounce, blend, and segment syllables in spoken words.
- c. Blend and segment onsets and rimes of single-syllable spoken words.
- d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.\* (This does not include CVCs ending with /l/, /r/, or /x/.)
- e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

## Comprehension and Collaboration

2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

## Presentation of Knowledge and Ideas

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.

# CCSS in Kindergarten

## STANDARDS

### SDS LEVELS



#### Key Ideas and Details

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.
3. With prompting and support, identify characters, settings, and major events in a story.

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Label	Describe	Attribute	Interpret	Inference	Evaluation	Analogy	Metalinguage
X	X	X					
	X	X	X				
X	X	X	X	X	X		
		X	X				
	X	X	X	X			
					X	X	
							X
							X
							X
							X
							X
	X	X	X	X			
	X	X	X	X			
	X	X					
	X	X					

## So we asked:

Would providing a broad range of language skills using a focused, multilevel approach to storybook reading in kindergarten improve:

- Morphology
- Phonology
- Semantics
- Syntax

# Specifically, we wanted to know:

Will scaffolded talk along a continuum of semantic levels result in greater gains in:

1. Semantic Composite
2. Syntactic Composite
3. Literacy Skills
4. Phonology

# Materials

Semantic Board

Treasures: A  
Reading/Language-  
Arts Program Big  
Books

MorphoPhonic Face  
Cards

SDS Lesson Plan



When Mama Cat

Muffy and Skinny  
up to nap.

and pounces

The cat and kittens take a nap

## Unit 5

Mama Cat  
has Three Kittens

Book 1 Day 2

S D S  S e m a n t i c  L e v e l s		<b>Metalanguage</b>
		<b>Analogy</b>
		<b>Evaluation</b>
		<b>Inference</b>
		<b>Interpretation</b>
		<b>Attribution</b>
		<b>Description</b>
		<b>Label</b>
		<b>Indication</b>
		<b>Reaction</b>

Add bigger and bigger ideas

**Metalanguage** - Help the children read the sentences. Give each child a chance to sequence the words to form the sentence, "The cat and kittens take a nap." Help children identify the first letter and corresponding sound of words. Focus on articulation as needed.

**Analogy** - Boris is different from the girl kittens in many ways. Are boys and girls different in your family or your class? How are boys different from girls? Is it ok to be different?

**Evaluation** - Boris does the opposite of what his mother and the other kittens are doing. Should everybody do the same thing at the same time? What could happen to Boris if he doesn't stay close to his mother? Can his mother watch him when she is asleep? Are there times at home and school when you should stay with your family and friends? Are there times when you can do things on your own?

**Inference** - Where do you think Boris is? (Check the next page of the story to see) Why isn't he sleeping? What do you think he is pouncing on? How does he feel? (Curious, full of energy, practicing his hunting skills)

**Interpretation** - How do the kittens and Mama Cat feel? (tired, sleepy) Which kitten is missing? (Boris) What time is it? (Day time, morning, afternoon?)

**Attribution** - What color are the kittens? How many kittens do you see? How many bees are in the picture?

**Description** - What are the kittens doing? (Curling up, taking a nap) What is Mama Cat doing? Where are they sleeping? What are the bees doing? (Flying, getting pollen from the plants, buzzing, leaving the cats alone)

**Label** - Focus on the first picture. Have children name things seen in the picture (kittens, Mama Cat, bees, flowers)

**BEGIN HERE**

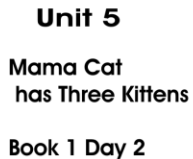
with small ideas ...



1. Book cover  
& story title
2. Discuss Theme  
(using Lesson Plan)

## BEGIN HERE

with small ideas ...



S D S e m a n t i c L e v e l s	Thought about thought!	Metalanguage
	It's kind of like	Analogy
	What do you think? In my opinion	Evaluation
	Other things I know about this	Inference
	The clues suggest —	Interpretation
	Physical attributes Mental states	Attribution
	Doing what? Where? When?	Description
	It's a —	Label
	Point or gesture	Indication
	Reflexive response	Reaction

## Add bigger and bigger ideas

Label - Focus on the first picture. Have children name things seen in the picture (kittens, Mama Cat, bees, flowers)

# Procedures

Present SDS Board;  
place clip near “LABEL”

-SLP will provide Scaffolding &  
Direct Model to discuss the  
information on  
Lesson plan

Move clip to “DESCRIPTION”

- Cont. for each level

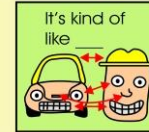
Let's name as  
many things as  
you can in the  
picture.



