

RFI Question 1

# JAMES PATTERSON LITERACY CHALLENGE

## LITERACY MATRIX IMPLEMENTATION STUDY OVERVIEW

THE BIG PICTURE	PHONOLOGICAL AWARENESS	WORD RECOGNITION AND DECODING PART I	WORD RECOGNITION AND DECODING PART II	FLUENCY	VOCABULARY	COMPREHENSION	SMALL GROUP IMPLEMENTATION	INSTRUCTIONAL LEADERSHIP
FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS	FOUNDATIONS
ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT	ASSESSMENT
INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION	INSTRUCTION
INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION	INTERVENTION
	PRACTICUM	PRACTICUM	PRACTICUM	PRACTICUM	PRACTICUM	PRACTICUM	PRACTICUM	PRACTICUM

● CONTENT MODULES     
 ● GRADE-LEVEL RESOURCES     
 ● COACH/PRINCIPAL RESOURCES

The Literacy Matrix is an online professional development tool for teachers to learn the key concepts in reading. Each strand includes modules on foundational knowledge, as well as evidence-based methods for assessment, instruction, and intervention. The strand for each key concept concludes with a practicum, teachers submit application assignment for review to show evidence of mastery.

### IMPLEMENTATION STUDY STRANDS

#### The Big Picture

- ✓ Provides a comprehensive overview of the reading process and a focus on features of effective instruction to meet student needs.

#### Phonological Awareness

- ✓ Helps to develop a deep understanding of why phonological awareness skills are important to the development of reading.

#### Early Decoding

- ✓ Provides an understanding of decoding as a skill and phonics as an instructional approach to teach students how to decode.

### DATA SOURCES

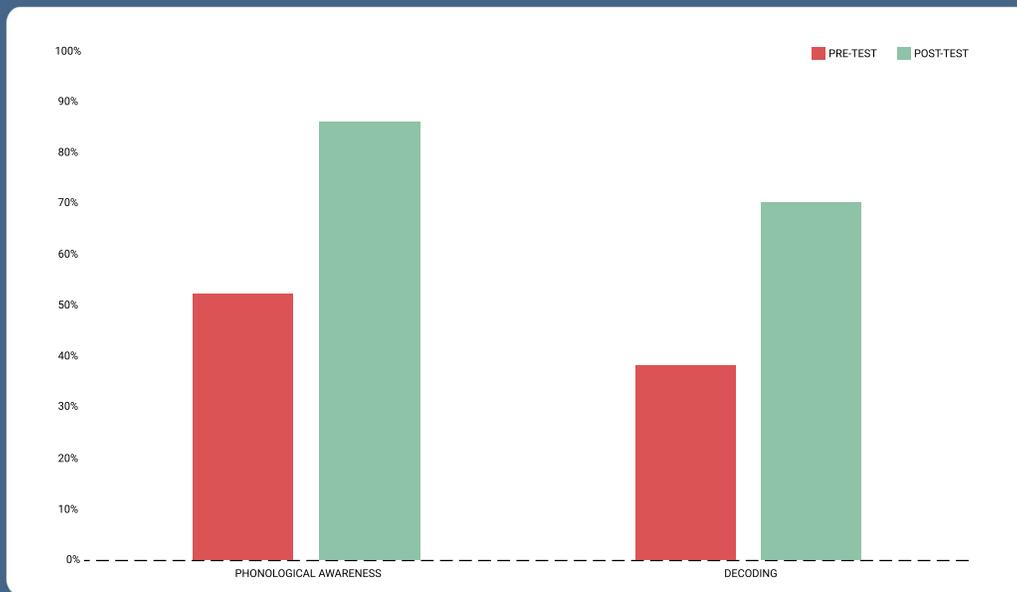
- 📅 Pre- and post-assessment of teacher knowledge
- 📅 Pre- and post-assessment of student outcomes
- 🌐 Social Validity

### PERIOD



# LITERACY MATRIX STUDENT OUTCOMES

The goal of the Literacy Matrix is to improve the reading achievement of children in the State of Florida. Data indicate that students made gains in phonological awareness and decoding. However, the Literacy Matrix is competency based and includes a teacher practicum at the end of each strand. During the pilot study, teachers completed the Phonological Awareness and Decoding strands. At the conclusion of each strand, participating teachers implemented 5 lessons with a small group of students selected based on data. The teacher administered a pretest and posttest on each student. Data from the practicum demonstrate that students learned phonological awareness and decoding skills based on the strategies the teachers learned in The Literacy Matrix.



## Outcome Summary

Students who received small group instruction on Phonological Awareness and Decoding as recommended in The Literacy Matrix demonstrated growth from Pretest to Posttest.

**+65%**

Phonological Awareness  
+65% Gain

**1.75**

Phonological Awareness  
Effect Size 1.75

**+86%**

Decoding  
+86% Gain

**1.13**

Decoding  
Effect Size 1.75

## Cohen's d Conventions for Small, Medium, and Large Effects

A measure that allows examination of the relative importance of a difference between means by reporting the size of the difference.

