



Effective Early Literacy Intervention for Students with Autism and Developmental Disabilities: Building Reading Fluency and Comprehension

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Intellectual Disability & Developmental Disabilities*
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Agenda

- Why
- Study
- Intervention
- Immediate Results
- Maintenance Results
- Discussion
- Questions



Project Intensity Team



Friends on the Block Research and Development



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Why



The Pervasive Narrative of the 95%

- Where does this narrative come from?
 - Mathes et al., 2005; Moats, 2020; Torgesen, 2004; Al Otaiba & Fuchs, 2006
- Is it true?
- Who can learn to read?
- We are working to rewrite the narrative of 95%!
 - Allor et al., 2014; Browder, Ahlgrim-Delzell, Courtade, Gibbs, & Flowers, 2008; Connor, Alberto, Compton, & O'Connor, 2014; Lemons et al., 2015



Reading:

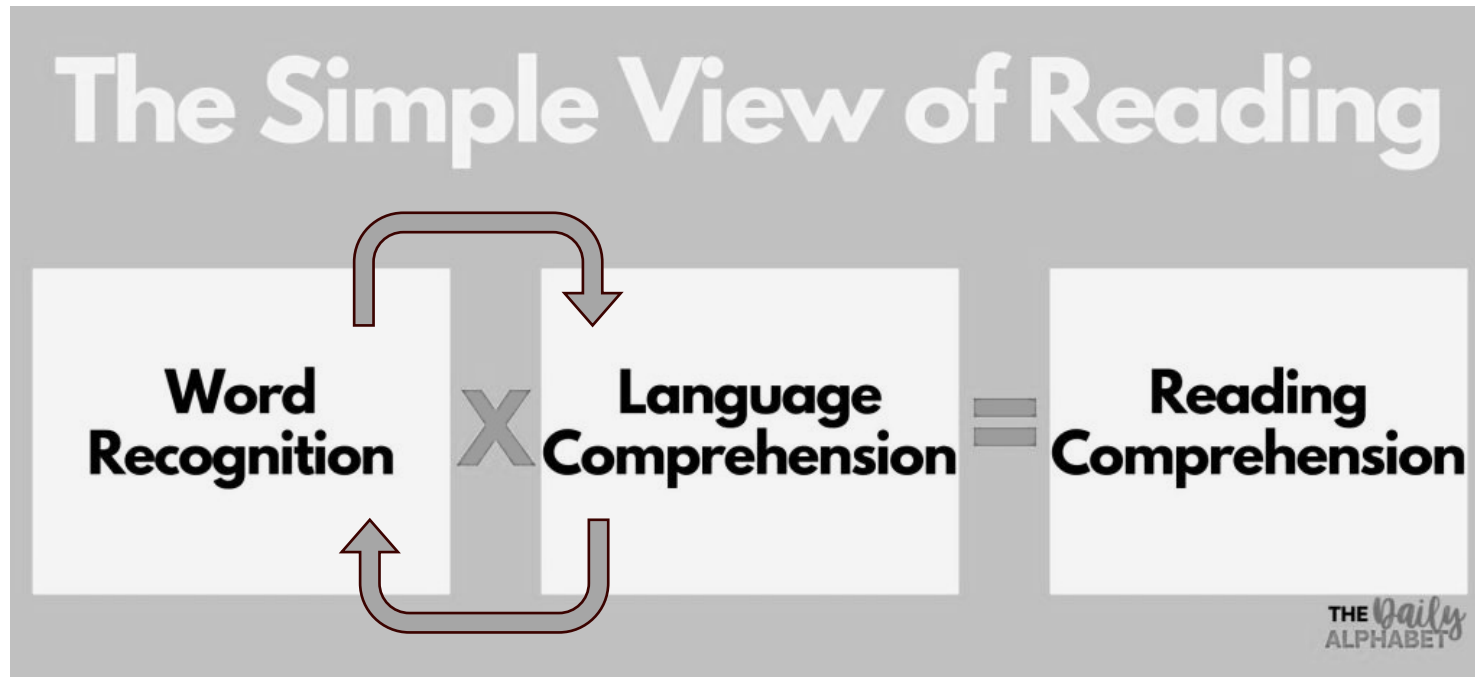
WHAT you need to learn doesn't change

- "Cultural, economic, and educational circumstances obviously affect children's progress," ... "But what they need to learn does not change."
 - (Dr. Mark Seidenberg in his book *Language at the Speed of Sight: How We Read, Why So Many Can't, and What Can Be Done About It*)
- Differences in necessity for intensive repetition and scaffolding certainly exist when working with students who have complex needs



The Simple View of Reading

- Word Recognition (code focused)
- Language Comprehension (meaning focused)
- Reading Comprehension (the goal of reading)



Literature Review:

Research on Comprehensive Programs

- Historically, research on reading for students with IDD (intellectual and developmental disabilities) has been limited
- Research in recent years has shown students with IDD respond favorably to more **comprehensive programs** of reading instruction (e.g., Allor, et al., 2014; Allor, et al., 2013; Browder, Mims, Spooner, Ahlgrim-DeLzell, & Lee 2008; Connor, Alberto, Compton, & O'Connor, 2014; Lemons, et al., 2015).



Research with *Friends on the Block* (from IES grants)

- Benner, G. J., Smolkowski, K., Allor, J., Al Otaiba, S., Preast, J., Small, J. W., Hermecz, S. B., & Strycker, L. A. (in press). Impact of a Comprehensive and Flexible Intervention for Students with Disabilities Experiencing Intensive Literacy Needs. Remedial and Special Education. [efficacy study, cohort 1]
- Allor, J. H., Gifford, D. B., Jones, F. G., Al Otaiba, S., Yovanoff, P., Ortiz, M. B., & Cheatham, J. P. (2018). The effects of a text-centered literacy curriculum for students with intellectual disability. *American Journal for Intellectual and Developmental Disabilities*. [pilot study with 8 students]
- Jones, F. J., Gifford, D. B., Yovanoff, P., Al Otaiba, S., Levy, D., & Allor, J. (2018). Alternate assessment formats for progress monitoring students with intellectual disabilities and below average intellectual quotients: An exploratory study. *Focus on Autism and Developmental Disabilities*. [assessment study]
- Allor, J. H., Yovanoff, P., Al Otaiba, S., Ortiz, M. B., & Conner, C. (2020). Literacy intervention for students with intellectual and developmental disabilities: A meta-analysis. [analysis of all 18 students from pilot studies]



The Study



Primary Research Question

Do **students with disabilities** who experience **intensive literacy needs**, including students with intellectual and developmental disabilities, who participate in FOTB demonstrate greater **reading** and **language outcomes** compared to students who participate in BAU reading instruction?



Overall Mean Average School Demographics

- Enrollment: 544 (Range: 316-770)
- Minority Enrollment: 76% (6-99%)
- Economically Disadvantaged: 79% (51-91%)
- Student/Teacher Ratio: 15.3:1 (12:1 to 18:1)

Demographics and Dosage: Cohort 1

Participants

- 62 students
(31 treatment; 31 control)
- Mean age: 7.8 (1.5)
- IQ (KBIT) Mean: 72.7 (15.2)
(range: 40 to 106)
- Disabilities
 - Intellectual/Developmental (54.8%)
 - Autism (9.7%)
 - Specific Learning Dis. (17.7%)
 - Speech/Language, Other (6.5%)
 - Not available (11.3%)

Intervention: Mean Dosage

- Hours of instruction: 51.9 (14.5)
- Weeks of instruction: 34.0 (8.9)
- Days per week: 3.5 (0.5)
- Minutes per session: 26.4 (2.4)

Note: 51.6% of the students in the C1 treatment group (n = 16) completed the entire program in 42 weeks or less (about 50 hours of instruction).



Demographics and Dosage: Cohort 2

Participants

- 70 students
(36 treatment; 34 control)
- Mean age: 7.6 (1.4)
- IQ (KBIT) Mean: 69.2 (13.1)
(range: 40 to 92)
- Disabilities
 - Intellectual/Developmental (31.4%)
 - Autism (5.7%)
 - Specific Learning Dis. (11.4%)
 - Speech/Language, Other (32.9%)
 - Not available (18.6%)

Intervention: Mean Dosage

- Hours of instruction: 50.3 (16.5)
- Weeks of instruction: 34.6 (9.7)
- Days per week: 3.7 (0.3)
- Minutes per session: 23.4 (2.2)

Note: 36.1% of the students in the C2 treatment group (n = 13) completed the entire program in 42 weeks or less (about 50 hours of instruction).



Engagement Comparison: Cohorts 1 & 2

	Cohort 1 <i>M(SD)</i>	Cohort 2 <i>M(SD)</i>
Average % of sessions engaged	74.2 (26.7)	49.8 (36.1)
Dosage (in hours)	51.9 (14.5)	50.3 (16.5)
Engagement-adjusted dosage (in hours)	39.3 (14.9)	24.9 (20.6)



Reading Variables & Measures

- Phonemic Awareness
 - *Comprehensive Test of Phonological Processing, 2nd Edition—Blending Words*
- Decoding
 - Non-words
 - *Wechsler Individual Achievement Test, Fourth Edition (WIAT-IV) Pseudoword Decoding*
 - Real words
 - *FOTB Word List*
 - *WIAT-IV Word Reading*
- Fluency
 - *WIAT-III Oral Reading Fluency*



Language Variables & Measures

- Oral Expression
 - *WIAT-IV Oral Expression*
- Listening
 - *WIAT-IV Listening Comprehension*

Think, Pair, Share

What works best when teaching students with intensive early literacy needs, including those with IDD, to read?



Intervention



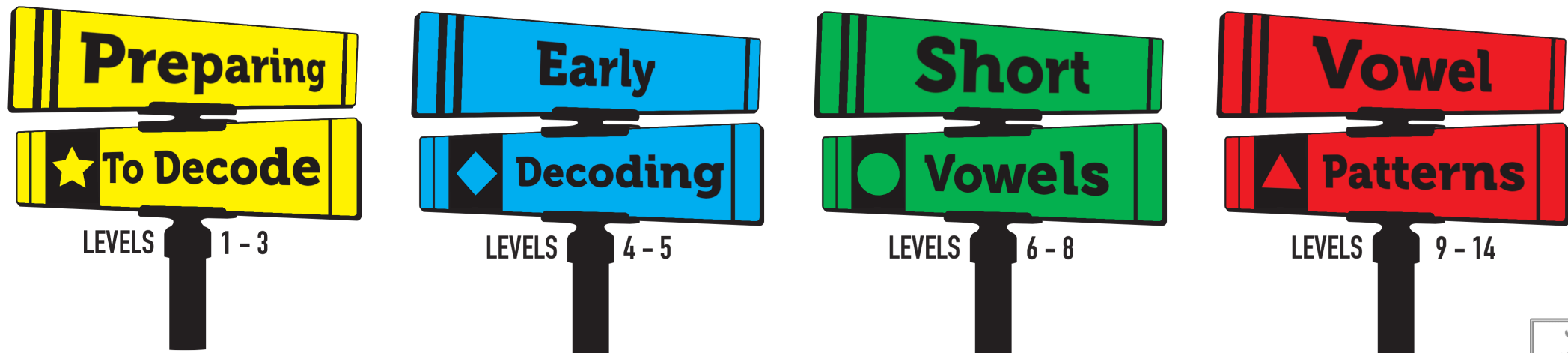
What is Friends on the Block?

A comprehensive and intensive **early literacy program** (initial instruction or intervention) designed to be **customizable** and provide needed supports and practice so **all students** can attain early literacy skills, particularly those with **intensive needs** such as students with disabilities (e.g., dyslexia, learning disabilities, intellectual and developmental disabilities).



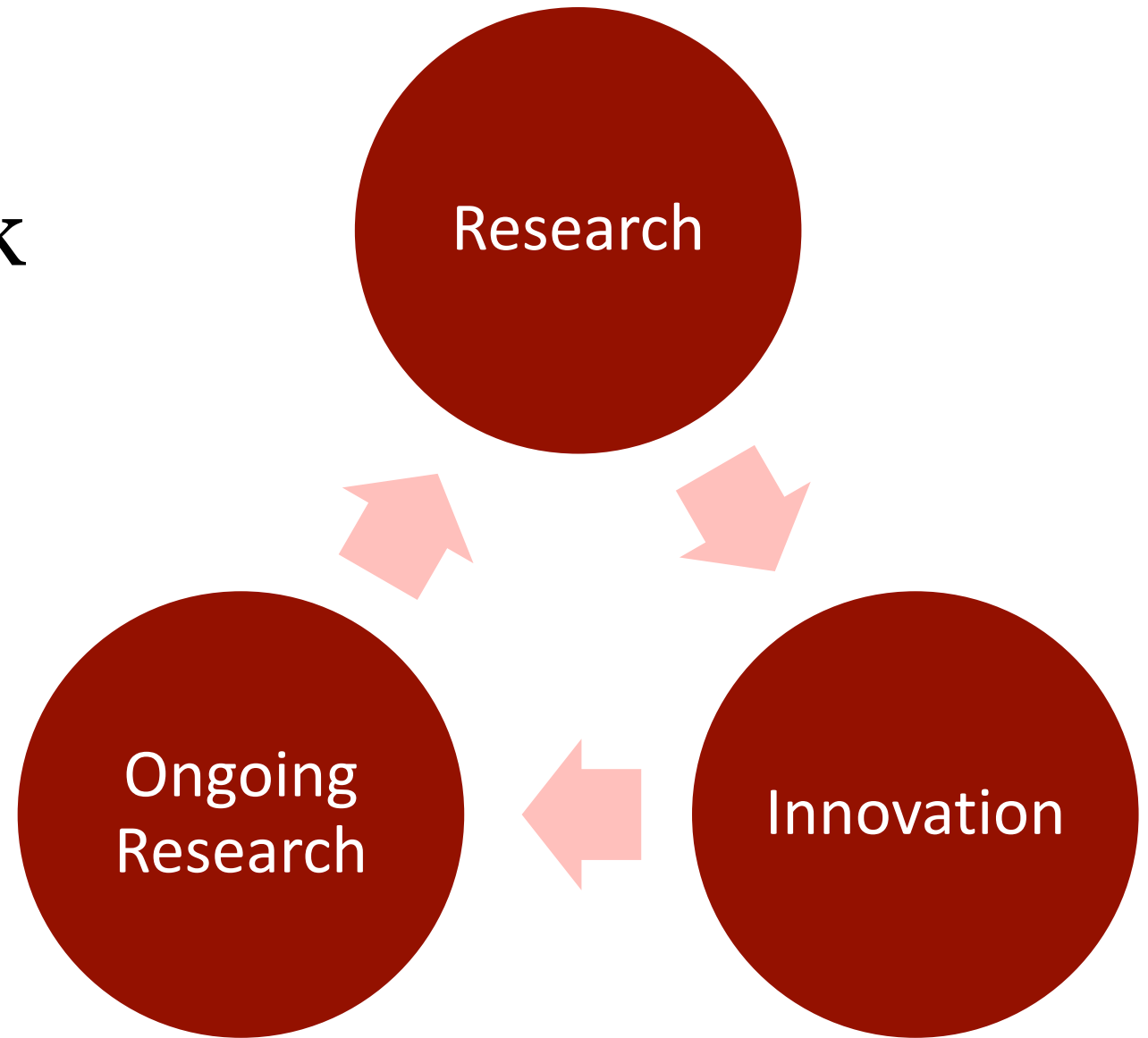
What are the components of FOTB?

