The Effectiveness of a Text-Centered Literacy Curriculum for Students with Intellectual Disability

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Southern Methodist University
Dallas, Texas

CEC 2017
projectintensity.com
friendsontheblock.com

Acknowledgements
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Project Intensity: What is it?

Project Intensity: The Development of a Supplemental Literacy Program Designed to Provide Extensive Practice with Multiple-Criteria Text for Students with Intellectual Disability

• Institute of Education Sciences (IES) development grant

• Partnership with schools and teachers

• Includes pilot testing to determine the promise of the intervention, but it is not a randomized-control trial (RCT)

• Today we will present findings from a single-case design pilot study with 4 students with ID using multiple baseline across levels, (extending our previous study)
Project Intensity: Who is it?

Principal Investigators

• Jill Allor, PI
• Stephanie Al Otaiba, Co-PI
• Paul Yovanoff, Co-PI

Curriculum Authors

• Jill Allor
• Stephanie Al Otaiba
• Jennifer Cheatham

Current and Former Research Staff

• Jennifer Cheatham
• Diane Gifford
• Francesca Jones
• Dawn Levy
• Melinda McGrath
• Ashley Moorshead
• Miriam Ortiz
• Carlin Conner
• Kristi Baker
Overview

• Purpose of Session: Recent Pilot Study
• Literature Review
• Description of the Curriculum
• Method: Participants, Measures, Implementation
• Findings: Graphs of Progress and Data Analysis
• Discussion, Implications for Practice, Future Research
• Q&A
Literature Review:
Research on Reading and Intellectual Disability

• Students with intellectual disability (ID) demonstrate lower levels of reading achievement than students with other disabilities (Caffrey & Fuchs, 2007; Wei, Blackorby, & Schiller, 2011).

• Limited research on effective teaching of reading to students with ID (Polloway, et al., 2010)

• Some research on isolated phonics skills; emphasis on sight word instruction (reviews by Browder, et al., 2006; Browder & Xin, 1998; Joseph & Seery, 2004)
Literature Review: Recent research on comprehensive programs

- More recently research has shown students with ID respond favorably to more comprehensive programs of reading instruction (e.g., Allor, et al., 2014; Browder, Mims, Spooner, Ahlgrim-Delzell, & Lee 2008; Connor, Alberto, Compton, & O’Connor, 2014; Lemons, et al., 2015).

- Two of our previous studies that led directly to our new curriculum
  
  
# Key Characteristics of Friends on the Block Curriculum

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Books and lesson activities support word recognition and comprehension, with intensive practice.
Video Demonstration

• shows short clips of typical lesson activities
• Level 1
  • sight words (a, do, I, like, not, want)
  • phonemic awareness and early phonics skills (not decoding words yet)
• Student from first year (EM, age 6, IQ 59, PPVT age equivalent 2.4)
## Initial Pilot Study: Student Participants (Allor et al., 2017)

<table>
<thead>
<tr>
<th>Student</th>
<th>Age</th>
<th>Diagnosis</th>
<th>IQ</th>
<th>PPVT Age Equiv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>9</td>
<td>ID/Autism</td>
<td>41</td>
<td>2.6</td>
</tr>
<tr>
<td>CF</td>
<td>9</td>
<td>ID/Down syndrome</td>
<td>42</td>
<td>2.9</td>
</tr>
<tr>
<td>EM</td>
<td>6</td>
<td>ID/Smith-Lemli-Opitz syndrome</td>
<td>59</td>
<td>2.4</td>
</tr>
<tr>
<td>JG</td>
<td>10</td>
<td>ID/Down syndrome</td>
<td>56</td>
<td>3.2</td>
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<td>KC</td>
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<td>ID/Down syndrome</td>
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<td>SM</td>
<td>10</td>
<td>ID/Smith-Lemli-Opitz syndrome, Autism, Brain Tumor</td>
<td>40</td>
<td>2.3</td>
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<tr>
<td>SS</td>
<td>11</td>
<td>ID/Down syndrome</td>
<td>63</td>
<td>4.8</td>
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Initial Pilot Study: Findings and Conclusions (Allor et al., 2017)