### Difference Between Two Means

Size of effect	<i>d</i>	% variance
small	.2	1
medium	.5	6
large	.8	16

# BIG PICTURE

The Big Picture strand examines the reading process. Teachers learn how to identify best practices, how to use assessment data to drive instruction and intervention, and how to plan to meet the needs of students by exploring the essential components of a comprehensive reading program. The strand also investigates learning disabilities and dyslexia.



**102 PARTICIPANTS**  
COMPLETED THE BIG PICTURE  
STRAND AND ASSESSMENT



**60**

**PRE TEST AVERAGE**



**86**

**POST TEST AVERAGE**



**43% INCREASE**  
GAIN FROM PRETEST TO POSTTEST



# ASSESSMENT DATA

## BIG PICTURE STRAND

### Pre and Post Test Participant Results



### PRE AND POST DATA BREAKDOWN

**+26**

Increase on average 26 points.

**+43%**

This is a 43% gain from pretest to posttest.

**2.11**

Calculated effect size (Cohen's *d*)

#### Cohen's *d* Conventions for Small, Medium, and Large Effects

A measure that allows examination of the relative importance of a difference between means by reporting the size of the difference.

#### Difference Between Two Means

Size of effect	<i>d</i>	% variance
small	.2	1
medium	.5	6
large	.8	16

# PHONOLOGICAL AWARENESS

In the Phonological Awareness strand, teachers develop a deep understanding of why phonological awareness skills are important to the development of reading, how to administer and use phonological awareness assessment, how to plan for and implement a multisensory phonological awareness activity, and how to intervene when students need additional support.



## 94 PARTICIPANTS

COMPLETED THE PHONOLOGICAL STRAND AND ASSESSMENT



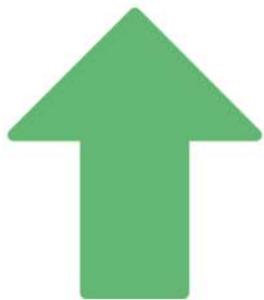
61

**PRE TEST AVERAGE**



79

**POST TEST AVERAGE**



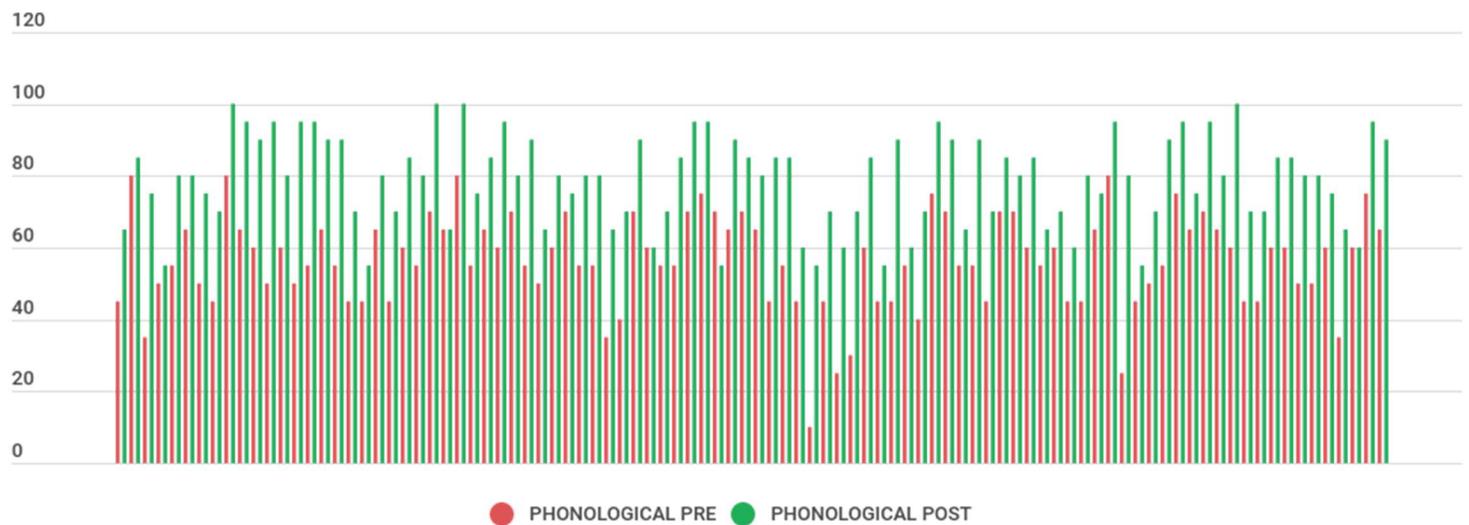
**30% INCREASE**  
GAIN FROM PRETEST TO POSTTEST



# ASSESSMENT DATA

## PHONOLOGICAL AWARENESS STRAND

### Pre and Post Test Participant Results



### PRE AND POST DATA BREAKDOWN

**+18**

Increase on average 18 points.

**+30%**

This is a 30% gain from pretest to posttest.

**1.37**

Calculated effect size (Cohen's *d*)

#### Cohen's *d* Conventions for Small, Medium, and Large Effects

A measure that allows examination of the relative importance of a difference between means by reporting the size of the difference.