- 60 student books with carefully controlled, decodable text
- Each book has a detailed Teacher's Guide and materials
- Over 100 learning games that provide specific cumulative practice of skills
- Organized into 14 levels that span four stages of skill development



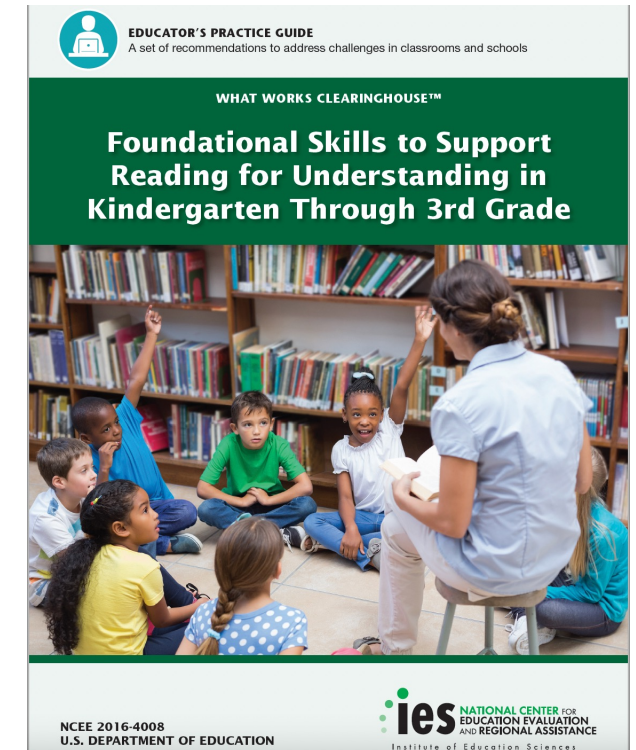
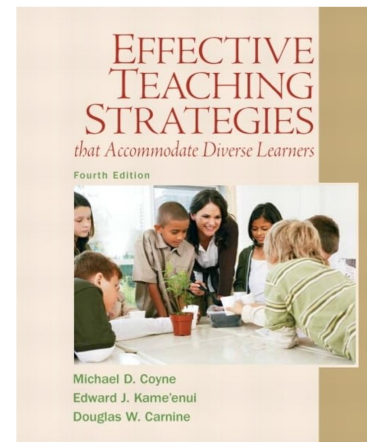
What makes Friends on the Block special?

- Applies existing research
- Ongoing process of research and innovation



Research: Evidence-based practices

- National Reading Panel (2000)
- WWC Practice Guide (2016)
- Principles of Effective Instruction (Coyne et al., 2006; Kame'ennui et al., 2002; Coyne et al., 2011)



Benefits of Friends on the Block



REDUCED COGNITIVE LOAD



EMBEDDED LANGUAGE AND
COMPREHENSION SUPPORTS



EXTENSIVE USE OF
CONNECTED TEXT

Innovative Scope and Sequence

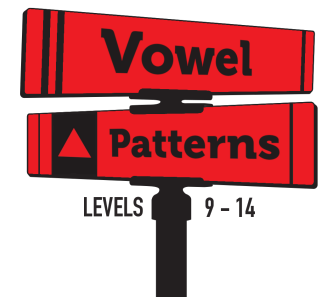
- Focuses on key skills within all strands of word recognition and language
- Facilitates integration of skills across strands and apply as they read books

Strand	Objective/Skill	Activity Learning Game	★ 1-3	◆ 4-5	● 6-8	▲ 9-14
Language: Comprehension & Vocabulary	Make oral predictions about a text	Predict				
	Develop language and comprehension	Discuss				
	Discuss and summarize a text using a graphic organizer	Review/ Get the Gist (Level 12+)				
	Develop oral language by sorting words based on meaning	Think and Sort				
Phonemic Awareness	Orally blend the first sound and rime into a spoken word	Say the Word Sounds Bingo				
	Say the first sound of spoken words	Say the First Sound Sounds Bingo				
	Orally blend sounds (phonemes) into a word	Say the Word Sounds Bingo				
	Say the sounds (phonemes) in spoken words	Say the Sounds Sounds Bingo				
Word Recognition	Fluently pronounce taught irregular (or temporarily irregular) words	Read It				
		Amazing Words				
		Word Bingo				
		Word Play				
	Fluently say the most common sound for taught letters	Say the Letter-Sound				
		Climb and Slide				
	Sound out and read short vowel words with taught letters/patterns	Sound It Out				
		I Got It				
	Sound out and fluently read words with taught letters/patterns	Sound It Out				
		Speed Reader				
		I Got It				
	Fluently read target words, including taught irregular words and words with taught letters/patterns	Read through the Seasons				
		Word Bingo				
		Word Play				
Fluency	Read target words and sentences fluently	Super Sentences				
	Read text with increasing fluency	Read				
Writing	Say the sounds in spoken words; spell words with taught letters/patterns	I Got It Say and Write				
	Write sentences fluently	Writing Super Sentences				
Apply	Apply various skills in the context of a book	Scavenger Hunt				

FOTB Target Word List and Phonics Patterns

Friends on the Block Target Word List and Phonics Patterns

Letter Sounds	★ Preparing to Decode			◆ Early Decoding		● Short Vowels			▲ Vowel Patterns					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14
	c, f, p, m, s, t	d, j, n	b, g, h, l, r	ck, k, a, z	u	ch, th, w, x, y	i, o, sh, qu, v	e	a-e, i-e, o-e	ai, ay, ol	al, ea, ee	ar, igh, er	oa, or, ow	ir, oo, ur
Sound It Out Words (Decodable)	In Levels 1-3 students are learning phonemic awareness blending and segmenting, letter-sounds, and a small number of irregular words. Students begin in the level in which they miss two or more target words (Levels 1-5) or four or more target words (Levels 6-14). As soon as the students learn most of the words in the starting level, move to the next level. (Note: Sound it Out words in Levels 4-5 are repeated in Level 6.)			am and at can dad mad sad	am and at can dad mad sad	am and at can dad fun had hat mad ran run sad sun up us	big did got him if in it next mom not on sit stop this will with	bed best end get help let like made make nine same side smile time when yes	came fine five gave home hope like made rain roll say stay tail told wait way white	cold day hold may old plain play rain neat need read see seem small tall wall together	all call clean each eat feel green neat need read see seem small tall wall together	after better chapter different hard high light might never night number part right start together	before below door follow forget goal know more morning own road short show slow yellow wood	bird book burn cook disturb girl good hook hurt shirt stood third took turn wood
	Note: Words in blue are made up of patterns taught in later levels so they are temporarily irregular. They are introduced prior to the pattern to facilitate meaning and may facilitate learning of the phonics pattern.			good help play there to was	big have little my please very what	be friend give go he her it me on so thank we who with your	because care come could feel first of how next said should take too why would	again away came clothes cold eat food for from need oh out put ready some	about animal been day does down every many one or other push saw their they were	any ball both boy done family girl more most once room saw their warm young	another answer kind know our people question really right second soon sure thought word work	almost book bought break buy easy four learn money new probably review these two watch	above alone by eight find house idea often special talk through usually walk water worry	able along carry color full great heard instead live love move only over try world



A Typical FOTB Lesson (Flexible: About 20-35 minutes)

Level 4 Example

Part 1: Warm-Ups 5-8 minutes

Part 2: Book Reading 10-15 minutes

Part 3: Learning Games 5-10 minutes

Lesson A Warm-Up

Say the Word: sam, dog, mad, jazz

1. Teacher: I will say the sounds in a word. Then you will say the word. I'll do the first one. Listen. /s/ /a/ /m/ /m/ /m/ (Stretch the word by connecting the sounds as you say it slowly. Hold continuous sounds 2-3 seconds. Say the word quickly. Allow think time.) That word is Sam. Say the word.

2. Teacher: Listen. /d/ /oo/ /g/ Say the word.

Students: (Say the word)

Repeat Step 2 with /m/ /m/ /m/ /a/ /a/ /d/ and /j/ /a/ /a/ /z/ /z/.

Corrective Feedback & Scaffolding:

If students do not respond correctly, go through the steps below, starting with Step 1 and stopping when students are able to respond correctly.

1. Say the word slowly. Stretch continuous sounds 2-3 seconds and connect the sounds.

2. Gradually shorten the length of continuous sounds.

3. Provide the word and have students repeat it.

Say the Sounds: mad, dog, sam, jazz

1. Teacher: I will say a word. Then you will say each sound in the word. The first word is mad. Listen to me say the sounds. /m/ /a/ /d/.

2. Teacher: Listen. Dog. Say the sounds.

Students: (Say the sounds.)

Repeat Step 2 with sam and jazz.

Corrective Feedback & Scaffolding:

If students make an error, follow the 1. We. You feedback procedure.

1. Listen. Sound it out.

2. Teacher: Sound it out.

Students: (Say the sounds.)

Repeat Step 2 with all of the words.

Read It

1. Teacher: You're going to say the sounds in a word and then say the word. Listen as I sound it out. /r/ /a/ /z/ and say the sounds for the letters. Connect the sounds quickly. Then say the word.

2. Teacher: (Point to letters of the word.)

Students: (Say each sound as you point to the letter, then say the word.)

Repeat Step 2 with all of the words.

Corrective Feedback & Scaffolding:

If students make an error, follow the 1. We. You feedback procedure.

1. Listen. Sound it out.

2. Teacher: Sound it out.

Students: (Say the sounds.)

Repeat Step 2 with all of the words.

Warm-Up

Say the Letter-Sound

r a z k l

Sound It Out

mad Jazz can at am

Read It

was to good there are

Lesson 8 Book: Read and Discuss

Use this guide to direct discussion and enhance student engagement. Use 1-2 questions per page based on student ability. Questions listed as the question "help" and numbers increase with the highest is the most difficult.

1. Teacher: Read with the student for the student test.

2. Teacher: Read with the student for the student test.

3. Teacher: Read with the student for the student test.

1. Read the title.

2. Read the word list to the student. Know what the pictures are.

Optional: Have the students point to the pictures.

3. Read the Story Starter.

1. Why do you think Sam is sad?

2. Sam thought the dog was sad. Why do you think that?

3. Why was the girl sorry she had yellow?

1. Why does Sam ask the girl if she is mad? What are some things that make you mad/sad?

2. Sam says he is ... (bored). Why do you think Sam is bored?

3. What color is the sky? (blue)

1. Why did Sam want to help the girl?

2. How can you help people when they are scared or mad?

3. The girl looks ... (mad/scared). What do you think Sam should do next?

1. What color is the grass? (green)

2. What is Sam wearing? (green shirt and blue shorts)

3. Why was the girl sorry she had yellow?

Sam and Jazz Take a Walk Scavenger Hunt

Materials: Sam and Jazz Take a Walk student book.

Teacher: Make sure your book is closed and is not open to clue. Then you look through your book to find the clue.

Read each clue, one at a time.

How can you help people when they are scared or mad?

If you have 1 student, encourage the student to read the clue.

If you have more than 1 student, encourage everyone to read the clue.

Super Sentences

Materials: student chart (sentences), Super Sentence chart.

Set out the necessary word and picture cards for the chart.

1. Teacher: We will use the word cards to make the sentence. Let's make this point to the first sentence.

2. Teacher: Let's make this point to the first sentence. Encourage student to read the sentence together.

Now let's read out sentence together.

Amazing Words

finish	good		here	in	you
there	no	where	like		yes
was	help			play	to
the		is	help	there	
good	here	do		want	look
see		play			where
are	to	was	she	not	happy
					start

I was not
n a d
at you.

Sam and Jazz Take a Walk

Written by Jill Allor, Francesca Jones, and Ashley Sandoval
Illustrated by Jennifer Cheatham

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www.FOTB.org



Immediate Results



Results Overview

- Analyzed 22 measures—reported a representative summary
 - Proximal measure for FOTB
 - Phonemic Awareness
 - Pseudoword Decoding
 - Word Reading
 - Reading Fluency
 - Listening Comprehension
 - Oral Expression
 - Reading Comprehension



