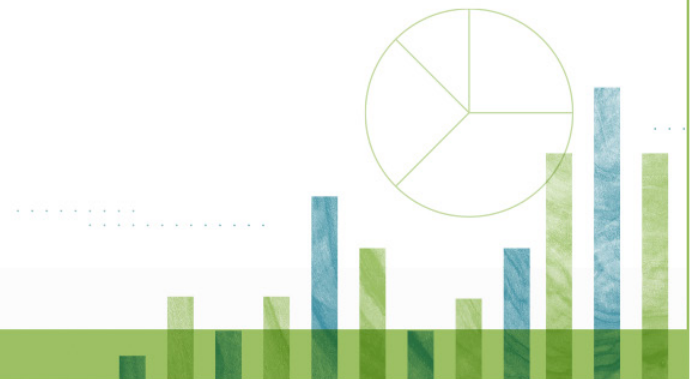




# OPELIKA CITY SCHOOLS Research Study

The Impact of the *Reading Horizons*® Method  
Implementation on Student Learning

Opelika City Schools  
2021–2022 Academic Year



Where reading momentum begins

## Introduction

During the 2021–2022 academic year, Opelika City Schools in Opelika, Alabama, implemented the *Reading Horizons Discovery*® curriculum, which features the Reading Horizons® (RH) method based on the science of reading, with 854 students across 80 classrooms in grades K–3.

The RH method delivers engaging, explicit, systematic phonics instruction through a multisensory approach based on Orton-Gillingham principles. Instruction is cumulative and organized in a sequence that enhances learning and simplifies teaching. Each sound of the English language is explicitly taught along with the letter(s) representing the sound. Five Phonetic Skills are taught to help students recognize short and long vowel patterns in words and syllables. Two Decoding Skills are presented to show students how to decode multisyllabic words.

The multisensory approach used with the RH method enhances learning and memory by simultaneously engaging auditory, visual, and kinesthetic modalities during instruction. A unique marking system is employed to draw student attention to the features and patterns of English and give visual cues for pronunciation. Throughout instruction, students are provided with engaging activities to practice and apply the skills learned. RH Discovery was designed to teach the RH method to kindergarten to third-grade students. Finally, RH supports districts using its software-embedded assessments (e.g., Spelling and Word Recognition Assessment and Check-Ups) and tools to evaluate the impact of RH Discovery on student growth.

Opelika City Schools, Reading Horizons, and Elite Research, LLC collaborated to evaluate the impact of implementation and student performance as measured by the Reading Horizons Implementation Integrity Rubric (RHIIIR) and aimsweb scores (published by NCS Pearson, Inc.), respectively.

Elite Research, LLC found that outcomes increased for all grade levels from the beginning to the end of the year. There were 17 statistically significant effects of teacher-level variables on student learning. Of note, implementation integrity of the RH method demonstrated statistically significant results. It showed small to large effects (Cohen's *d* ranged from .402 to .712) on outcomes for all grades, controlling for demographics.

## Methodology

### PURPOSE

During the 2021–2022 academic year, Opelika City Schools collaborated with Reading Horizons to study the implementation of RH and explore the relationship between the implementation of the RH method and student learning outcomes in grades K–3.

### RESEARCH QUESTIONS

The following guiding research questions informed the study design:

1. To what extent do teachers implement RH with integrity, measured by the RHIIIR?
2. How much do students grow due to exposure to the RH method throughout the 2021–2022 school year?
3. What is the relationship between teacher implementation of RH and student performance and growth, as measured by the aimsweb assessment composite scores and the relevant individual subscales?

### STUDY DESIGN

This study employed a one-group pre-post quasi-experimental design. Elite conducted a four-level mixed model regression analysis accounting for the nested structure of the data (e.g., repeated measures nested within students, classrooms, and schools). Analysis was conducted within grade to allow for proper comparisons. A pre- to post-variable that captured average student performance at the beginning, middle, and end-of-year assessment points was included in the model. Key demographic covariates included in the models were gender, special education, low socioeconomic status, and race/ethnicity to account for selection bias. To assess the primary research question, the implementation integrity score developed by RH (see discussion below), measured at the teacher level, was included in the model and interacted with the pre- to post-variable. This cross-level interaction was conducted to assess the impact of levels of implementation integrity on the outcome of interest over time. The results were considered statistically significant by the What Works Clearinghouse threshold of a *p*-value less than five percent ( $p < .05$ ).

# OPELIKA CITY SCHOOLS

## MEASURES

**Implementation integrity**—The RHIR contains five indicators that measure implementation integrity across four levels of practice, *Emerging*, *Exploring*, *Engaging*, and *Empowering*.