#### Difference Between Two Means

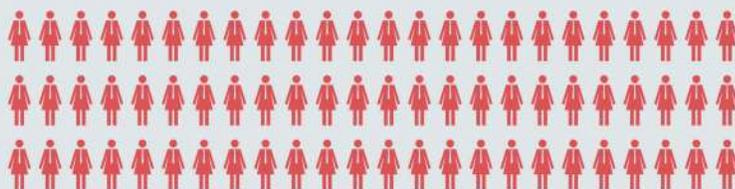
Size of effect	<i>d</i>	% variance
small	.2	1
medium	.5	6
large	.8	16

# DECODING

Word Recognition and Decoding Instruction, Part I begins by addressing the distinction between decoding and phonics and explores why word reading skills, including decoding, are critically important to the development of reading. Teachers learn when and how to assess word-reading skills, and guidelines for effective instruction and intervention.



**85 PARTICIPANTS**  
COMPLETED THE DECODING  
STRAND AND ASSESSMENT



**50**

**PRE TEST AVERAGE**



**75**

**POST TEST AVERAGE**



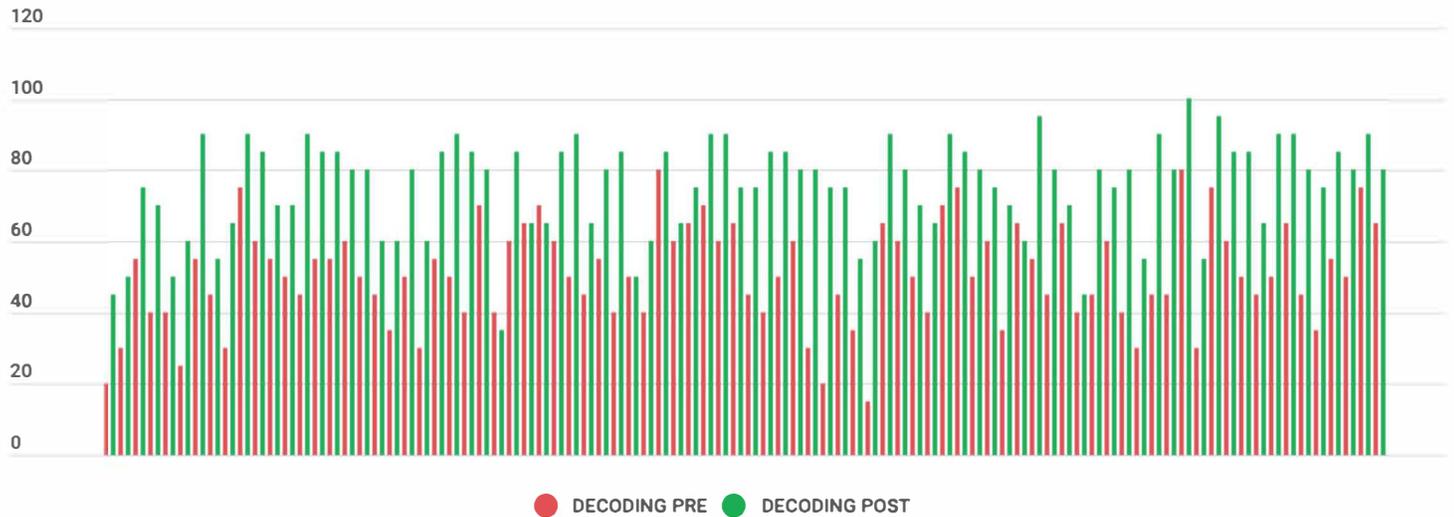
**50% INCREASE**  
GAIN FROM PRETEST TO POSTTEST



# ASSESSMENT DATA

## DECODING STRAND

### Pre and Post Test Participant Results



### PRE AND POST DATA BREAKDOWN

**+25**

Increase on average 25 points.

**+50%**

This is a 50% gain from pretest to posttest.

**1.78**

Calculated effect size (Cohen's *d*)

#### Cohen's *d* Conventions for Small, Medium, and Large Effects

A measure that allows examination of the relative importance of a difference between means by reporting the size of the difference.

#### Difference Between Two Means

Size of effect	<i>d</i>	% variance
small	.2	1
medium	.5	6
large	.8	16

# CONTENT FEEDBACK



"The content is good. For someone that has been teaching a long time it is a nice review of many things I have learned over the years. It is all in one place and explained very well."

"I have really enjoyed having the examples in a classroom or from a teacher. I have also liked that the information is given to us in video form."

"The content is helpful and presented in a clear and concise manner."

"I am finding the information provided very beneficial. The models are extremely informative, and I have been in the habit of taking the practices back to my classroom."

"The academic information is thorough and interesting. The format is good. There is an adequate amount of testing/review to be sure I understand the information."

"Yes. The content of this class is the foundational skills that all teachers need and often times do not get."

"I do want to let you know that I worked today with my group using the sound boxes and the chips and they loved it- this was my group that struggles. I worked with my higher, above level group last week with magnetic letters but I'm so excited about how well this works I wish I had been familiarized with this way of doing this earlier so thank you."