Results Summary

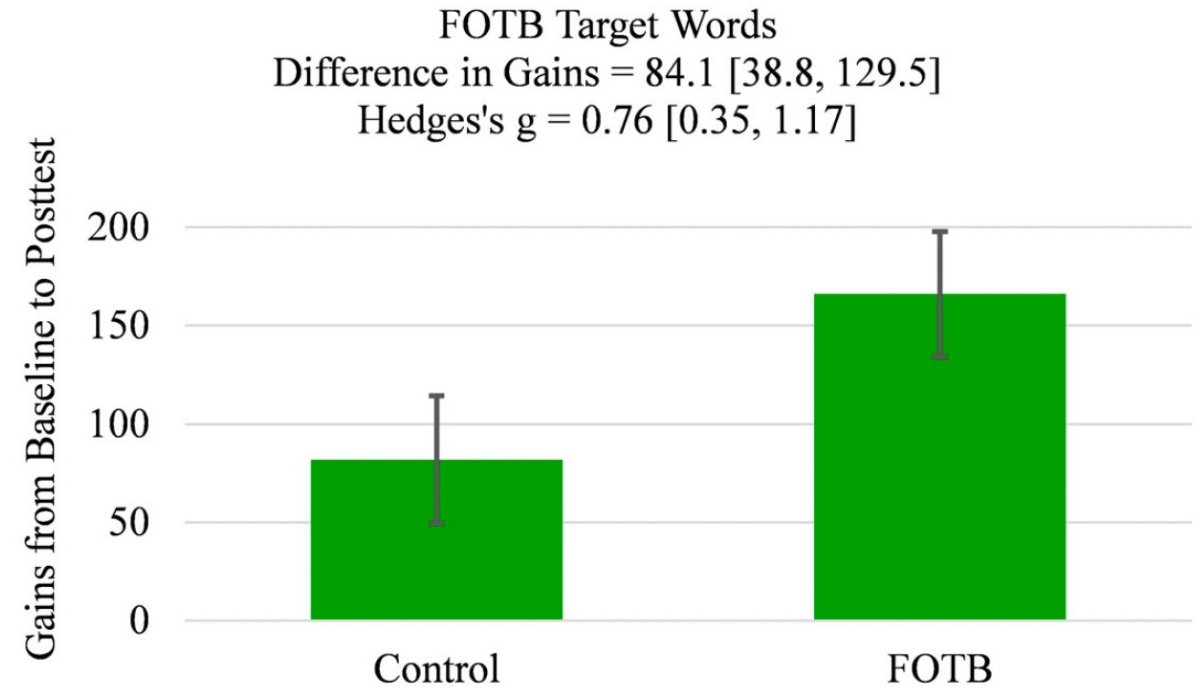
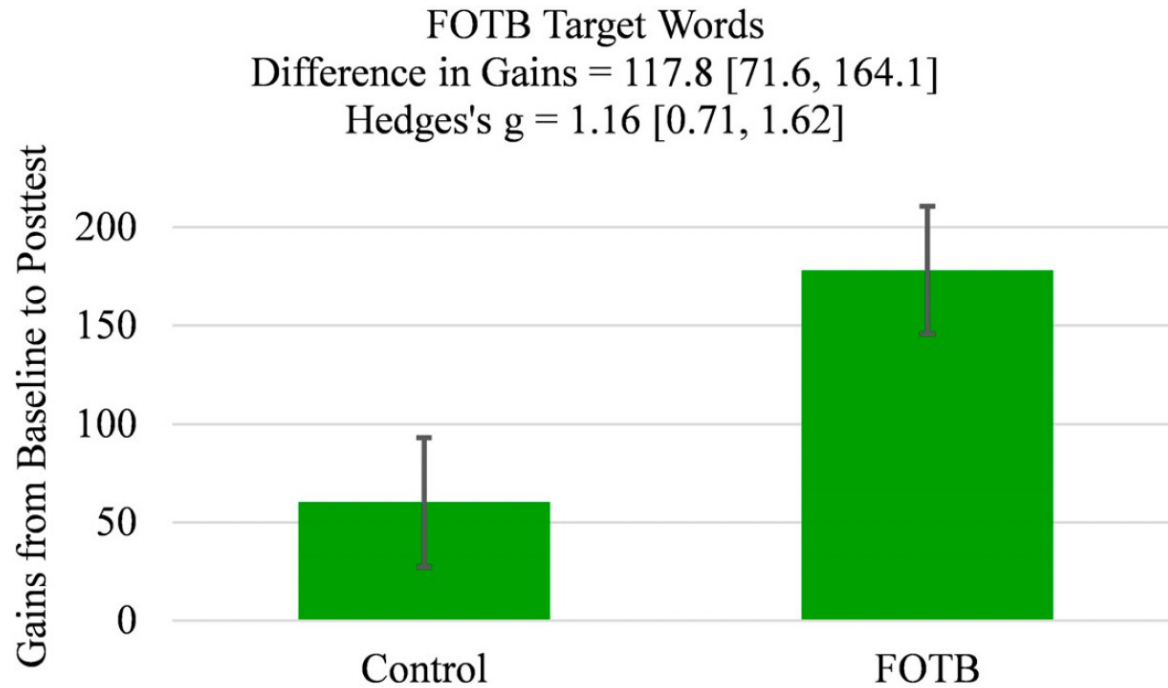
Measures Reported Today (C1)	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0006	1.2
CTOPP Blending	.0702	0.5
WIAT Pseudoword Decoding	.0326	0.6
WIAT Word Reading	.0326	0.4
WIAT Oral Reading Fluency	.0006	1.0
WIAT Receptive Vocabulary	.9388	0.0
WIAT Oral Discourse	.7561	-0.1
WIAT Expressive Vocabulary	.7606	-0.1
WIAT Oral Word Fluency	.4026	0.2
WIAT Reading Comprehension	.0176	0.7

Measures Reported Today (C2)	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0110	0.8
CTOPP Blending	.8617	-0.0
WIAT Pseudoword Decoding	.9981	0.0
WIAT Word Reading	.5688	0.1
WIAT Oral Reading Fluency	.1455	0.6
WIAT Receptive Vocabulary	.4558	0.3
WIAT Oral Discourse	.4558	-0.2
WIAT Expressive Vocabulary	.3875	-0.3
WIAT Oral Word Fluency	.3958	-0.3
WIAT Reading Comprehension	.3875	0.5

Note. *p* values adjusted with Benjamini–Hochberg correction for 22 total tests

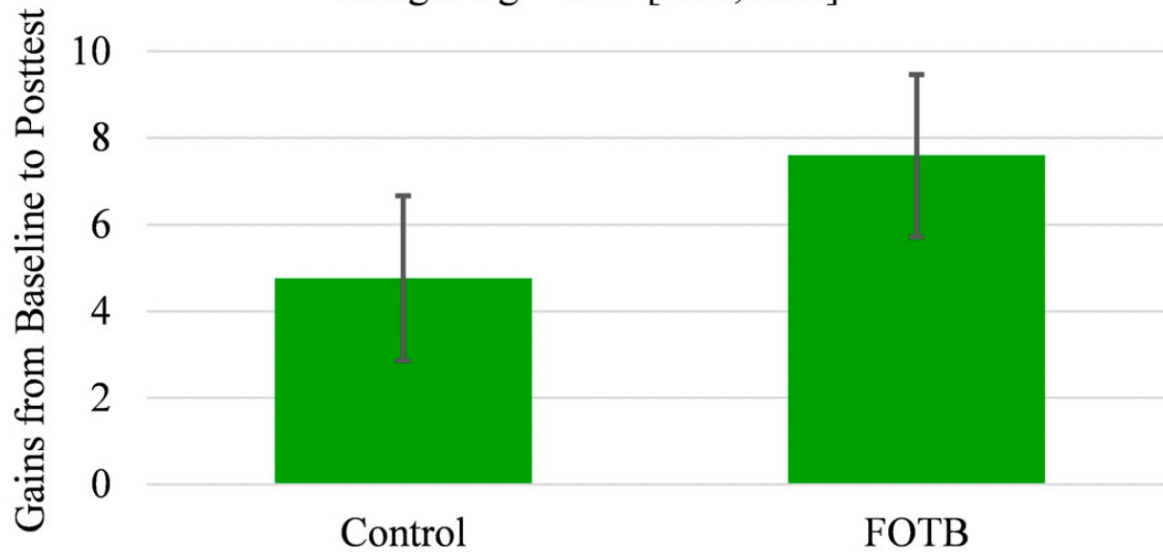


Proximal measure for FOTB

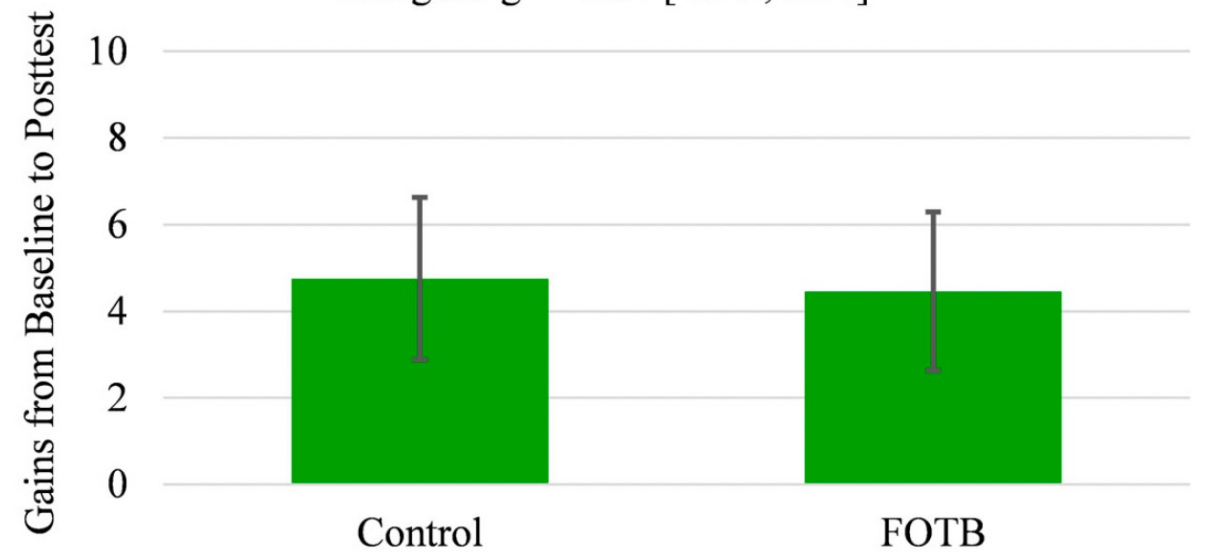


Phonemic Awareness (Blending)

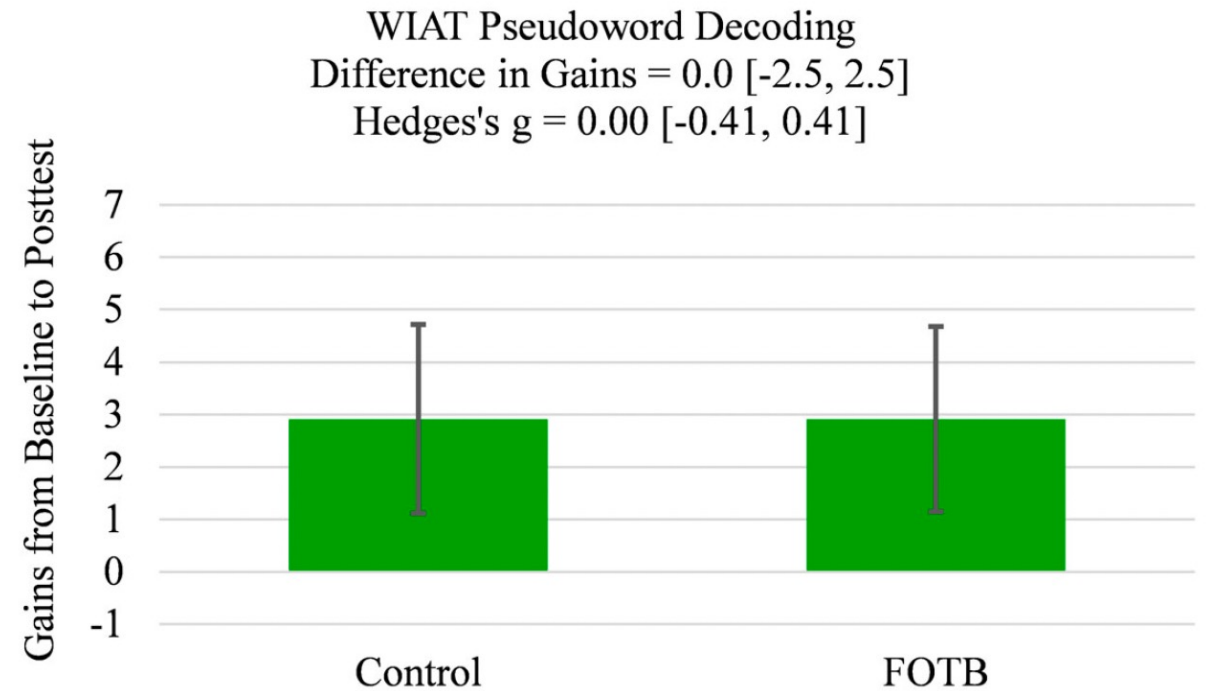
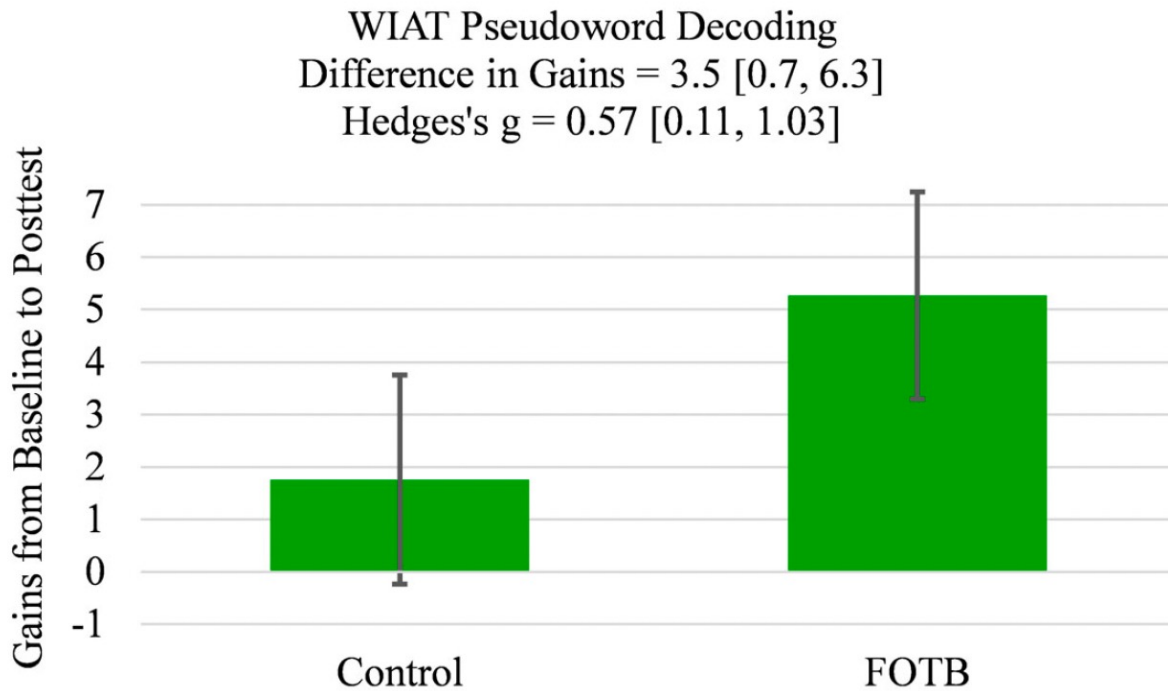
CTOPP Blending Words
Difference in Gains = 2.8 [0.2, 5.5]
Hedges's g = 0.47 [0.03, 0.92]



CTOPP Blending Words
Difference in Gains = -0.3 [-2.9, 2.3]
Hedges's g = -0.04 [-0.42, 0.34]