- We found a functional relation between participation in the intervention and growth on a proximal sight word measure.
  - 8 cases with at least three replications across sight word levels.
  - One case with three replications across decoding levels.
- Consistent with prior research, we found large individual differences in growth on distal measures.
- Teachers, tutors, and parents report that the intervention is feasible and engaging.
Pilot Study (Current data): Research Questions

1. Is there a functional relation between participation in the intervention and improved outcomes on proximal (target word) measures?

2. Will students make gains on distal measures after participating in the intervention?
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Friends on the Block Books: How are they different?

• Some books focus on high-frequency, or common, words
  • Dick and Jane

Come down, Dick.
Come and see.
See the big, big mother.
See the funny little baby.
Puff is my baby.
Puff is my funny little baby.

I see the big mother.
I see the little baby.
Look, Jane.
See the big father.
Some books focus on **decodable** words
Some books focus on **predictability and meaning**
How are they different? 
...based on multiple criteria

Soon Sam was feeling better, and it was time to go home. They all walked together to Will and Dan’s apartment building.
Books... based on multiple criteria

Varied Sentence Structure
Language similar to spoken language
Picture Support
Repetition

Pam asked, “Dan, did you get a big cut? If it is a big cut, we would help you take care of it.”

Dan said, “No, I did not get a big cut. Look at it. It is just a little scratch.”

Decodability
High-Frequency (sight words)
## Key Characteristics of Friends on the Block Curriculum

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### Friends on the Block Target Word List (Levels 1-11)

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<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Level 4</td>
</tr>
<tr>
<td>c, f, p, m, s, t</td>
<td>d, j, n</td>
<td>b, g, h, I, r</td>
<td>ck, k</td>
</tr>
<tr>
<td>Level 5</td>
<td>Level 6</td>
<td>Level 7</td>
<td>Level 8</td>
</tr>
<tr>
<td>a, u</td>
<td>ch, th, w, x, y, z</td>
<td>i, o, sh, qu, v</td>
<td>e</td>
</tr>
<tr>
<td>Level 10</td>
<td>Level 11</td>
<td></td>
<td>a-e, i-e, o-e, ai, ay, ol, al, ea, ee</td>
</tr>
</tbody>
</table>

#### Each lesson focuses on a student-read text; 4+ books per level

#### Levels 6+ include both decodable & sight words

#### Fluency of skills is built during activities. Fluency, including prosody, is developed during book reading.

#### Comprehension Skills include: story grammar, main idea and details, making predictions, retell, making connections

#### Vocabulary and Oral Language: taught through Dialogic Reading style questioning.

**Books in Levels 1-5 focus on sight word recognition; phonemic awareness and phonics activities are included in lessons during these levels.**

**A placement assessment is administered to determine where students should start the lessons.**

**6 words**

**8 words**

**15 words**

**15 words**

**15 words**

**Principal Investigator:** Jill Allor Ph.D., Southern Methodist University; jallor@smu.edu

**Students progress through the curriculum at their own pace, repeating books/lessons within a level until skills are mastered.**
### Levels 1-5*