**S**  
**D**  
**S**  
**S**  
**e**  
**m**  
**a**  
**n**  
**t**  
**i**  
**c**  
**L**  
**e**  
**v**  
**e**  
**s**



**Metalinguage**



**Analogy**



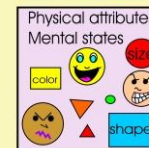
**Evaluation**



**Inference**



**Interpretation**



**Attribution**



**Description**



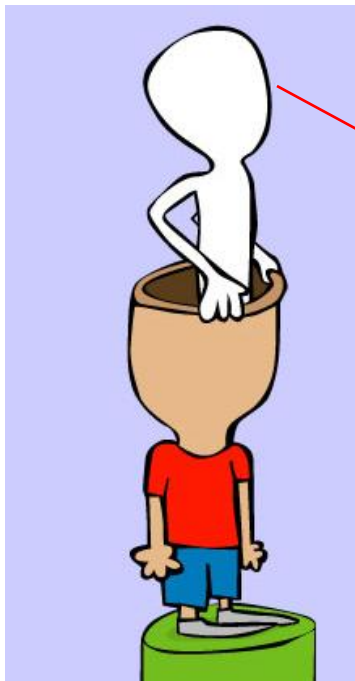
**Label**



**Indication**



**Reaction**



## Metalanguage

### Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - a. Recognize and produce rhyming words.
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  - e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

Mama cat curls up to nap = **6 words**

cat – hat      nap - tap

Mama = **2 syllables**    ma + ma = mama

Onset /k/    rime /at/    /k/ + /at/ = cat



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cat – cap – nap – nip – hip – hop - hot

# How did we do it?

- Participants
  - School Demographics
  - School-based SLPs
  - Intervention & Comparison Groups
- Assessment Instruments
- Materials/Procedures

# A bit about our School Pool:

- School Demographics
  - 4 inner city schools in Southern Louisiana
- 5 School-based SLPs
  - Years of Experience range from 2-30 years
  - 3 have CCC; 1 in Clinical Fellowship year; 1 holds LA License only
  - 4 have M.A. in COMD; 1 has B.A. in COMD (M.Ed.)
- 7 Members of an Assessment Team

# Kindergarten Student Selection

## Intervention Group (SLP)

- Age Range: 5;4 - 7;2
  - (M = 6;1 ; SD = 0.69)
- 7 Female; 11 Males
- 17 AA; 1 Hispanic
- 12 IEP students; 8 below 16%ile on DSC
- 6 students were repeating K
- 100% received Free or Reduced Lunch

## Comparison Group

- Age Range: 5;3 – 6;2
  - (M = 5;8 ; SD = 0.35)
- 8 Females; 10 Males
- 16 AA; 2 EA
- All below 16%ile on DSC
- None repeating K
- 100% received Free or Reduced Lunch

There was not a significant difference in age between the groups:  $t(25) = 2.347, p = .027$

# How did we measure progress?

## Inclusion

- Developing Skills Checklist
  - Language
  - Auditory
  - Memory
  - Print Concepts

## Language

- Test of Language Development: Primary Fourth Edition (TOLD:P4)
  - Picture Vocabulary
  - Relational Vocabulary
  - Oral Vocabulary
  - Syntactic Understanding
  - Sentence Imitation
  - Morphological Comprehension

## Literacy Skills

- TOLD:P4
  - Word Discrimination
  - Phonemic Analysis
- The Phonological Awareness Test-Second Edition (TPAT2)
  - Segmentation