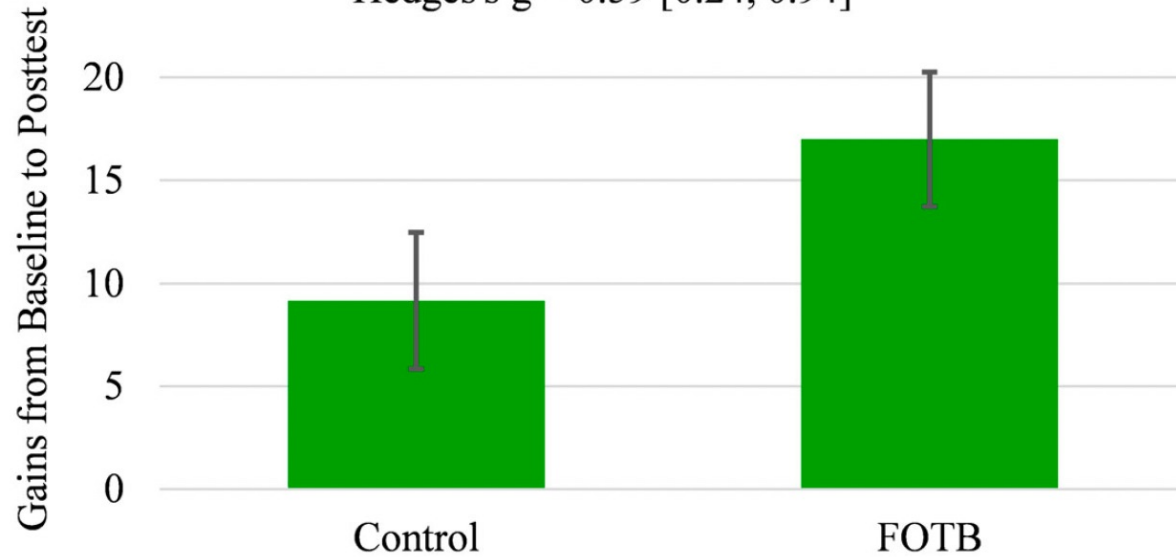


Pseudoword Decoding

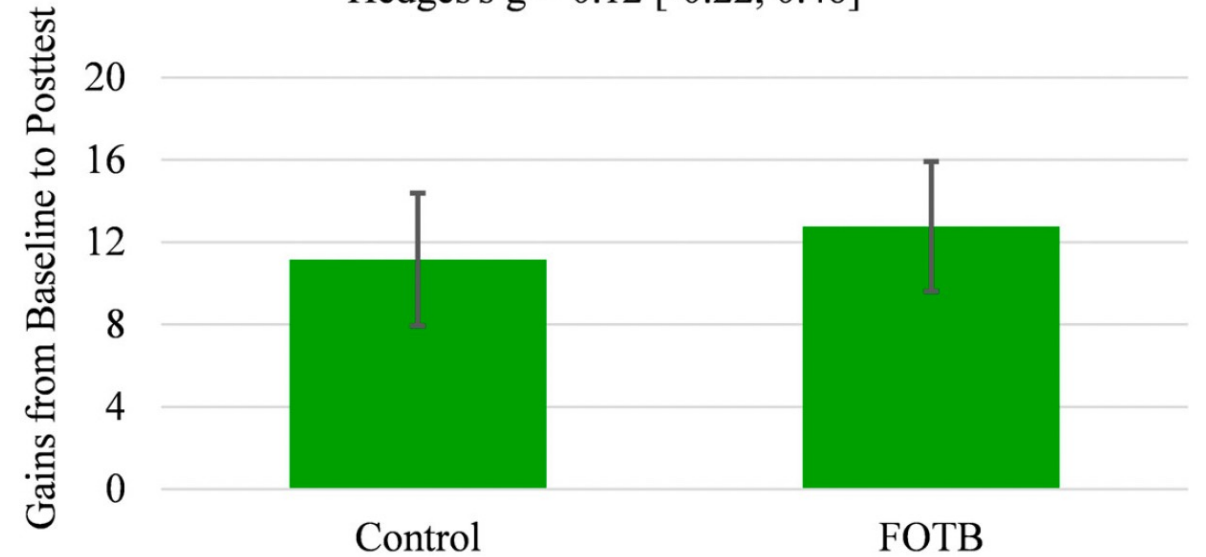


Word Reading

WIAT Word Reading
Difference in Gains = 7.8 [3.2, 12.5]
Hedges's g = 0.59 [0.24, 0.94]

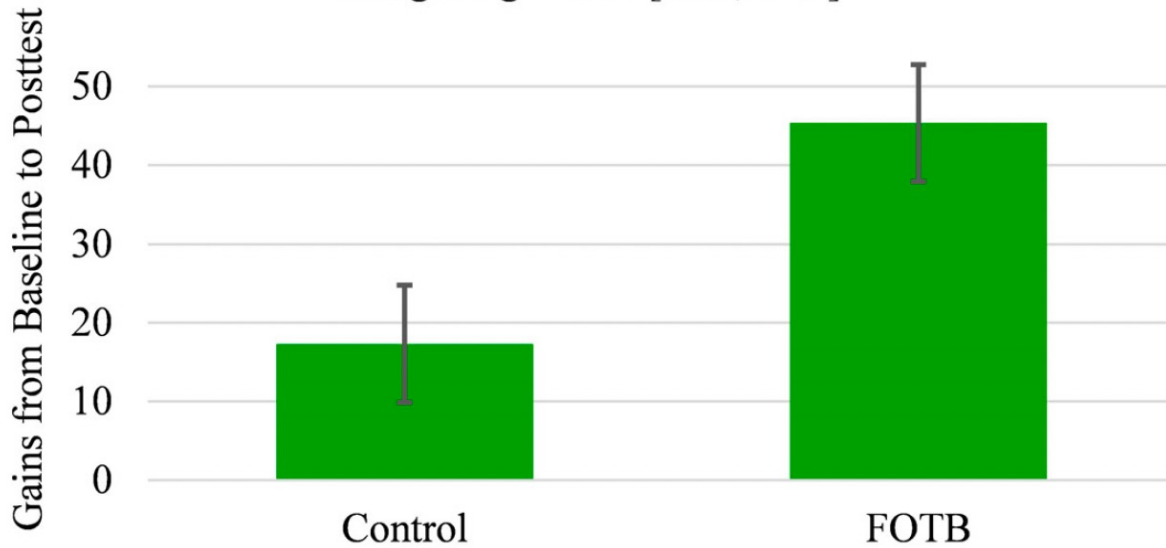


WIAT Word Reading
Difference in Gains = 1.6 [-2.9, 6.1]
Hedges's g = 0.12 [-0.22, 0.46]

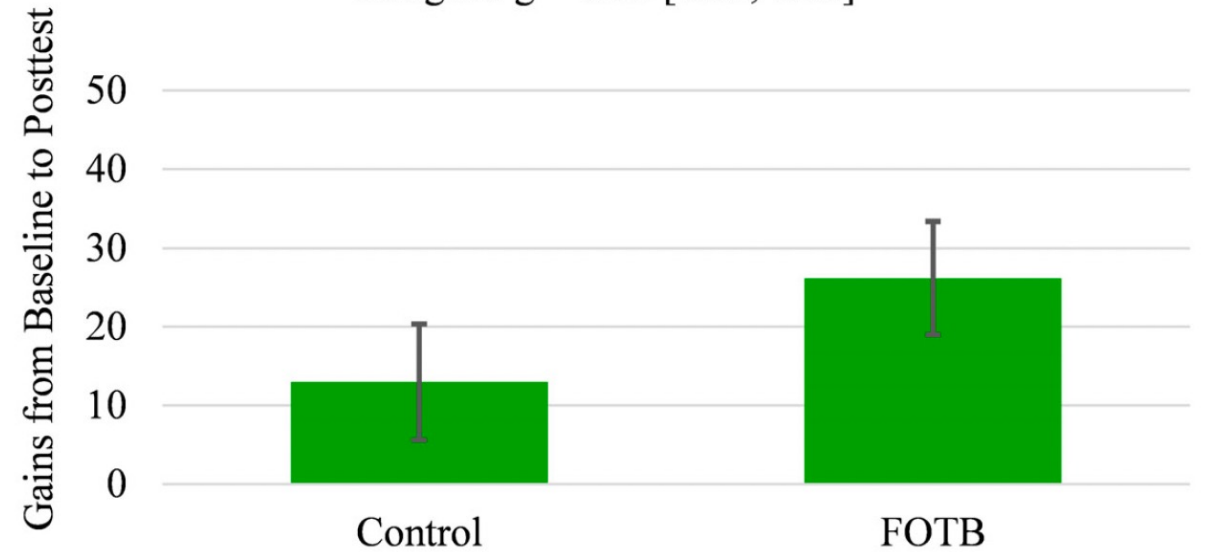


Oral Reading Fluency

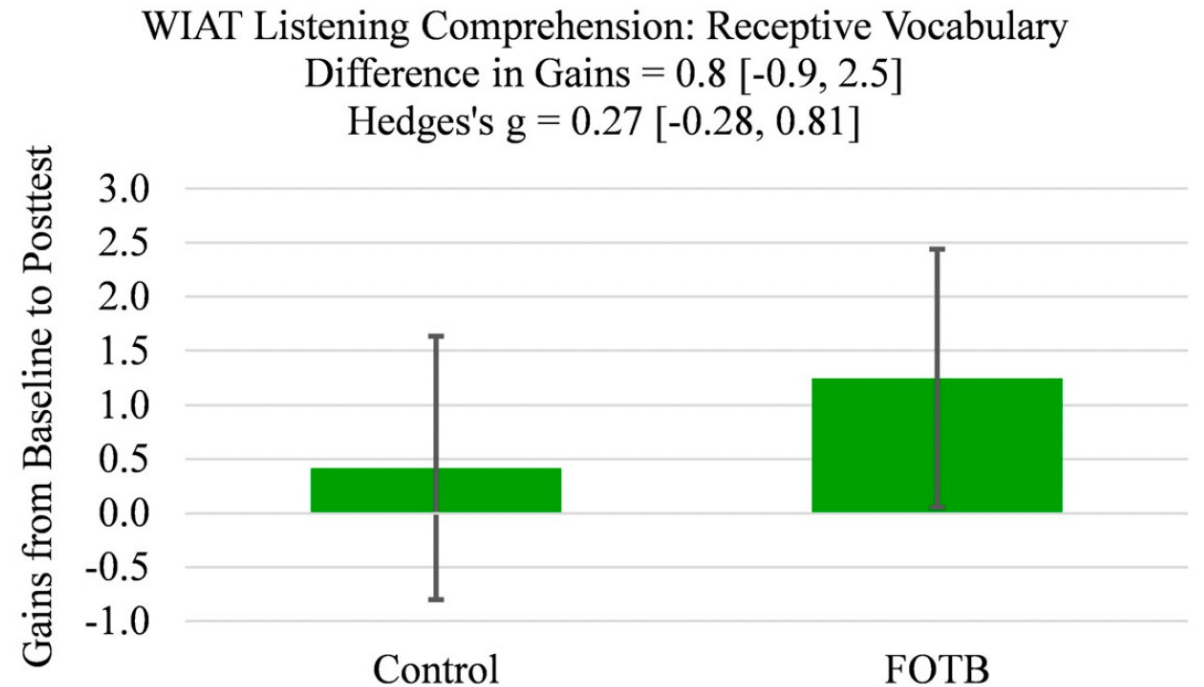
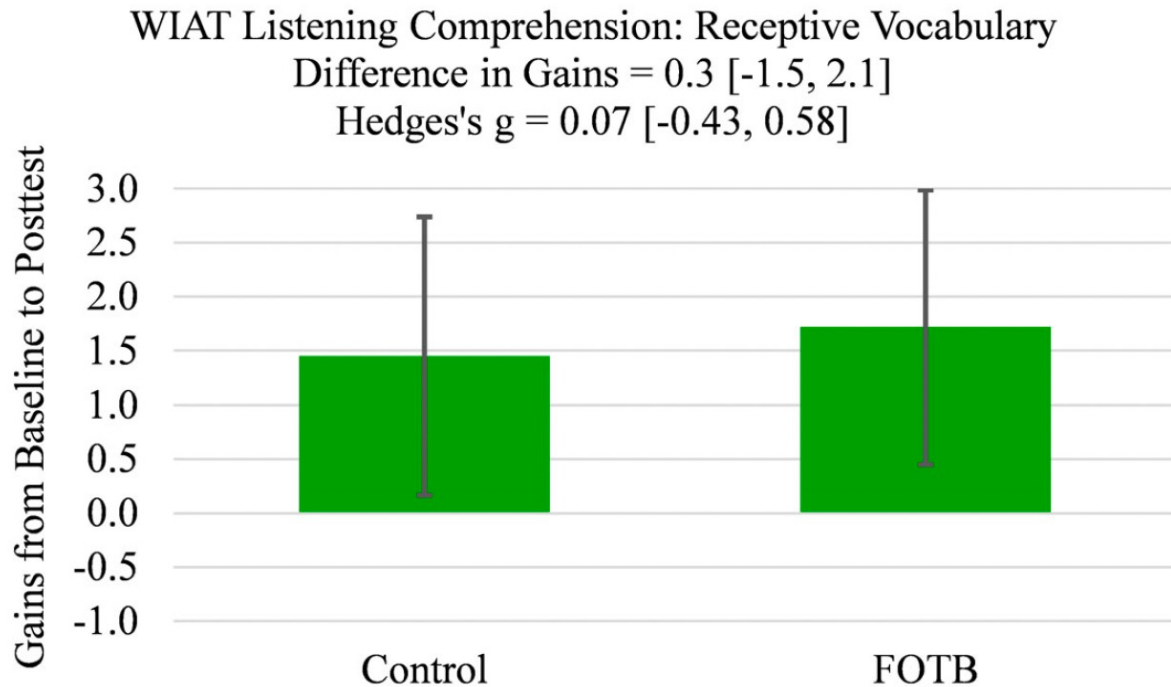
WIAT Oral Reading Fluency
Difference in Gains = 28.0 [17.5, 38.6]
Hedges's g = 1.04 [0.65, 1.43]



WIAT Oral Reading Fluency
Difference in Gains = 13.2 [2.9, 23.5]
Hedges's g = 0.58 [0.13, 1.03]

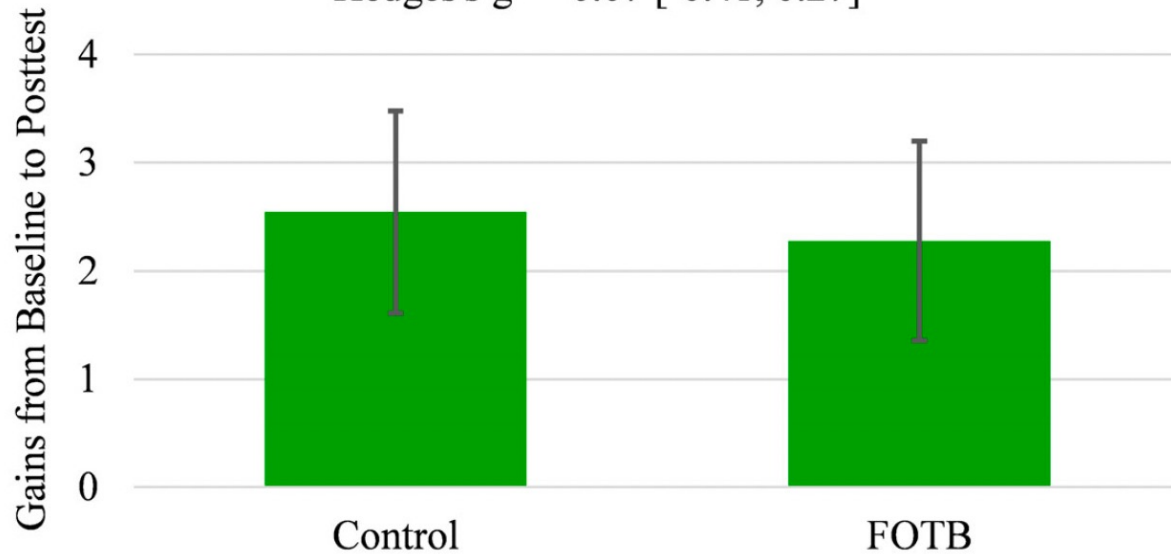


Listening Comprehension (Receptive Vocabulary)