#### Week At A Glance and Objectives

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Objectives</th>
</tr>
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<tbody>
<tr>
<td><strong>Warm-up</strong></td>
<td></td>
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<tr>
<td>Story - Picture walk, predictions, read-through</td>
<td>Orally blend onset and rime into a word</td>
</tr>
<tr>
<td>Play Think and Sort</td>
<td>Identify the first sound in words</td>
</tr>
<tr>
<td>Amazing Words</td>
<td>Fluently say the sounds for taught letters/patterns</td>
</tr>
<tr>
<td><strong>Wear the Sounds</strong></td>
<td>Fluently pronounce taught sight words</td>
</tr>
<tr>
<td><strong>Preview</strong></td>
<td>Make predictions about a text, develop oral language</td>
</tr>
<tr>
<td><strong>Questions</strong></td>
<td>Develop language, develop story comprehension</td>
</tr>
<tr>
<td><strong>Review</strong></td>
<td>Story comprehension, read a story with 90% accuracy</td>
</tr>
<tr>
<td><strong>Think and Sort</strong></td>
<td>Sort words, develop language</td>
</tr>
<tr>
<td><strong>Sam’s Sounds</strong></td>
<td>Identify beginning sounds in words</td>
</tr>
<tr>
<td><strong>Build Sentences</strong></td>
<td>Use word cards to build a sentence</td>
</tr>
<tr>
<td><strong>Scavenger Hunt</strong></td>
<td>Find target words/pictures, build words</td>
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<th>Tutor Activities</th>
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<td><strong>Story Reading</strong></td>
<td>Read with increasing fluency</td>
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<tr>
<td><strong>Amazing Words</strong></td>
<td>Blend onsets and rimes</td>
</tr>
<tr>
<td><strong>Squares</strong></td>
<td>Read target words</td>
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<tr>
<td><strong>Build Sentences</strong></td>
<td>Build words, read a complete sentence</td>
</tr>
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Monday – Thursday: Warm Up, Story, Activity

Friday: Practice Day

*Unit 5 I Got It! game replaces Sam’s Sounds
Sample Pages from Level 1 Book

8 Page Books

Helper Text

Teacher or tutor reads “helper text” and child reads text in conversation bubbles

Shorter Word Lists

<table>
<thead>
<tr>
<th>Read It</th>
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<tbody>
<tr>
<td>a</td>
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<th>Picture Words</th>
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<tbody>
<tr>
<td>apples</td>
</tr>
<tr>
<td>banana</td>
</tr>
<tr>
<td>cake</td>
</tr>
<tr>
<td>cookies</td>
</tr>
<tr>
<td>ham</td>
</tr>
<tr>
<td>muffin</td>
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Story Starter
This is a story about when Sam forgot to take his lunch to school.

It was time for lunch. Sam looked, but he didn’t have a lunch. He forgot his lunch at home! Tom said, “I will share my lunch with you.” “Me, too,” said Will. “Do you want a banana?”

Will said, “I can share my ham sandwich. Do you like ham?”

I do not want a banana.
I like ham.
Warm Up

Detailed Teacher Language

Day 2 Warm-Up

What Word? Mom, Sam, pie, cake.
1. Teacher: It's time for What Word? I will say the sounds in a word. Then you will say the word. I'll do the first ones. Listen, /sm/ /m/. (Say onset and rime of first word. If onset is a continuous sound, hold it for 2-3 seconds.)

Say stop sounds quickly. Pause for thinking time. That word is Mom. What word?

Students: (Mom)

2. Teacher: Listen, /st/ /am/. What word?

Students: (Sam)

Repeat Step 2 with pie /pi/ /ie/ and cake /k/ /ake/.
CORRECTIVE FEEDBACK & SCAFFOLDING
If students do not respond correctly, say the onset and rime again. Stretch continuous onsets 2-3 seconds and connect the sound when the onset is continuous. If students still do not respond with the correct word, gradually shorten the length of the beginning sounds until they respond with the correct word. If they still do not respond correctly, provide the word and ask them to repeat it.

What's the First Sound? Mom, Sam, cake, pie.
1. Teacher: It's time for What's the First Sound? I will say a word. Then you will say the first sound in the word. Listen, /s/ /am/ /s/ /am/ /is/ /s/ /i/. (Hold continuous sounds 2-3 seconds. Say stop sounds quickly.) Now let's do it together. What's the first sound in Sam?

Teacher and Students: /s/

2. Teacher: Now it's your turn. What's the first sound you hear in Mom?

Students: (Say the first sound.)

Repeat Step 2 with cake and pie.
CORRECTIVE FEEDBACK & SCAFFOLDING
If students do not say the first sound correctly, repeat the model in Step 1.