To measure implementation of the RH method, classroom observation scores across all five indicators of the RHIR were averaged, creating three groups of educators whose overall rubric score averages were X1 = 1.83, X2 = 2.8, and X3 = 3.83, respectively. The reliability estimate for the composite rubric scores was adequate and desirable for this type of analysis (scale: 1 to 4; reliabilityBOY = .879; reliabilityEOY = .842).

**Student performance**—The **aimsweb assessment** is a benchmark and progress monitoring system based on direct, frequent, and continuous student assessment using brief, accurate measures of reading, math, spelling, and writing. The assessment reports performance on key early literacy indicators, such as **Oral Reading Fluency, Letter Name and Sound Fluency, and Nonsense Word Fluency. Overall Reading** scores were also evaluated for Grades 2 and 3. These subscales were selected given their close alignment with the learning outcomes identified in the RH Discovery curriculum.

## Overview of Program Implementation

Opelika City Schools, Alabama, has nine PK–12 schools, 290 teachers, and 4,700 students. 54 percent of the students are English Language Learners, and 51 percent are eligible for free or reduced-price lunch.

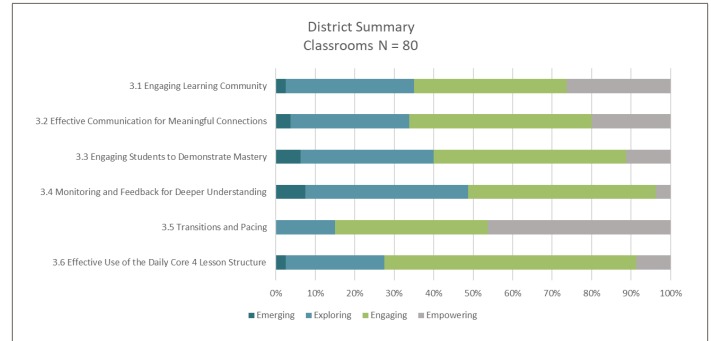
During the 2021–2022 school year, Opelika City Public Schools purchased and implemented the direct instruction curriculum and software. They supported their implementation by offering the Reading Horizons’ in-person professional learning to all teachers. All six elementary and intermediate schools implemented RH Discovery in grades K–4 as their Tier 1 phonics curriculum. A typical Tier 1 (full class) lesson occurred whole class on a daily basis, for approximately 30 minutes, from August through May.

## Results

### Question 1: To what extent do teachers implement RH with integrity, as measured by the RHIR?

Across the 80 classrooms where RH methods were observed at the end of the year, most teachers

demonstrated evidence of **Exploring** or **Engaging** levels on the progression of practice for each of the six key indicators of implementation integrity.



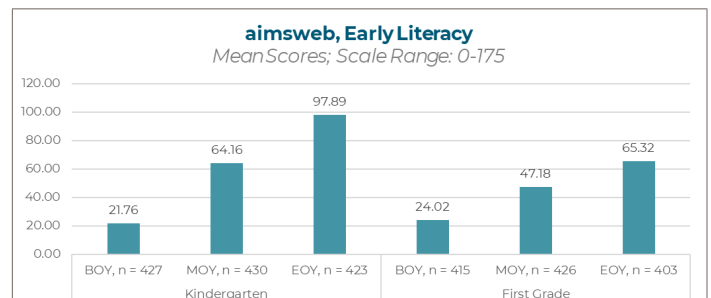
### Question 2: How much do students grow due to exposure to the RH method throughout the 2021–2022 school year?

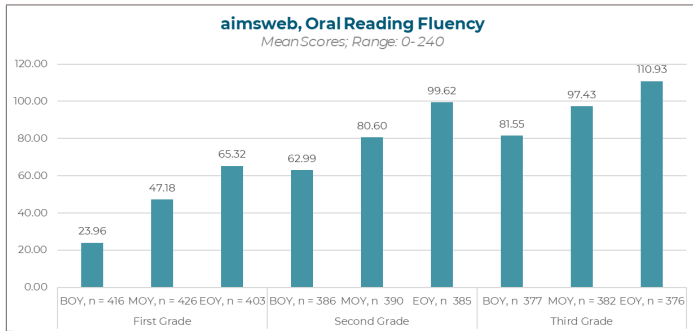
As a result of exposure and teacher use of the RH method, student aimsweb scores for key subscales across all grade levels increased from pre to post.