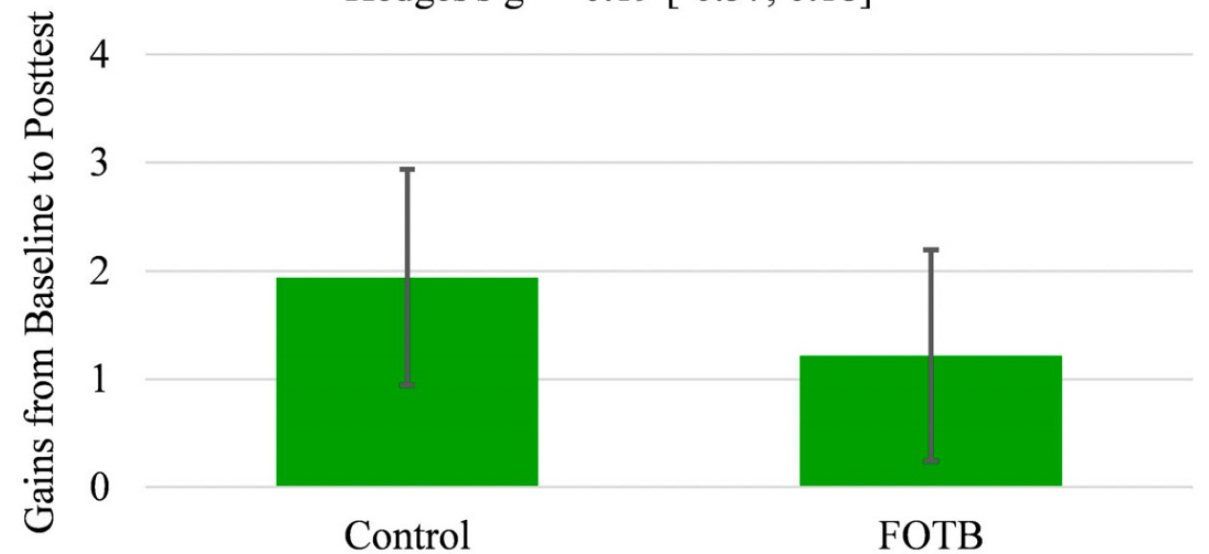


Listening Comprehension (Oral Discourse)

WIAT Listening Comprehension: Oral Discourse
Difference in Gains = -0.3 [-1.6, 1.0]
Hedges's g = -0.07 [-0.41, 0.27]

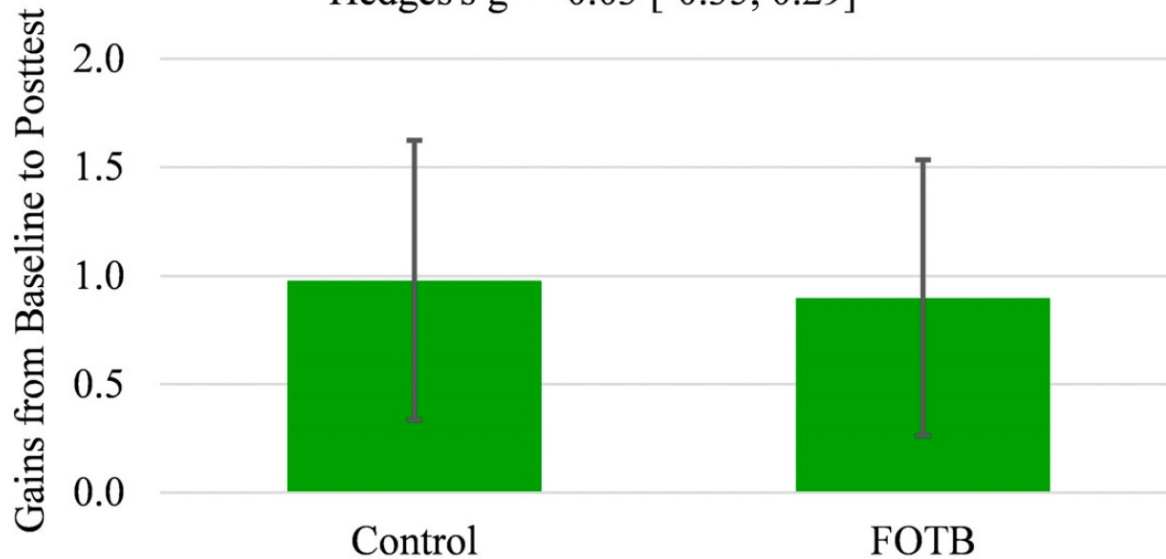


WIAT Listening Comprehension: Oral Discourse
Difference in Gains = -0.7 [-2.1, 0.7]
Hedges's g = -0.19 [-0.57, 0.18]

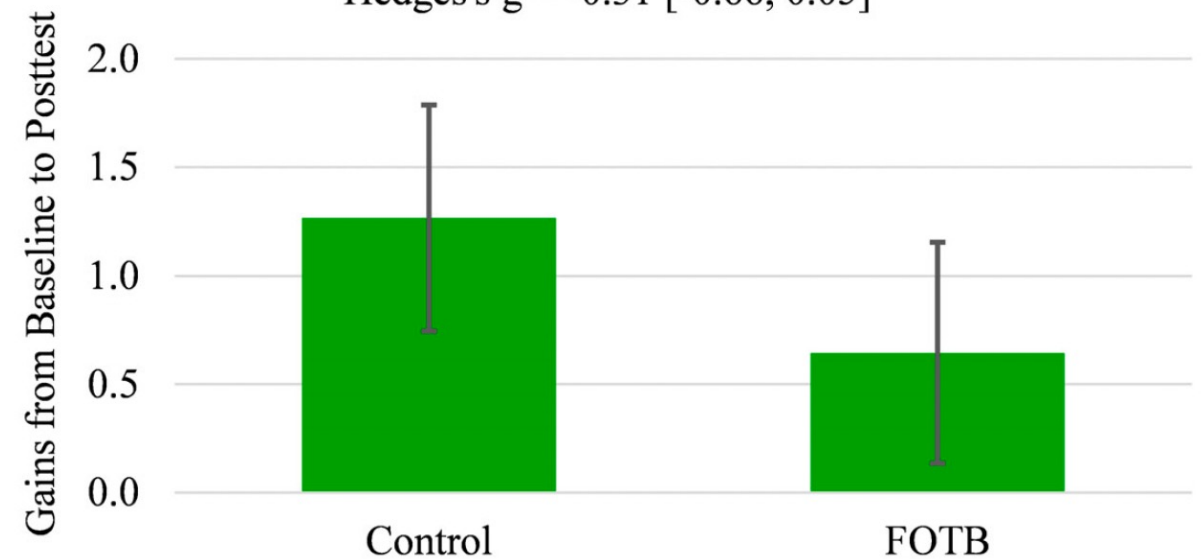


Oral Expression (Expressive Vocabulary)

WIAT Oral Expression: Expressive Vocabulary
Difference in Gains = -0.1 [-1.0, 0.8]
Hedges's g = -0.03 [-0.35, 0.29]

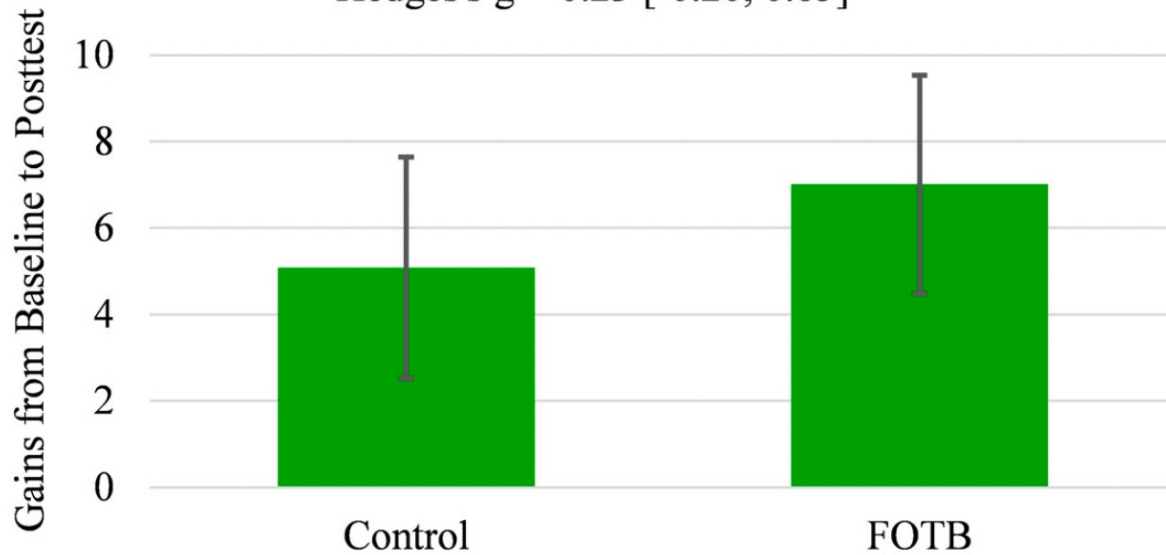


WIAT Oral Expression: Expressive Vocabulary
Difference in Gains = -0.6 [-1.3, 0.1]
Hedges's g = -0.31 [-0.66, 0.05]

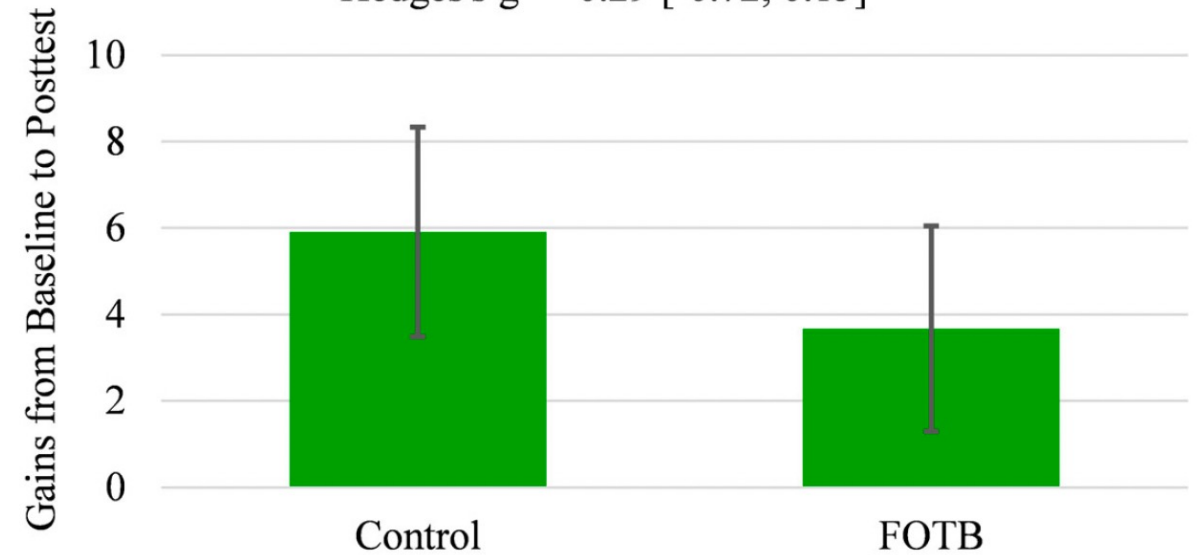


Oral Expression (Oral Word Fluency)

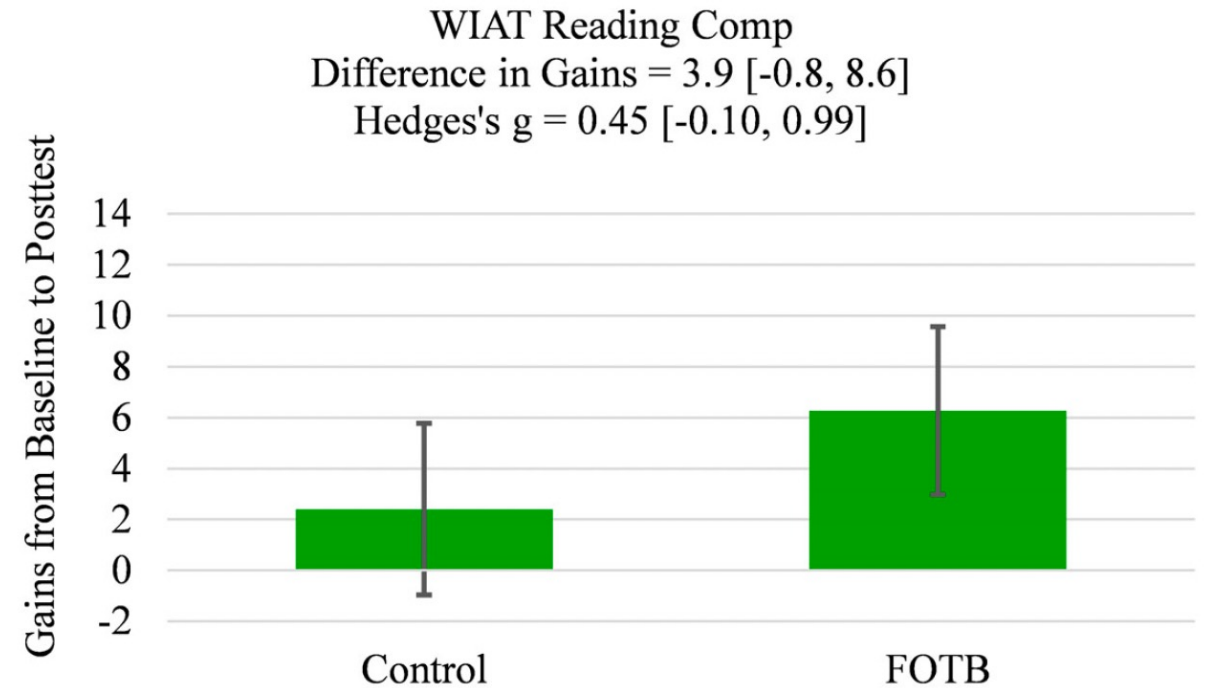
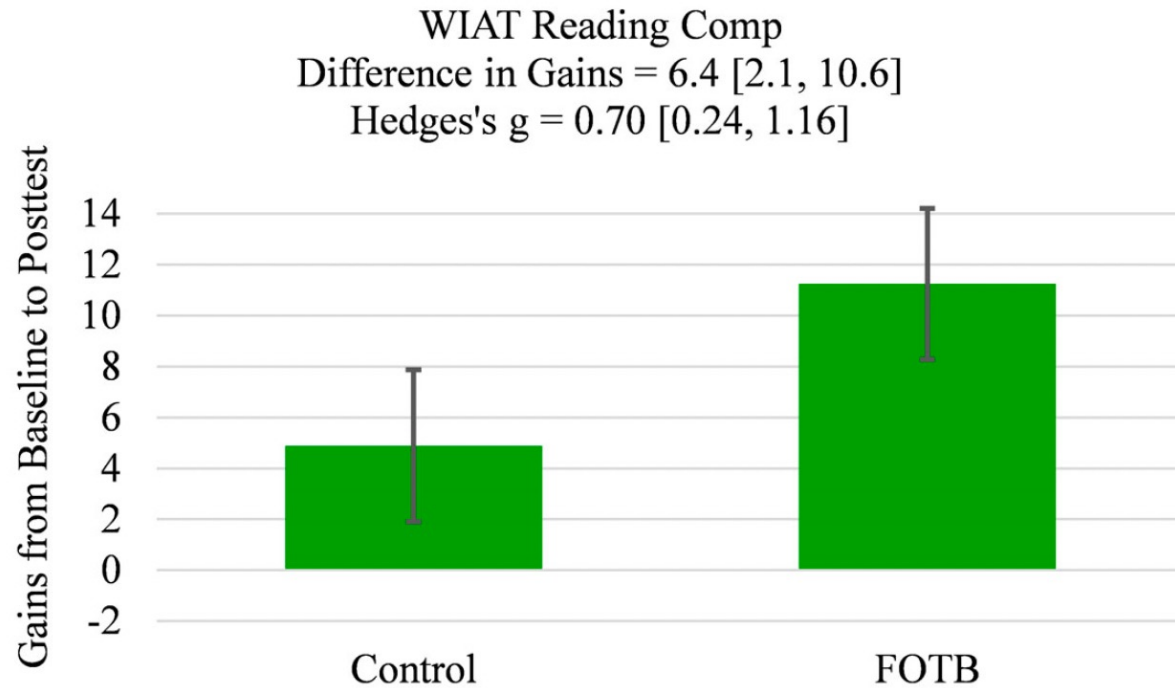
WIAT Oral Expression: Oral Word Fluency
Difference in Gains = 1.9 [-1.7, 5.5]
Hedges's g = 0.23 [-0.20, 0.65]