Day 2 Warm-Up Continued

Say the Sounds
1. Teacher: It's time for Say the Sounds. When I touch the letter(s), say the sound. Remember to say the sound for as long as I touch it. What sound? (Touch the letter(s), holding your finger on the letter(s) for 2-3 seconds for a continuous sound or tapping the letter(s) quickly for a stop sound.)

Students: (Say the sound of the letter(s).)

Teacher: Now let's practice some more sounds you know.

2. Teacher: (Hold and tap letter(s).)

Students: (Say the sound, stretching continuous sounds for 2-3 seconds and saying stop sounds quickly.)

Repeat Step 2 with all of the letters.
CORRECTIVE FEEDBACK & SCAFFOLDING
If students make an error, say the correct sound, have students say the sound and repeat the row.

Look and Say Words
1. Teacher: It's time for Look and Say Words. Remember to look at each word when I point to it and say the word when I tap it. (Point to the first word.) What word? (Tap the first word.)

Students: (Say word.)

Repeat with all words.
CORRECTIVE FEEDBACK & SCAFFOLDING
If students make an error, say the correct word, have students say the word and repeat the row.

Warm-Up

Say the Sounds
f s p t m

Look and Say
not I do like a

© Friends on the Block
OBJECTIVE: Develop language (receptive and expressive), develop vocabulary and story comprehension

Menu of Questions Provided to Develop Language and Comprehension

Day 2 Story Time: During Reading Questions

Use this guide to direct discussion and enhance student engagement. Select 1-2 questions per page based on student ability. Questions increase in difficulty as the question “steps” and numbers increase, with the highest step (#3) being the most difficult.

If desired, echo read with the student for the student text.

DIRECTIONS

1. Read the title and make predictions about the story.
   - What do you think this book will be about? Do you take your lunch to school? Have you ever left it at home?
   
   Predictions take place only on the first day the story is read.

2. Read the word list to the students. Make sure the students know what the pictures are.
   - Optional: Have the students point to the words as you read.
   - Read the Story Starter.
   - Read the words to the students to model (and save time).

3. Why is Sam sad? (forgot his lunch at home) Who will help him? (Tom and Will) How will they help him? (share their lunches with him)
   - What is this? (point to tray) What is this? (point to brown lunch bag) Which one was brought from home? (lunch bag) Does Sam have a lunch? (no)

4. Where are the boys? (school cafeteria) How many boys are sitting at the table? (3) What color is Will’s tray? (green) What is Will eating for lunch? (banana, carrots, sandwich, drink)
   - Do you think Sam likes ham? (yes, he is smiling) Do you think Sam will take the sandwich? Why? (yes, he is hungry) Do you like ham?
   - What’s happening on this page? (Will is sharing his sandwich with Sam.) What kind of sandwich does Will have? (ham sandwich)

   What color is the table? (gray) Are the boys standing or sitting? (sitting)
Day 4 Story Time: Review and Comprehension

Read the story straight through.

Complete the Story Grammar graphic organizer. Discuss the parts of the story. *If desired, make a copy of the graphic organizer and write down student responses.

**OBJECTIVE for FICTION:** Identify the components of the story, including characters, setting, plot, and/or problem and resolution.

**STORY GRAMMAR**
- Listen to me read the title of each box. Each of these is a part of the story.
- Think about the book.
- Tell me about that part of the book. Look at the pictures to help you remember.

**CHARACTERS**
Who or What the Story is About

**SETTING**
When and Where the Story Takes Place

**PLOT**
What Happens in the Story
Day 4 Story Time: Review and Comprehension

Read the story straight through.

Complete the Main Idea graphic organizer. Discuss the parts of the story.
*If desired, make a copy of the graphic organizer and write down student responses.