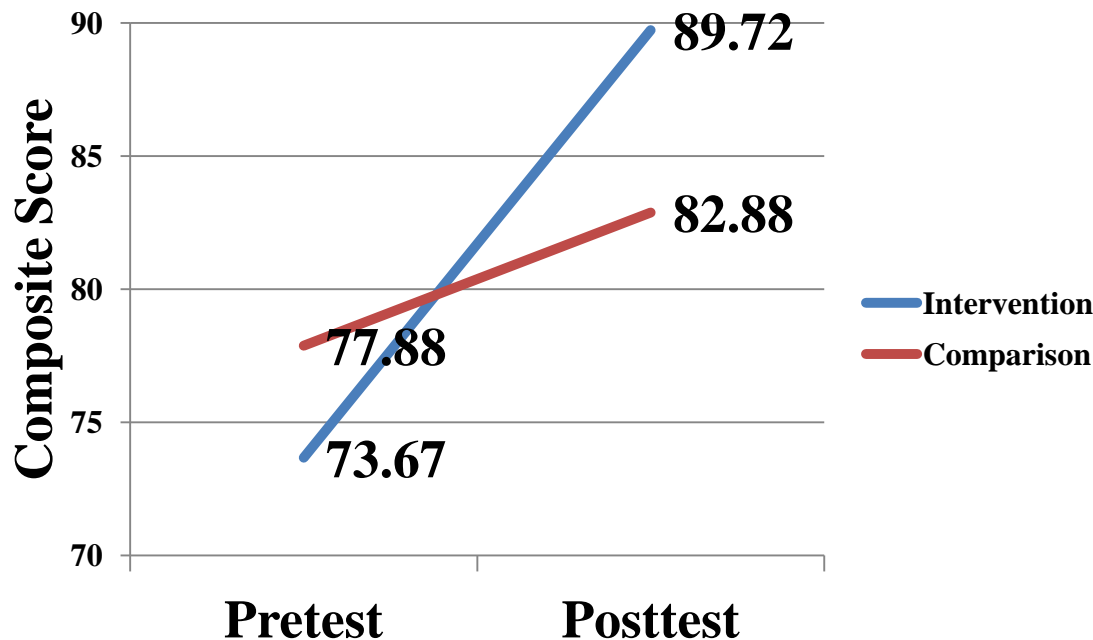
## Phonology

- TOLD:P4
  - Word Articulation



# Q1: Semantic Composite

Intervention Group						Comparison Group				
Pretest		Posttest		Gain		Pretest		Posttest		Gain
Mean	SD	Mean	SD			Mean	SD	Mean	SD	
Total	73.67	15.71	89.72	17.36	16.05	77.88	13.40	82.88	10.98	5.00

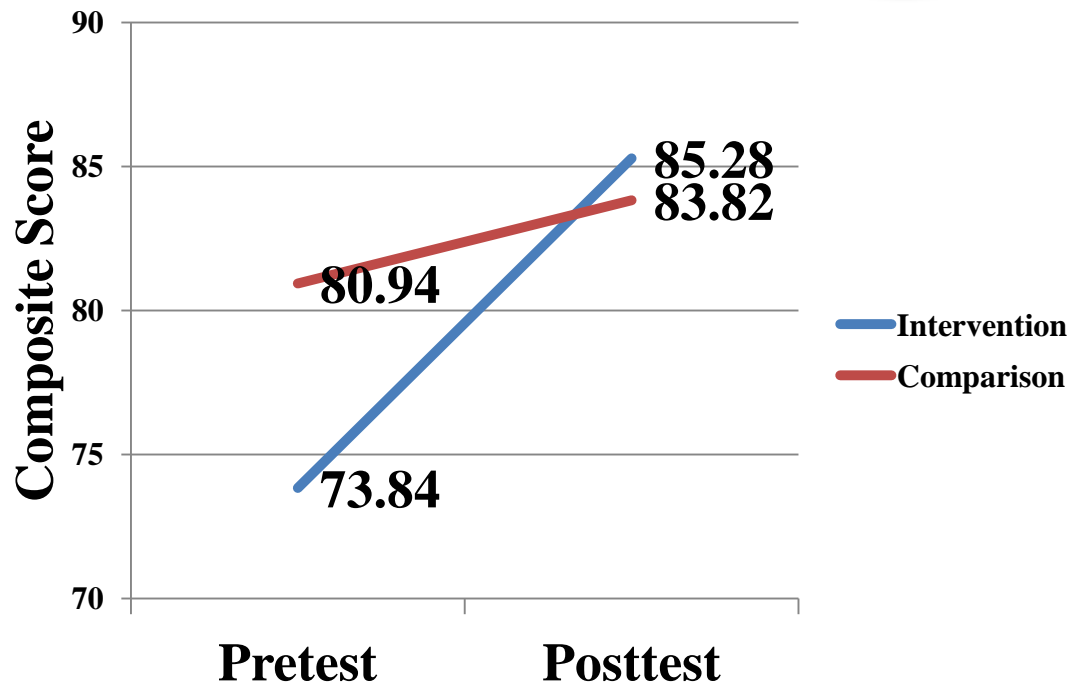


Intervention group made significantly greater gains in semantic subtests that were also clinically significant (increased from poor to nearly average, more than 1 sd of change)



## Q2: Syntax Composite

Intervention Group						Comparison Group				
Pretest			Posttest			Pretest			Posttest	
	Mean	SD	Mean	SD	Gain	Mean	SD	Mean	SD	Gain
Total	73.84	11.10	85.28	15.96	11.44	80.94	13.20	83.82	11.45	2.88



Intervention group made significantly greater gains in syntax that were also clinically significant (increased from poor to below average, more than 1 sd of change)

# **Q3: Literacy Skills**

## **Phonemic Awareness**

- Intervention group made comparable gains in phonemic awareness to controls receiving another intervention. Improved from poor to below average.

# **Q3: Literacy Skills**

## **Print Awareness**

- Intervention group knew more letter names at pretest so both increased to mastery or near mastery at posttest; both also increased letter-sound knowledge (24/26 for intervention group; 21/26 for controls)