WIAT Oral Expression: Oral Word Fluency
Difference in Gains = -2.2 [-5.6, 1.2]
Hedges's g = -0.29 [-0.72, 0.15]



Reading Comprehension



Results Summary

Measures Reported Today (C1)	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0006	1.2
CTOPP Blending	.0702	0.5
WIAT Pseudoword Decoding	.0326	0.6
WIAT Word Reading	.0326	0.4
WIAT Oral Reading Fluency	.0006	1.0
WIAT Receptive Vocabulary	.9388	0.0
WIAT Oral Discourse	.7561	-0.1
WIAT Expressive Vocabulary	.7606	-0.1
WIAT Oral Word Fluency	.4026	0.2
WIAT Reading Comprehension	.0176	0.7

Measures Reported Today (C2)	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0110	0.8
CTOPP Blending	.8617	-0.0
WIAT Pseudoword Decoding	.9981	0.0
WIAT Word Reading	.5688	0.1
WIAT Oral Reading Fluency	.1455	0.6
WIAT Receptive Vocabulary	.4558	0.3
WIAT Oral Discourse	.4558	-0.2
WIAT Expressive Vocabulary	.3875	-0.3
WIAT Oral Word Fluency	.3958	-0.3
WIAT Reading Comprehension	.3875	0.5

Note. *p* values adjusted with Benjamini–Hochberg correction for 22 total tests



Follow-Up Results



Cohort 1

Methods

Students Tested at Follow-Up

Approximate Timeline

- Baseline: Fall 2021
 - Post: Spring 2023
 - End of Intervention
 - Follow-Up: Spring 2024
- N=39 (21 FOTB; 18 BAU)
 - Mean Age at Beginning of Intervention: 7.6
(Control SD=1.5, Treatment SD=1.1)
 - Gender: 67% male, 33% female
 - Race: 64% African American, 36% White
 - Disability labels:
 - 10% Intellectual Disability
 - 54% Developmental Delay
 - 10% Autism (IQ mean=76.5; SD=11.86)
 - 15% Specific Learning Disability
 - 5% Speech/ Language Disorder
 - 5% Other Health Impairment



Follow-Up Results Summary (Cohort 1)

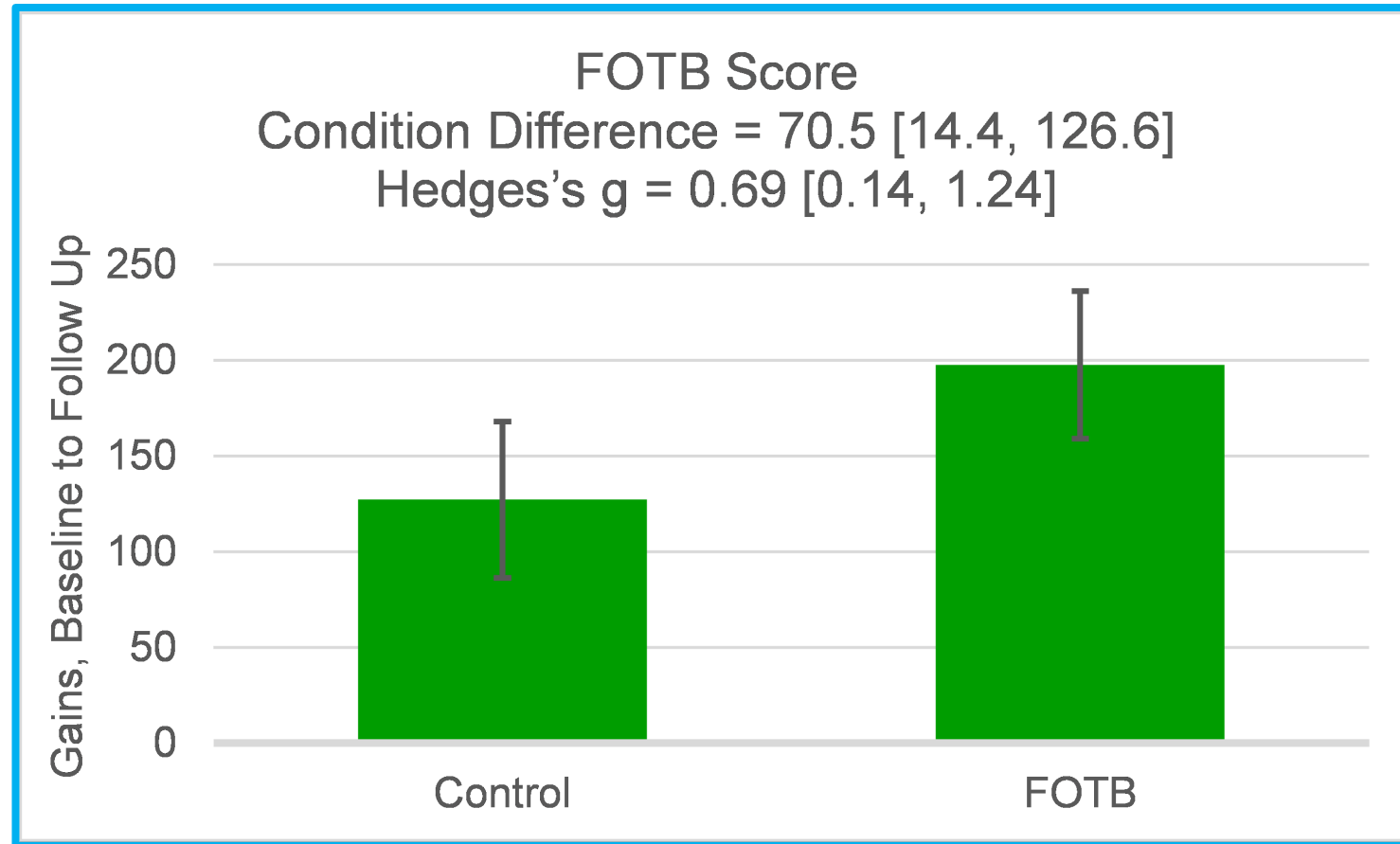
Baseline to Post	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0006	1.2
CTOPP Blending	.0702	0.5
WIAT Pseudoword Decoding	.0326	0.6
WIAT Word Reading	.0326	0.4
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WIAT Receptive Vocabulary	.9388	0.0
WIAT Oral Discourse	.7561	-0.1
WIAT Expressive Vocabulary	.7606	-0.1
WIAT Oral Word Fluency	.4026	0.2
WIAT Reading Comprehension	.0176	0.7

Baseline to Follow Up	<i>p</i>	<i>g</i>
FOTB (proximal measure of target words)	.0557	0.7
CTOPP Blending	.5247	0.2
WIAT Pseudoword Decoding	.0622	0.6
WIAT Word Reading	.0745	0.4
WIAT Oral Reading Fluency	.0033	0.95
WIAT Receptive Vocabulary	.5176	0.2
WIAT Oral Discourse	.7817	-0.1
WIAT Expressive Vocabulary	.2572	0.3
WIAT Oral Word Fluency	.0801	0.7
WIAT Reading Comprehension	.0303	0.8

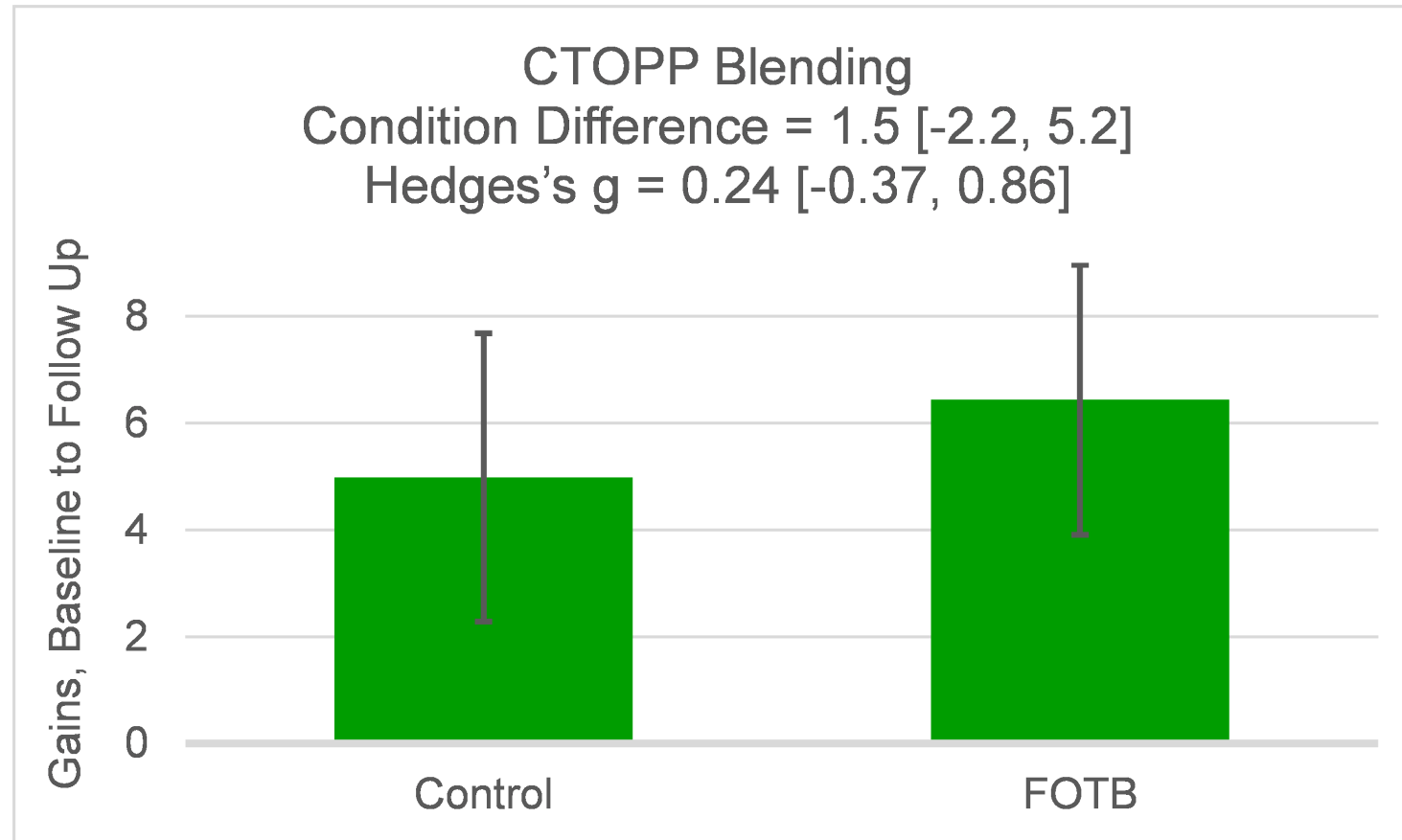
Note. *p* values adjusted with Benjamini–Hochberg correction for 22 total tests