**OBJECTIVE for Non-Fiction:** Identify the main idea and details of a simple story.
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<td>dad</td>
<td>are</td>
<td>am</td>
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<td>is</td>
<td>happy</td>
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<td>like</td>
<td>look</td>
<td>not</td>
<td>want</td>
</tr>
</tbody>
</table>

Books in Levels 1-5 focus on sight word recognition; phonemic awareness and phonics activities are included in lessons during these levels.

6 words | 8 words | 15 words | 15 words

<table>
<thead>
<tr>
<th>Target Decodable Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>am</td>
</tr>
<tr>
<td>and</td>
</tr>
<tr>
<td>at</td>
</tr>
<tr>
<td>can</td>
</tr>
<tr>
<td>dad</td>
</tr>
<tr>
<td>fun</td>
</tr>
<tr>
<td>had</td>
</tr>
<tr>
<td>hat</td>
</tr>
<tr>
<td>mad</td>
</tr>
<tr>
<td>ran</td>
</tr>
<tr>
<td>run</td>
</tr>
<tr>
<td>sad</td>
</tr>
<tr>
<td>sun</td>
</tr>
<tr>
<td>up</td>
</tr>
<tr>
<td>us</td>
</tr>
</tbody>
</table>

Students progress through the curriculum at their own pace, repeating books/lessons within a level until skills are mastered.

Each lesson focuses on a student-read text; 4+ books per level.

Levels 6+ include both decodable & sight words.

Fluency of skills is built during activities. Fluency, including prosody, is developed during book reading.

Comprehension Skills include: story grammar, main idea and details, making predictions, retell, making connections.

Vocabulary and Oral Language: taught through Dialogic Reading style questioning.

Principal Investigator: Jill Allor Ph.D., Southern Methodist University; jallor@smu.edu
Levels 6-9

Week At A Glance and Objectives

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up</td>
<td>Warm-up</td>
<td>Warm-up</td>
<td>Warm-up</td>
<td>Warm-up</td>
<td>Practice Day</td>
</tr>
<tr>
<td>Story - Picture walk, predictions, read-through</td>
<td>Story - Questions from reading guide during reading</td>
<td>Story - Questions from reading guide during reading</td>
<td>Story - Read-through and comprehension graphic organizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play I Got It!</td>
<td>Play Build Sentences</td>
<td>Play Speed Reader</td>
<td>Play Scavenger Hunt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutor</td>
<td>Story - Echo Read</td>
<td>Story - Take turns or Echo Read</td>
<td>Story - Take Turns</td>
<td>Story - Take Turns</td>
<td></td>
</tr>
<tr>
<td>Amazing Words</td>
<td>Word Bingo</td>
<td>Checkers</td>
<td>Build Sentences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td>Send a previously mastered book home on Friday; read 3 times and return the book by Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objectives:**
- **What Word?** Orally blend three phonemes into a word
- **Say It Slowly** Identify each sound in a word
- **Say the Sounds** Fluently say the sounds for taught letters/patterns
- **Sound and Say** Sound out and read words consisting of taught letter-sounds
- **Look and Say** Fluently pronounce taught sight words
- **Preview** Make predictions about a text, develop oral language
- **Questions** Develop language, develop story comprehension
- **Review** Story comprehension, read a story with 90% accuracy
- **I Got It!** Build words, read a complete sentence
- **Build Sentences** Use word cards to build a sentence
- **Speed Reader** Read words with increasing fluency
- **Scavenger Hunt** Find target words/pictures, build words

**Tutor Activities:**
- **Story Reading** Read with increasing fluency
- **Amazing Words** Read with increasing fluency
- **Bingo** Identify target words/sounds
- **Checkers** Read target words
- **Build Sentences** Build words, read a complete sentence

**Monday – Thursday:**
Warm Up, Story, Activity (same structure)

**New games and activities are introduced**
Sample Pages from Level 6A Book

16 Page Books

New Look and Say Words
- go
- he
- it
- me
- on
- we
- with
- your

New Sound and Say Words
- am
- and
- at
- can
- fun
- had
- ran
- ran
- up
- us

Picture Words
- ball
- Grandma

Story Starter
- This is a story about Jazz and Wags playing with a ball.

