

Intervention Research with ELLs

From Research to Practice

Presented By

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Findings from 4 Experimental Studies with 1st Grade English Language Learners at-risk for Reading Problems with **2nd grade and 4th grade** Follow-up Data

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Background

- Some Spanish speaking children will struggle to become readers, regardless of the language of instruction (English or Spanish)
- Much of what we know about teaching reading to native English speaking struggling readers applies to teaching native Spanish speaking struggling readers
- Thus, interventions designed to teach reading should be effective in either Spanish or English
- Oralcy development and ESL strategies are critical additions to reading interventions for Spanish speaking students

Research Sample (Cohort 1)

- **Schools**
 - 3 Houston (1 Transitional, 2 English Immersion)
 - 4 Austin (4 Transitional)
 - 4 Brownsville (3 Transitional, 1 English)
- **Intervention Tutors - All bilingual/biliterate**
 - 2 Houston (1 Spanish/English, 1 English only)
 - 3 Brownsville (2 English only, 1 Spanish only)
 - 2 Austin (2 Spanish only)
- **Students**
 - Houston (6 Spanish, 26 English)
 - Brownsville (28 Transitional, 24 English)
 - Austin (33 Transitional, 0 English)

Research Design

SPANISH PARTICIPANTS

- Cohort 1
 - 33 Treatment
 - 34 Comparison
- Cohort 2
 - 42 Treatment
 - 47 Comparison

ENGLISH PARTICIPANTS

- Cohort 1
 - 25 Treatment
 - 25 Comparison
- Cohort 2
 - 45 Treatment
 - 49 Comparison

The Interventions

- Primary focus on reading
- Parallel in Spanish and English
- English version previously validated as effective
- 50 minutes per day October-May
- 1:4 Teacher to Student ratio
- Provided in addition to language arts instruction

Lesson Cycle

- Story Retell (@ 10 minutes)
- Reading Lesson (@ 35 minutes)
- Embedded Language Support (@ 5 minutes)

Story Retell

- Preview the book and assess prior knowledge
- Make predictions or build background knowledge
- Introduce 2-4 vocabulary words
- Read the book aloud
- Students retell what was read
- Teacher writes student responses and summarizes

Proactive Reading/ *Lectura Proactiva*

- Explicit instruction in synthetic phonics, with emphasis on fluency
- Integrates decoding, fluency, and comprehension strategies
- Decodable text
- Carefully constructed scope and sequence designed to prevent possible confusions
- Every activity taught to 100% mastery every day

Daily Lessons

- Includes multiple strands
- Amount of new information is kept to a minimum so that children can assimilate it
- Review and generalization included in every lesson

Instructional Design: Integrated Strands

Vocabulary and Concept Knowledge

Phonemic Awareness

Encoding

Letter-Sound Recognition

Word Recognition

Repeated Connected Text Reading

Comprehension Strategies

Intervention Comparison

English

- Focus on phonemic awareness -segmenting and blending-until children are sensitive to phonemes within blends
- Focus on reading monosyllabic cvc words before moving into multisyllabic and other syllable types
- Sounding out is the primary decoding strategy
- Children are taught to be “flexible” decoders since English has many irregular words
- Much time assisting children to process connected text fluently through the reading of decodable stories
- Basic comprehension strategies are taught and practiced daily
- ESL inserts ensure that children have the necessary concepts and vocabulary to participate in each lesson

Intervention Comparison

Spanish

- Significantly less phonemic awareness instruction
- The cv syllable type is given major emphasis
- Reading multisyllabic words begins almost immediately
- The phoneme is focused on syllables within words, but children don't sound out an entire multisyllabic word phoneme by phoneme
- Processing words syllable by syllable is the primary decoding strategy
- Children read much more complex word structures much sooner than they do in English
- Spanish text becomes richer much more quickly, allowing for the inclusion of more advanced comprehension strategies

Results for Spanish Intervention Cohort 1

**Statistically significant differences in favor of Spanish Intervention treatment group for outcomes in Spanish.
Time × Treatment Interaction effects for:**

- Letter sounds
- Blending phonemes- words and non-words
- Word attack
- Oral reading fluency — Spanish
- Passage comprehension
- Overall language development

Results for Spanish Intervention Cohort 2

**Statistically significant differences in favor of English Intervention treatment group for outcomes in English.
Time × Treatment Interaction effects for:**

- PA composite
- Letter sound identification
- Word attack
- DIBELS, BOY

Effect Sizes for Spanish Intervention Cohort 1 and 2 respectively

Spanish Measure	Effect Size	
Letter Name Identification	+.32	.26
Rapid Letter Naming	+.46	.67
Letter Sound Identification	+.72	.53
PA Composite	+.73	.81
Oral Language Composite	+.35	.23
Word Attack	+.85	.45
Passage Comprehension	+.55	.42
DIBELS	+.75	.28,.41