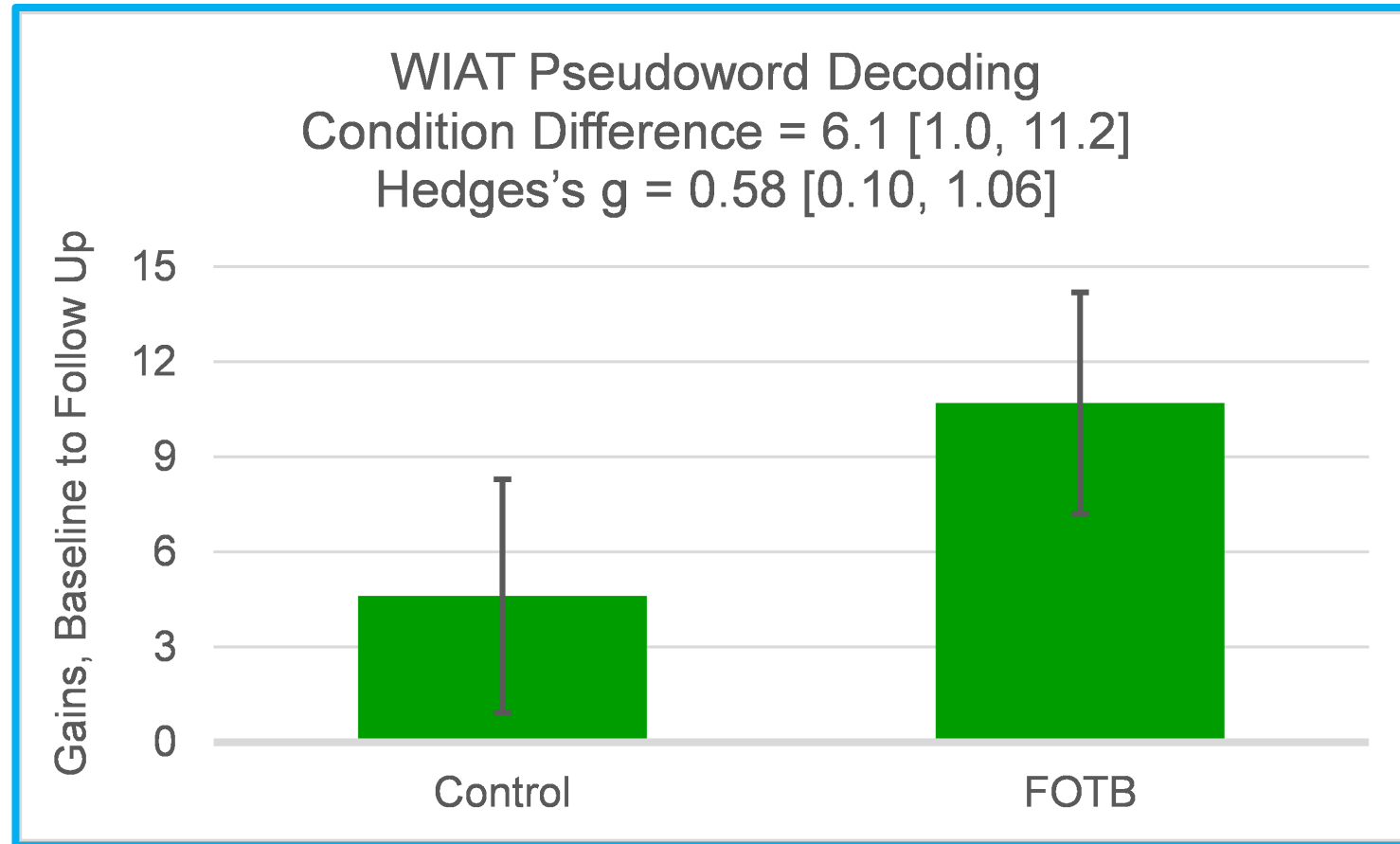
Proximal Measure for FOTB



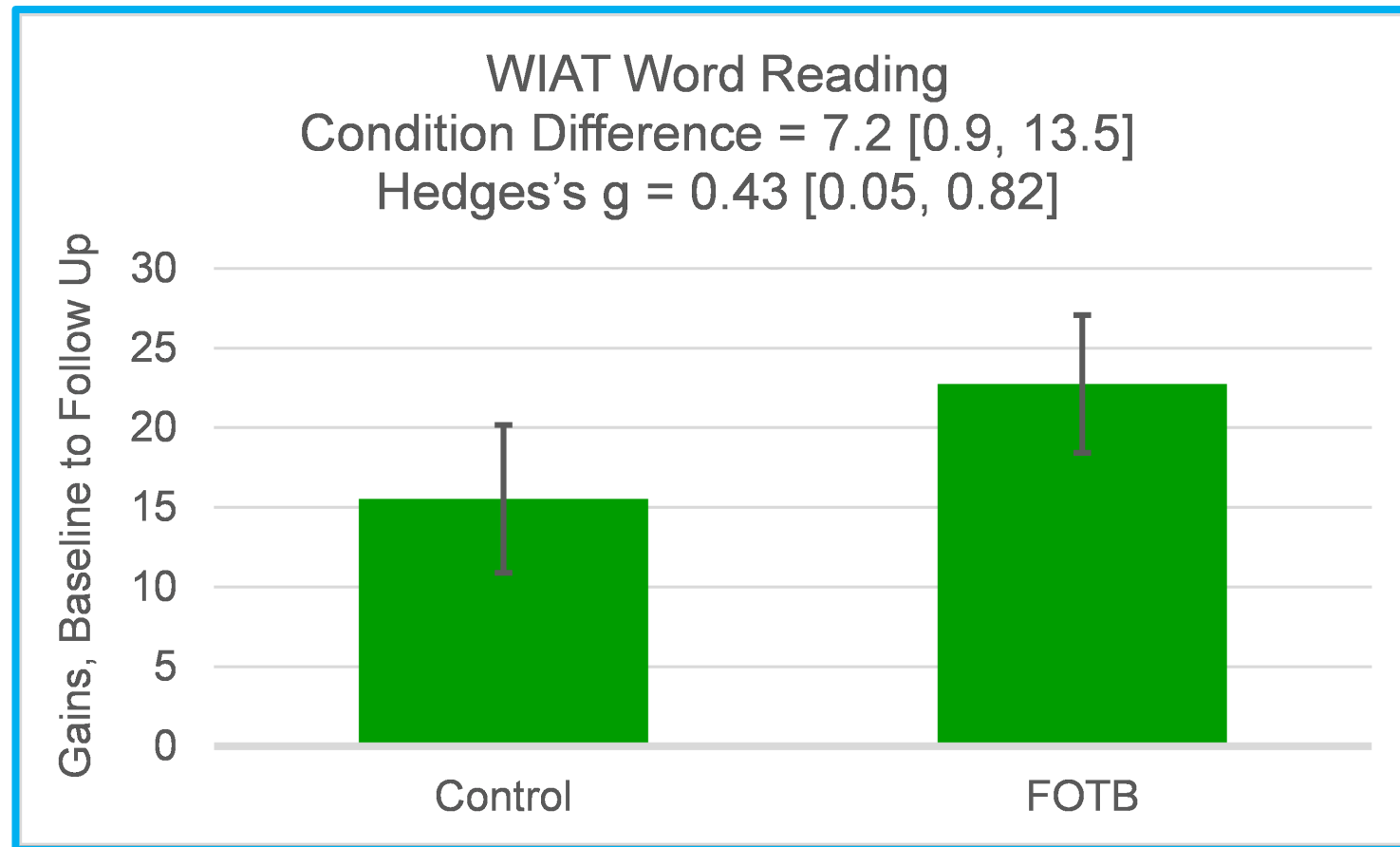
Phonemic Awareness (Blending)