Level 6+ Include Decodables Words

The Student Reads All The Text

© Friends on the Block
Sample Pages from Level 6B Book

Longer Word Lists

New Look and Say Words
- be
- he
- on
- we
- friend
- her
- so
- who
- give
- it
- thank
- with
- go
- me
- very
- your

New Sound and Say Words
- am
- fun
- sun
- and
- had
- up
- at
- hat
- us
- can
- ran
- can
- Dad
- run

Picture Words
- birds
- castle
- shovel
- water

Story Starter
In this book you will learn about things people like to do at the beach.

The beach is the land that is next to the ocean. Beaches have lots of sand. There is so much you can do at the beach.

Teacher or tutor reads "helper text" in gray boxes and child reads text in white bubbles/boxes

©Friends on the Block
Sample Pages from Level 7B Book

Long Word Lists

New Look and Say Words

- because
- care
- come
- could
- feel
- first
- how
- of
- next
- said
- should
- take
- took
- why
- would

New Sound and Say Words

- big
- did
- got
- him
- if
- in
- it
- mom
- not
- on
- sit
- stop
- this
- will
- with

Picture Words

- New York
- picture
- shirts
- shoes
- three
- tie
- flies
- two
- yellow

Story Starter

This is a story about how Ana and Zoe help their Dad pack for a trip.

Some Helper Text

Dad got his big suitcase out of the closet and put it on the bed. Dad told Zoe to start writing a list of things he should take with him. As she got the things on the list, put them on the bed.

Longer Student Text

Zoe looked on the list. She said, "Dad, the first things on the list are shirts and pants.

"I should take three shirts," said Dad. So Dad got three shirts.
Learning Games

I Got It! Cards

The shoes fit in the bag.

Checkers

Word Bingo

Friends on the Block
Pilot Study (current data): Research Questions

1. Is there a functional relation between participation in the intervention and improved outcomes on proximal (target word) measures?

2. Will students make gains on distal measures after participating in the intervention?
Method: Student Participants

<table>
<thead>
<tr>
<th>Student</th>
<th>Age</th>
<th>Diagnosis</th>
<th>IQ</th>
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</thead>
<tbody>
<tr>
<td>CH</td>
<td>10</td>
<td>ID, SI</td>
<td>43</td>
</tr>
<tr>
<td>KD</td>
<td>11</td>
<td>SI</td>
<td>65</td>
</tr>
<tr>
<td>LD</td>
<td>12</td>
<td>ID, SI</td>
<td>65</td>
</tr>
<tr>
<td>NW</td>
<td>10</td>
<td>SI</td>
<td>88</td>
</tr>
</tbody>
</table>
Method: Measures

• Measures
  • Proximal researcher-created measure of level “target” words
  • Distal (pre/post – approximately 32 weeks apart)
    • Letter-Sound Knowledge (AimsWeb Letter-Sound Fluency)
    • Phonological Awareness (FAST Onset Sounds/DIBELS Phoneme Segmentation Fluency)
    • Sight Words (Fuchs Word Identification Fluency)

• Measurement Procedures
  • Placement test to determine initial placement in intervention
  • Proximal measure used to establish baseline and movement across levels
Method: Implementation

• Training and Coaching
  • 4 Teachers and 3 Paraprofessionals
  • Initial 2-Hour Training
  • Bi-monthly visits by coach, conducting observations, providing support, and modeling key components
  • Coaches available “on demand” via e-mail or phone

• Intervention Schedule
  • 4 days a week,
  • two 20 minute sessions per day, one session taught by the teacher (1-3 students) and another taught by the paraprofessional (1:1)
Fidelity

• Teachers and tutors demonstrated high degrees of fidelity.
• Video observations conducted one time per level for teacher and tutor per student.
• Average fidelity 96.66% (range = 87% - 100%; SD = 5.39)
Feasibility

• Teachers were enthusiastic about the program.