Results for English Intervention Cohort 1

**Statistically significant differences in favor of English Intervention treatment group for outcomes in English.
Time × Treatment Interaction effects for:**

- Letter naming fluency
- Letter sound identification
- Phonological composite (sound matching, blending words, blending non-words, segmenting words, elision)
- Word attack
- Dictation
- Passage comprehension

Results for English Intervention Cohort 2

Statistically significant differences in favor of English Intervention treatment group for outcomes in English. Time × Treatment Interaction effects for:

- Letter sound identification
- Letter word identification
- Phonological composite
- Word attack
- DIBELS, BOY

Effect Sizes for English Intervention Cohort 1 and 2

English Measure	Effect Size	
Letter Name Identification	+.59	-.23
Rapid Letter Naming	+.88	-.16
Letter Sound Identification	+1.01	.36
PA Composite	+1.24	.38
Verbal Analogies	+.77	.11
Oral Language Composite	+.43	- .17
Word Attack	+1.09	.42
Passage Comprehension	+1.08	.06
DIBELS BOY	+.16	.27,.32

2nd Grade Follow-Up Effect Sizes

	English	Spanish
Oral Lang Comp	.24	.04
Letter Wd ID	.43	.64
Word Attack	.45	.54
Word Rdg Eff	.41	.45

2nd Grade Follow-Up Effect Sizes

	English	Spanish
Passage Comp	.31	.49
ORF	.36	.39
Spelling	.43	.65

4th Grade Follow-Up Effect Sizes

	English	Spanish
Oral Lang Comp	.04	.20
Letter Wd ID	.45	.30
Word Attack	.29	.20
Word Rdg Eff	.22	.30

4th Grade Follow-Up Effect Sizes

	English	Spanish
Passage Comp	.25	.30
ORF	.25	.30
Spelling	.24	.40

Instructional Goals of the Read Aloud/Story Retell Procedure

- **Build and extend vocabulary and content knowledge**
- **Build and expand listening comprehension and oral language skills within the context of reading both narrative and informational trade books.**

Elements of the Procedure

- **Introduce the story and three or four new words.**
 - **Read a passage from a narrative or informational text out loud, followed by literal and inferential questions.**
 - **Reread the passage, focusing on the three or four vocabulary words.**
 - **Extend comprehension by deeply processing vocabulary knowledge.**
 - **Summarize what was read or learned.**
- (Hickman, Pollard-Durodola, Vaughn, 2004)**

Selection of Vocabulary Words

- **Select 3-4 words of high utility that can be used in varied contexts.**
- **Tier 2 words go beyond basic, familiar concepts (Tier 1) but are not so vague and technical (Tier 3) that they would be confined to specified content knowledge.**
- **Define words in terms that readily understood by students, helping students to make connections between world knowledge and new knowledge.**

Questions that guide vocabulary selection:

- **Will learning the words make students better able to describe their own life experiences because the words or knowledge gained can be linked to known words or concepts?**
- **Will learning the words result in a deeper understanding of a specific context within a story that can also be linked to student knowledge or life experiences?**

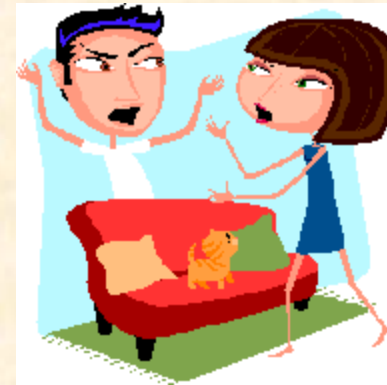
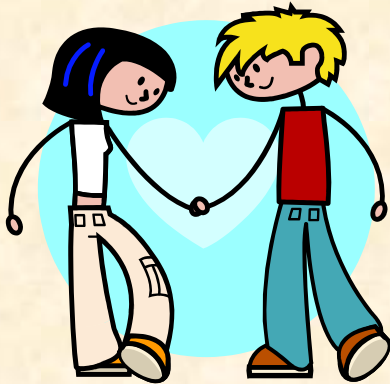
Selection of Text and Read Aloud Passages

- **Select text that is one to two grade levels above the student's grade.**
- **Select stories and informational text based on student interest.**
- **Arrange texts into thematic groups (3-4) that will allow students to gain more depth in content knowledge.**
- **Divide book into passages of 200-250 words so that it can be completely read within three to five days.**