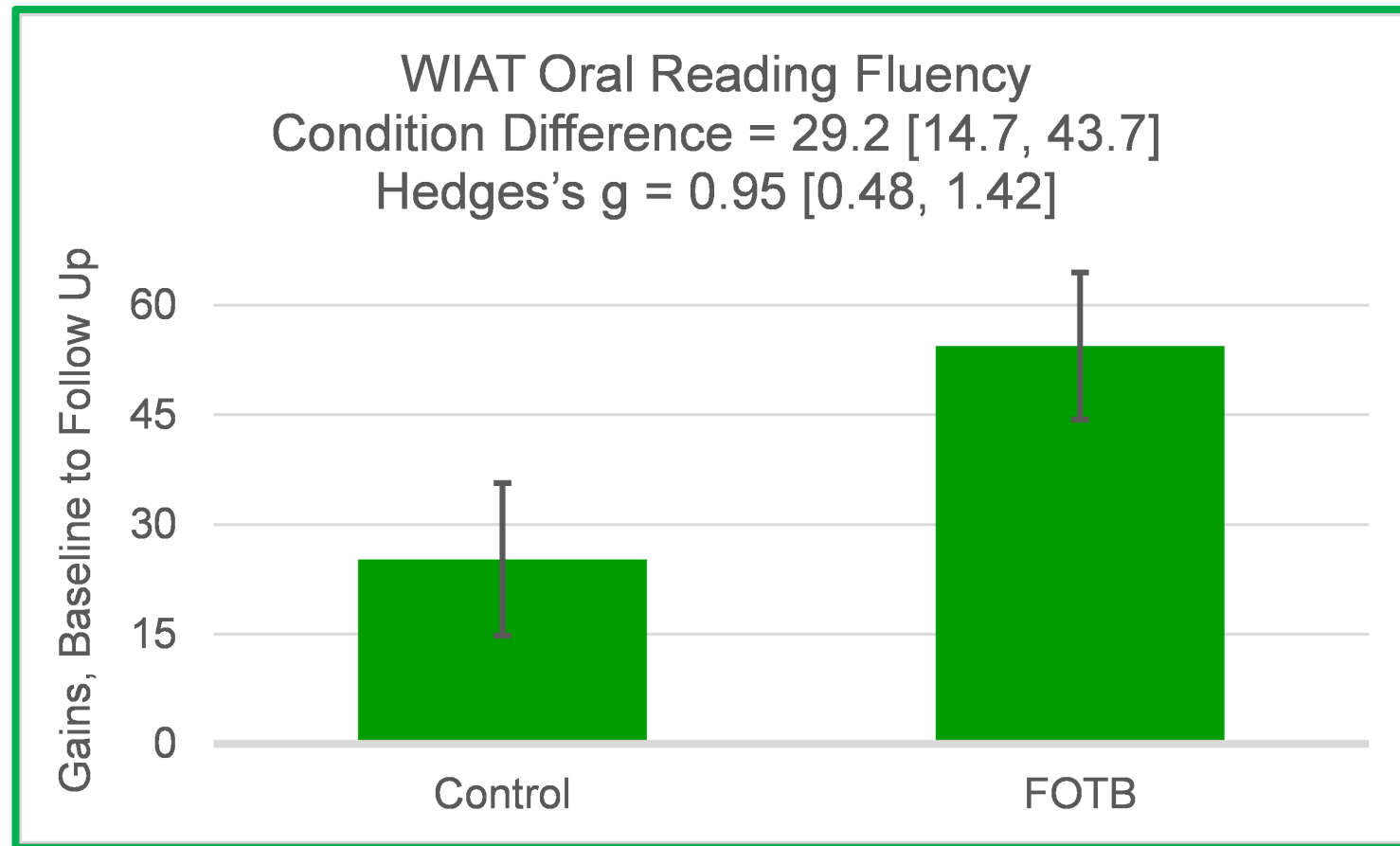
Pseudoword Decoding



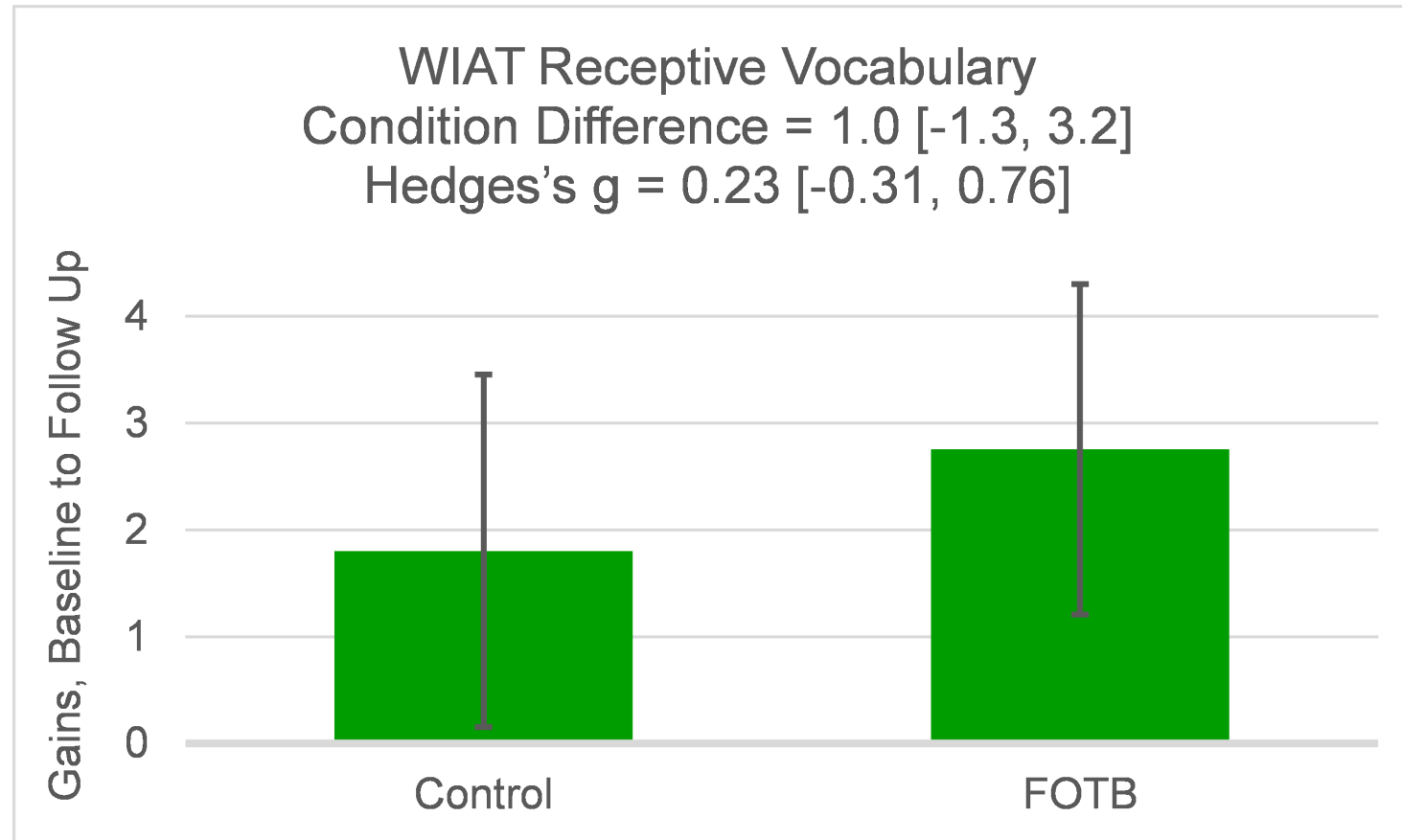
Word Reading



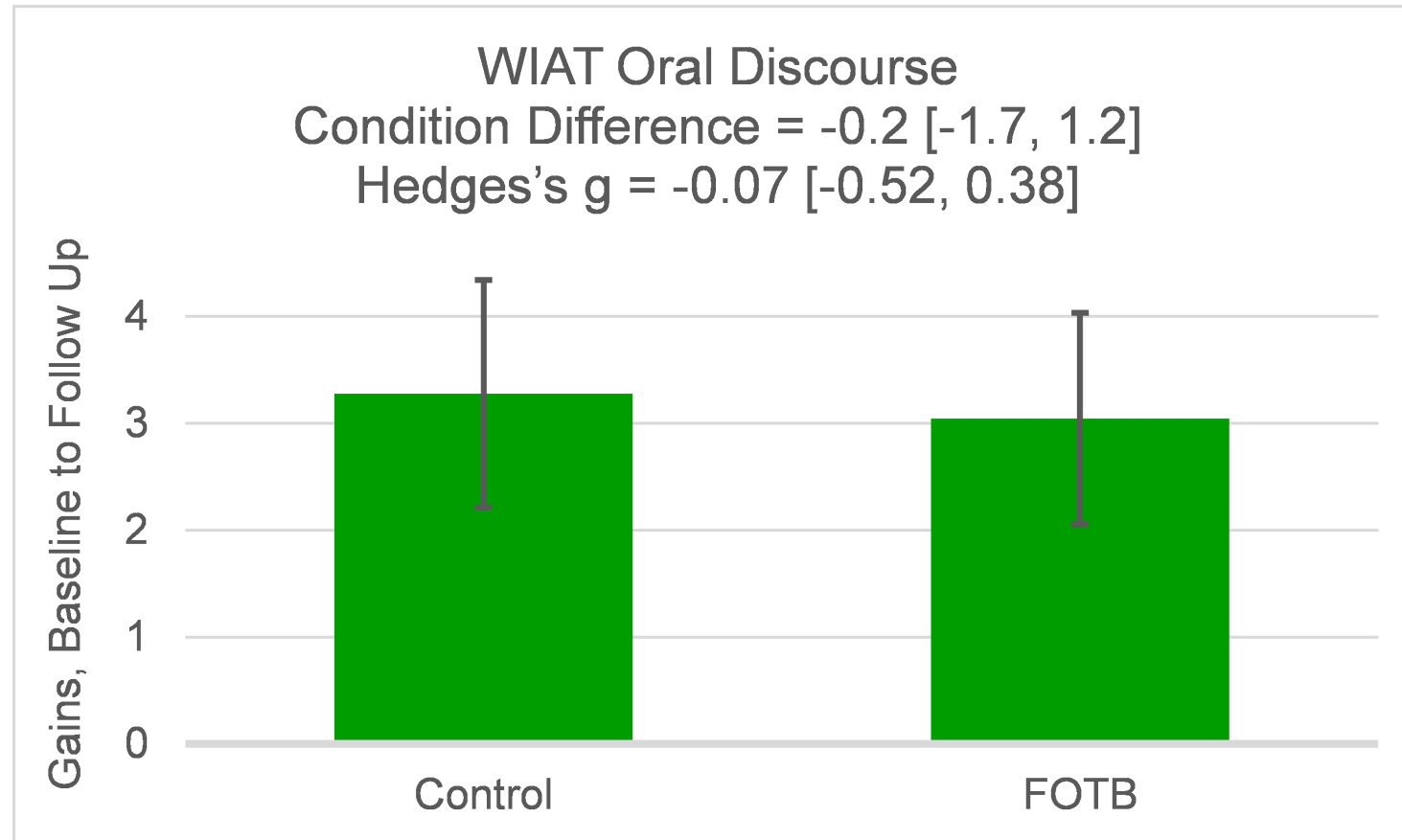
Oral Reading Fluency



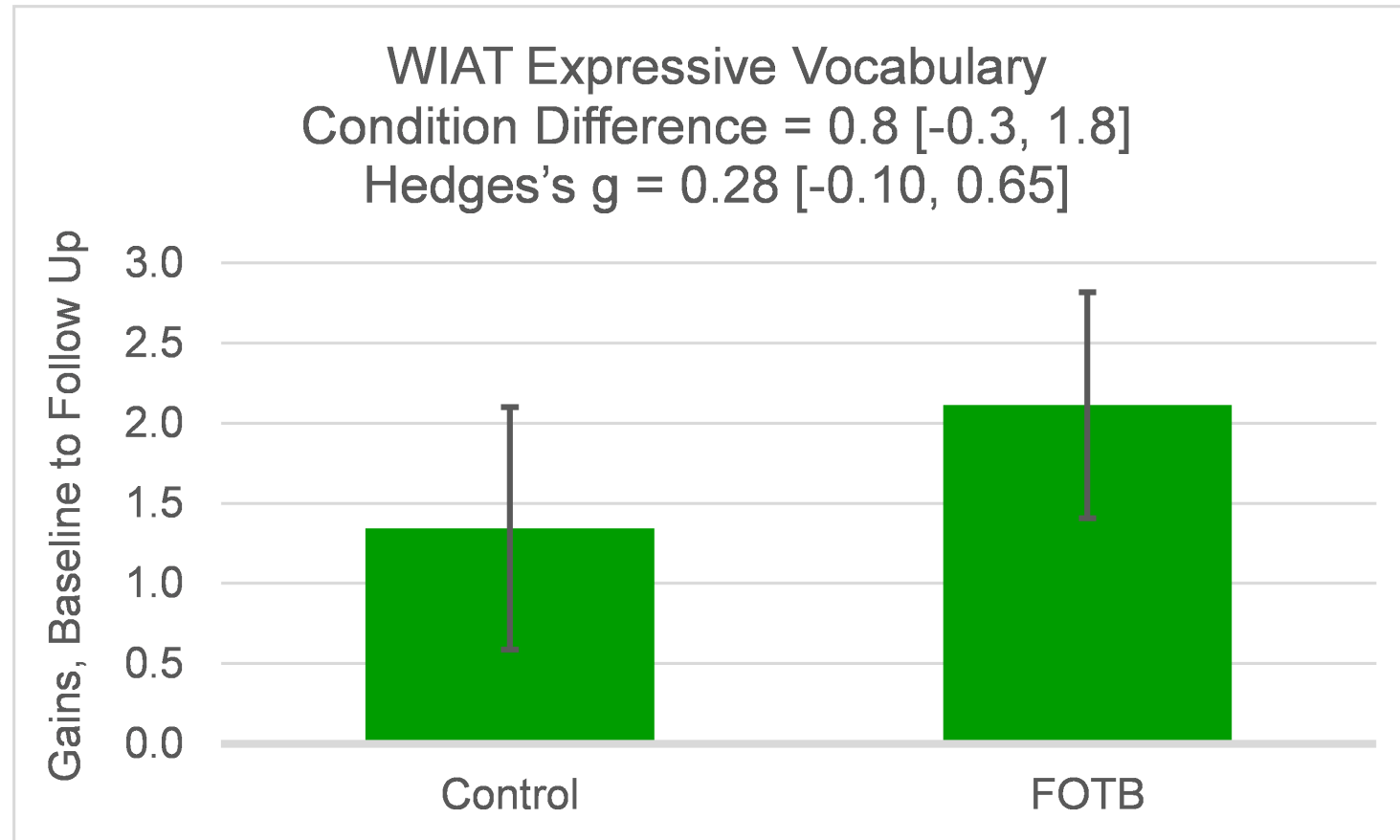
Listening Comprehension (Receptive Vocabulary)



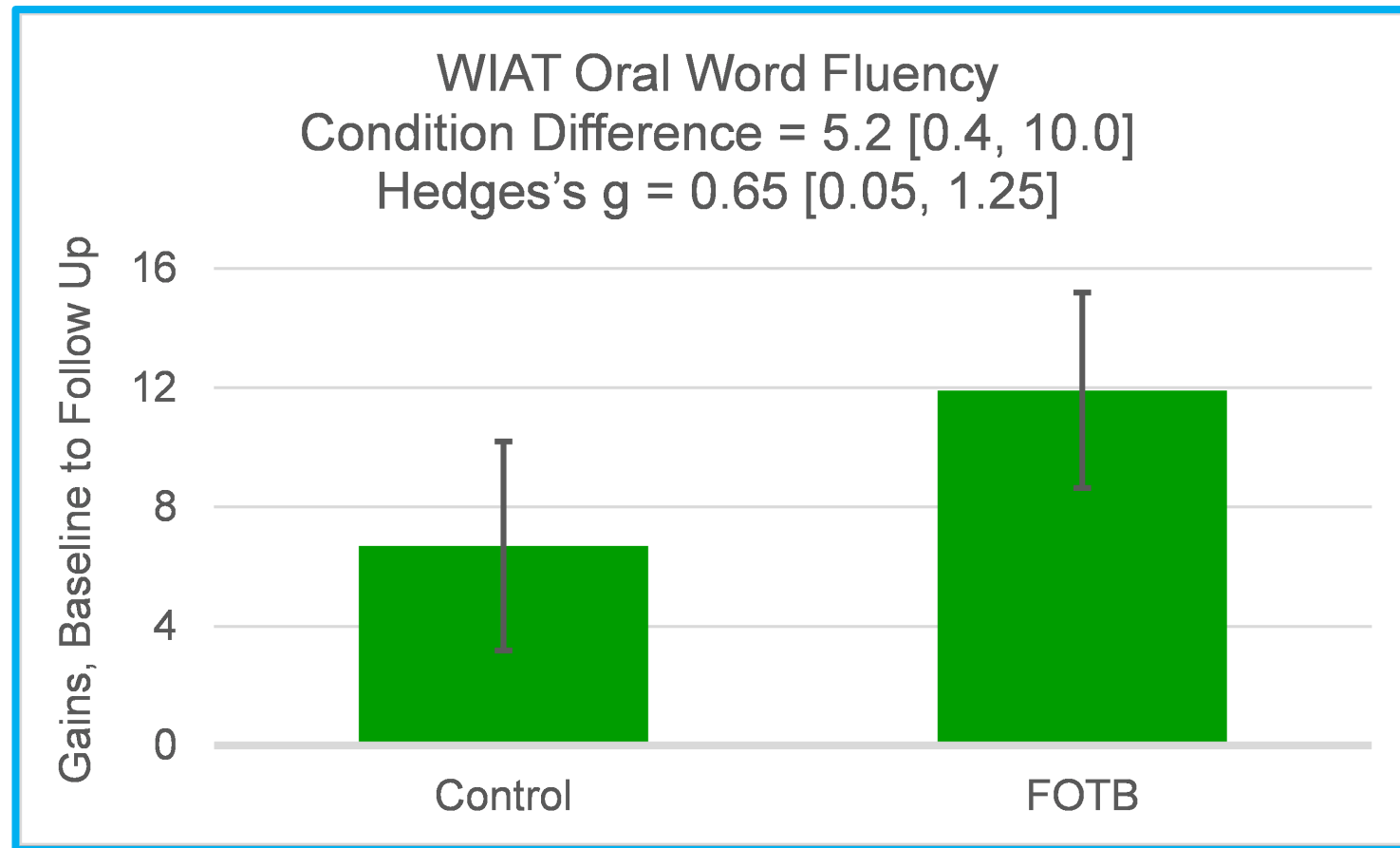
Listening Comprehension (Oral Discourse)



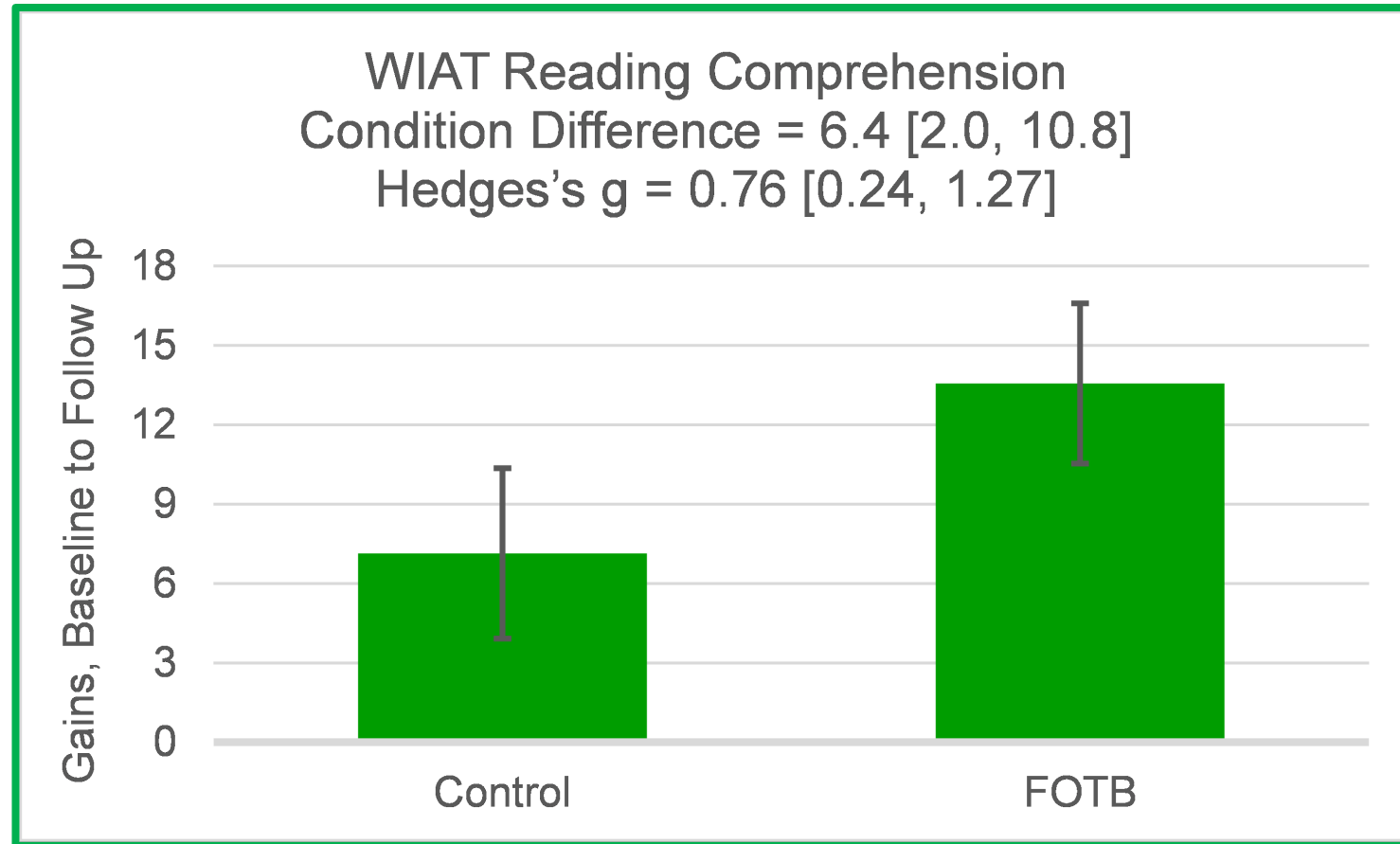
Oral Expression (Expressive Vocabulary)



Oral Expression (Oral Word Fluency)



Reading Comprehension



Follow-Up Results Summary (Cohort 1)

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Discussion



Fluency and Comprehension Gains across Cohorts



Turn and Talk

What have you seen that stands in the way of student success with literacy intervention?



Engagement and the Counterfactual



Dosage



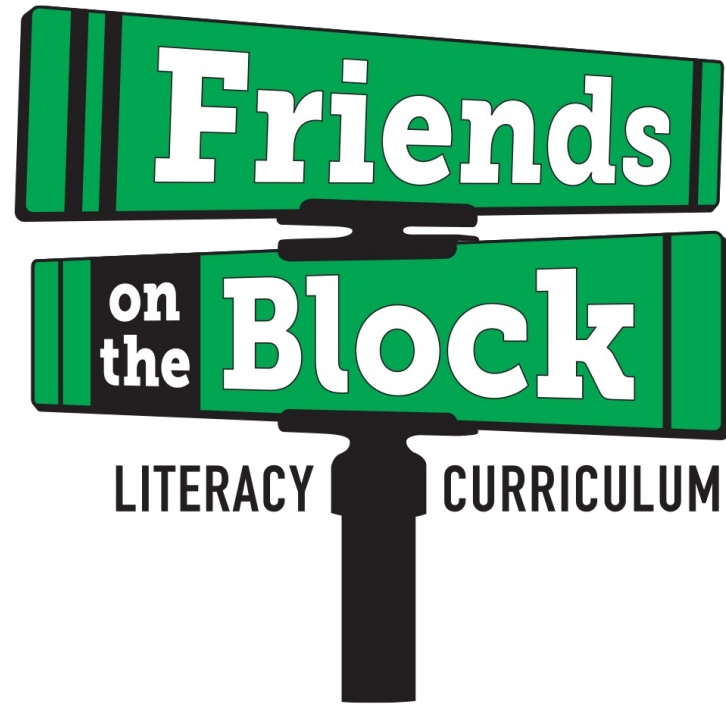
Self-Teaching Hypothesis



Questions



For More Information on Friends on the Block



Overview & Demonstration Videos

FREE Materials



OSF Registries

Acknowledgements Support for research and development provided by grants #H324K040011-05, R324A130102, and R324A200151 from the Institute of Education Sciences to Southern Methodist University. Jill Allor and Stephanie Al Otaiba acknowledge a financial interest in the Friends on the Block books and curriculum. The views expressed are those of the authors and have not been reviewed or approved by the granting agency.





Thank you!

Takeaway: FOTB is effective in boosting the early literacy skills of children with IDD.

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