• Students were eager for new books. Students made good connections to characters within and across books.

• Parents were also very enthusiastic and credited the program for important language and literacy gains (plus meaningful changes in students’ eagerness to read other books).
Findings: Research Question #1

1. Is there a functional relation between participation in the intervention and improved outcomes on proximal (target word) measures?

2. Will students make gains on distal measures after participating in the intervention?
Update: CH is currently in Level 8.
CH Video: How to Make a Pizza

Step 1. Get the ingredients. Ingredients are the things you will use to make the pizza. You need dough, sauce, cheese, and toppings. You can have pineapple, olives, mushrooms, or pepperoni.

Step 2. Spread out the dough on a pan. Then put some sauce on it.

I do not like pineapple.
I do not like mushrooms.

Step 3. Put some cheese on top of the sauce.

I like cheese.

Step 4. Put the toppings on the pizza. You can put whatever toppings you want to have on the pizza.

I want olives.
I want pepperoni.
CH Video

Where is Puff?
Written by Jennifer Cheatham and Jill Allor
Illustrated by Jennifer Cheatham

<table>
<thead>
<tr>
<th>New Look and Say Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>because</td>
</tr>
<tr>
<td>come</td>
</tr>
<tr>
<td>could</td>
</tr>
<tr>
<td>feel</td>
</tr>
<tr>
<td>said</td>
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<td>should</td>
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<td>take</td>
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<td>too</td>
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</table>

<table>
<thead>
<tr>
<th>New Sound and Say Words</th>
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</thead>
<tbody>
<tr>
<td>big</td>
</tr>
<tr>
<td>did</td>
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<tr>
<td>got</td>
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<tr>
<td>him</td>
</tr>
<tr>
<td>if</td>
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<td>in</td>
</tr>
<tr>
<td>it</td>
</tr>
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<td>mom</td>
</tr>
<tr>
<td>not</td>
</tr>
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<td>on</td>
</tr>
<tr>
<td>sit</td>
</tr>
<tr>
<td>stop</td>
</tr>
<tr>
<td>this</td>
</tr>
<tr>
<td>will</td>
</tr>
<tr>
<td>with</td>
</tr>
</tbody>
</table>

© Friends on the Block
Update: KD is currently in Level 7.
Update: LD has finished all levels.
Update: NW is currently in Level 11.
Findings: Research Question # 1

• Employed Tau-U analysis, which provides an estimate of non-overlapping data after adjusting for trend (Parker, et al., 2011)

• Functional relation demonstrated by statistically significant differences (between baseline and intervention phases) found for at least some phases for all students
Update: CH is currently in Level 8.
Update: KD is currently in Level 7.
## RQ1: Findings - Tau U Analysis

### Target Sight Words - CH KD

<table>
<thead>
<tr>
<th>Level</th>
<th>Tau U</th>
<th>p</th>
<th>Tau U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0</td>
<td>0.0062</td>
<td>0.84</td>
<td>0.0283</td>
</tr>
<tr>
<td>2</td>
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<td>0.9</td>
<td>0.0034</td>
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<tr>
<td>3</td>
<td>0.9429</td>
<td>0.0013</td>
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<tr>
<td>Combined</td>
<td>0.9332</td>
<td>0.0001</td>
<td>0.7876</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

### Target Sight Words - LD NW

<table>
<thead>
<tr>
<th>Level</th>
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<th>p</th>
<th>Tau U</th>
<th>p</th>
</tr>
</thead>
<tbody>
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<tr>
<td>8</td>
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<td>1.0</td>
<td>0.0062</td>
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<tr>
<td>9</td>
<td>0.9028</td>
<td>0.0023</td>
<td>0.9583</td>
<td>0.0009</td>
</tr>
<tr>
<td>10</td>
<td>0.2963</td>
<td>0.3458</td>
<td>0.8889</td>
<td>0.0047</td>
</tr>
<tr>
<td>Combined</td>
<td>0.7268</td>
<td>0.0001</td>
<td>0.9848</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