Multiple meanings

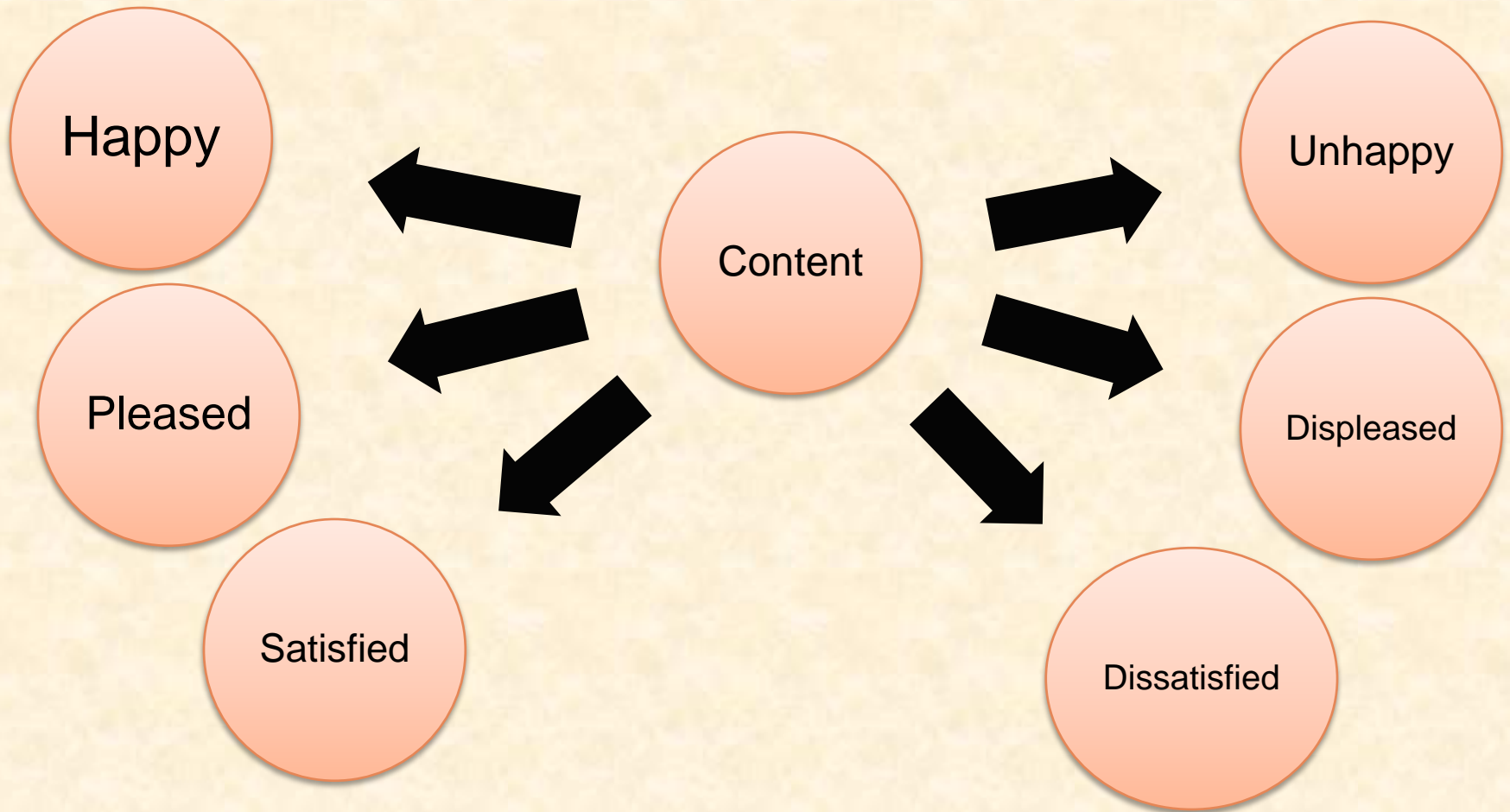
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Examples and Non-examples *Content*



Semantic Web

Definition:



Sentence: Mary was content playing outside.

Examples:

Definition: .Happy or satisfied

Synonyms:

happy
satisfied
pleased

Content




Antonyms:

unhappy
dissatisfied
displeased

Sentences:

- Mary was content while she was playing outside.
- Juan was content since his cousins were visiting.

Student Glossaries

Word	Usage	Picture	Word in Native Language
Miracle	It's a miracle to see a flower blooming.		Milagro
Ancestor	This is a picture of someone's ancestors.		Antecesor
Wondrous/ Marvelous	This is a wondrous place to visit.		Maravilloso

For more information

- <http://www.texasreading.org/utcrla/materials/newlightonliteracy>
- Vaughn Gross Center for Reading and Language Arts The University of Texas at Austin
- Hickman, P., Pollard-Durodola, S. D., & Vaughn, S. (2004). Storybook reading: Improving vocabulary and comprehension for English-language learners. *Reading Teacher*, 57(8), 720-730.
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