Scale	Grade K	Grade 1	Grade 2	Grade 3
Auditory vocabulary	+	+	N/A	N/A
Early literacy	+	+	N/A	N/A
Letter name fluency	+	N/A	N/A	N/A
Letter sound fluency	+	N/A	N/A	N/A
Oral reading fluency	N/A	+	+	+
Nonsense word fluency	N/A	+	N/A	N/A
Word reading fluency	N/A	+	N/A	N/A
Reading	N/A	N/A	+	+
Reading comprehension	N/A	N/A	+	+
Vocabulary	N/A	N/A	+	+

Green indicates statistically significant results, + indicates desirable results, and N/A indicates no observations were gathered for the particular subscale.

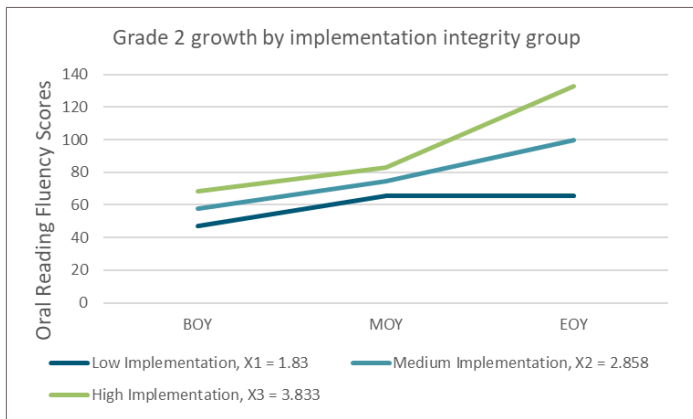
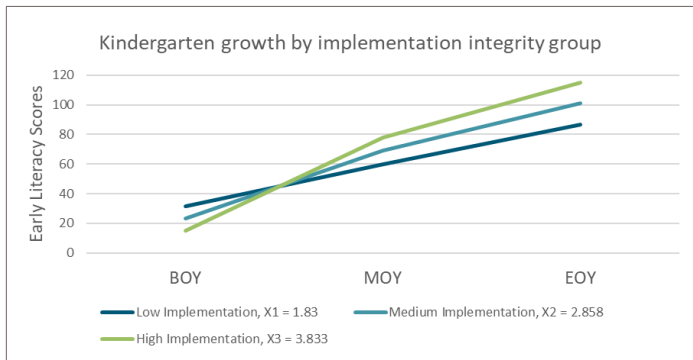
Of special interest, due to its direct alignment with the RH program, aimsweb scores for the **Early Literacy** and **Oral Reading Fluency** subscales increased for kindergarten and first grade, and first through third grade, respectively.





### Question 3: What is the relationship between teacher implementation of RH and student growth?

To measure implementation of the RH method, classroom observation scores across all five indicators of the RHIR were averaged, creating three groups of educators whose overall rubric score averages were X1 = 1.83, X2 = 2.8, and X3 = 3.83, respectively. There were a total of 68 classrooms observed and scored at both the beginning and end of the year. Average student growth from the middle to the end of the year was significantly higher for students in classrooms where teachers scored higher on the rubric than in classrooms where teachers scored lower on the rubric, particularly in kindergarten.



Teacher implementation integrity impacted student growth the most in kindergarten and third-grade classrooms:

- For kindergartners, teacher classroom rating impacted decoding ( $d = .944$ ) – a very large effect size. Higher classroom ratings indicated higher outcome scores compared to lower classroom ratings by EOY.
- For third graders, teacher classroom ratings impacted decoding ( $d = .445$ ). Higher classroom ratings indicated higher outcome scores compared to lower classroom ratings by EOY.

### Conclusions

Implementation integrity of the RH method, as measured by the classroom observation scores on the RHIR, was statistically significant and showed small to large effects (Cohen's  $d$  ranged from .402 to .712) on outcomes for all grades, controlling for demographics. Substantial effects of observer ratings on decoding scores over time were identified for kindergarten students.

Teacher implementation integrity impacted student growth the most in kindergarten and second-grade classrooms:

- For kindergartners, teacher classroom rating impacted decoding ( $d = .417$  to  $.525$ ) – a large effect size. Higher classroom ratings indicated higher outcome scores compared to lower classroom ratings by EOY.
- For second graders, teacher classroom ratings impacted decoding ( $d = .402$  to  $.714$ ). Higher classroom ratings indicated higher outcome scores compared to lower classroom ratings by EOY.
- For both grade levels, greater improvement was noted between the middle and end-of-year assessments.

The results of the study exploring the relationship between implementation and outcomes (Research Question 3) demonstrates that the RH method, as is implemented via its K-3 literacy solutions, meets the What Works Clearinghouse ESSA Tier 3 requirements—*Promising Evidence*.