### Target Decodable Words - LD NW

<table>
<thead>
<tr>
<th>Level</th>
<th>Tau U</th>
<th>p</th>
<th>Level</th>
<th>Tau U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1.0</td>
<td>0.0062</td>
<td>7</td>
<td>0.023</td>
<td>0.9697</td>
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<tr>
<td>8</td>
<td>1.0</td>
<td>0.0009</td>
<td>8</td>
<td>0.8</td>
<td>0.023</td>
</tr>
<tr>
<td>9</td>
<td>0.9028</td>
<td>0.0023</td>
<td>9</td>
<td>1.0</td>
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<td>10</td>
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<td>0.3458</td>
<td>10</td>
<td>0.8889</td>
<td>0.0047</td>
</tr>
<tr>
<td>Combined</td>
<td>0.7268</td>
<td>0.0001</td>
<td>Combined</td>
<td>0.9019</td>
<td>0.0591</td>
</tr>
</tbody>
</table>
Findings: Research Question #2

1. Is there a functional relation between participation in the intervention and improved outcomes on proximal (target word) measures?

2. Will students make gains on distal measures after participating in the intervention?
Findings: Research Question #2

• Student growth on distal measures varied

• All students demonstrated at least some growth on letter-sound knowledge, phonemic awareness, and sight words
Results—RQ #2 Distal (pre and post)

*LD finished the curriculum in January 2017 therefore his scores are as of Jan 2017.
Discussion and Implications for Practice

• Further evidence of the promise of the intervention
  • On 4 additional cases, a functional relation was found between participation in the intervention and growth on a proximal sight word measure
  • On 1 of 2 cases, a functional relation was found on the proximal decodable measure

• Further evidence to support higher expectations for literacy outcomes for students with ID and other struggling readers

• Consistent with prior research, large individual differences in growth on distal measure was found

• Teachers, tutors, and students report that the intervention is feasible and engaging

• Our proximal measures were sensitive to relatively slow growth
Discussion and Implications for Practice

- Anecdotal observations about behavior and motivation
  - decrease in behavior issues
  - increase in motivation and desire to read
  - increase in engagement during instruction

- Anecdotal observations about comprehension
  - connection across text
  - connections between text and home
  - spontaneous conversation about text
  - identify with characters in the story
  - curious about what will happen to characters
Directions for Future Research

• Meta analysis on students from 3 years of pilot studies
• Prepare a Goal 3 Efficacy Grant
• Continue analyzing engagement data based on observations
• Future research needs to address challenge of providing more intensive literacy instruction
  • More independent activities
  • More writing instruction
  • Techniques for small-group delivery
• Make program available more broadly. Please contact us if you are interested in using our materials!

friendsontheblock.com
Don’t just take our word for it:

“CH shows so much enthusiasm for *Friends on the Block*. If there is ever a reason that we miss his lesson, he reminds me later that we missed his lesson and asks if we can do it later in the day.

Both of my paras have commented on how much more reading CH does in their group work. He tries to sound out words when in the past, he wouldn’t.

CH has the ability to connect to each book that is presented to him. He enjoys talking about the characters and he remembers their names. He gets excited when a new character is introduced. He enjoys each and every game that he plays. He is great with building sentences. CH could probably teach the program if I were ever absent. He has all of the warm ups memorized as well as the authors and illustrators. *He has come so far with this program.*

This program has done so much for me as a teacher. I am so proud to say I am a part of this reading program. I can actually say, “*I teach children how to read!*” with this program. Thank you for developing this program!”

-Teacher
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Resources

• Project Intensity (current project)
  http://www.projectintensity.com/

• Dialogic Reading

• Early Interventions in Reading
  https://www.mheonline.com/programMHID/view/SRAEIRLV11

• Early Literacy Skills Builder
  http://www.attainmentcompany.com/elsb
References


References


