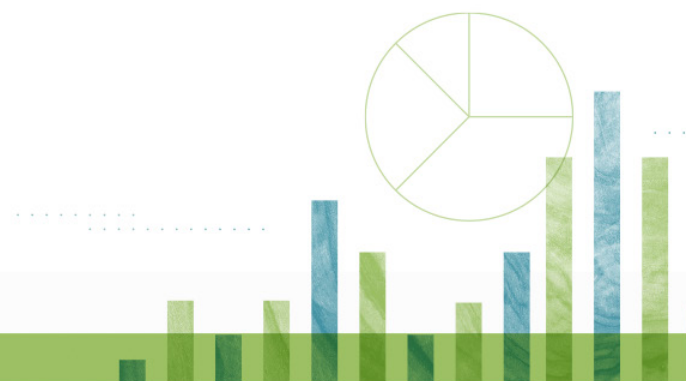




Anderson County SCHOOLS (DISTRICT 3) Research Study

The Impact of *Reading Horizons Discovery*[®]
on K-2 Literacy Outcomes

Anderson County Schools
2022-2023 Academic Year



Where reading momentum begins

Introduction

During the 2022–2023 academic year, Anderson County Schools (District 3) in Iva, South Carolina, implemented the *Reading Horizons Discovery*® (*RH Discovery* or RHD) curriculum, which features the Reading Horizons® (RH) method based on the science of reading, with 268 students across 35 classrooms in kindergarten through second grade.

The RH method delivers engaging, explicit, and 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.

Anderson County Schools (District 3), Reading Horizons, and Learn Platform by Instructure, collaborated to evaluate the impact of teacher professional learning and student literacy outcomes, as measured by the NWEA MAP Fluency assessment (published by Houghton Mifflin Harcourt). Learn Platform found that outcomes increased for some schools from the beginning to the end of the year. There were six statistically significant effects of

teacher-level variables on student learning. Of note, schools with higher implementation of RHD Daily Core 4 were statistically related to student literacy outcomes, showing small to moderate effects (Cohen's *d* ranged from .13 to .22) on outcomes, controlling for demographics.

Methodology

PURPOSE

During the 2022–2023 academic year, Anderson County Schools (District 3) collaborated with Reading Horizons to explore the relationship between the professional learning participation and implementation of the RH method and student learning outcomes in kindergarten through second grade.

RESEARCH QUESTIONS

The following guiding research questions informed the study design:

1. Was teacher participation in professional learning associated with student literacy outcomes?
2. Was implementation of RHD (Daily Core 4) associated with student literacy outcomes?

STUDY DESIGN

This study employed a treatment-only study with appropriate statistical controls. This study took place in three elementary schools in Anderson County Schools (District 3) in South Carolina during the 2022–2023 school year. Analyses included 35 teachers and 268 students from kindergarten through second grade. Researchers used NWEA MAP Fluency assessment scores (i.e., Phonological Awareness, Phonics, Language Comprehension) as the student achievement outcome. Researchers also conducted multilevel models examining whether differences in RHD implementation predicted student outcomes. Researchers used fall 2022 and spring 2023 teacher surveys to investigate professional learning and self-reported implementation of RHD. Analyses included descriptive statistics, correlations, partial correlations, and multi-level models. Researchers examined relationships between teacher professional learning and student literacy outcomes.

Measures

Professional learning and implementation— Researchers used a teacher survey to assess participation in professional learning and implementation of RHD. Teachers completed the survey in fall 2022 and spring 2023 on their participation in Reading Horizons professional learning and implementation.

Student performance— Researchers used the NWEA MAP Fluency standardized assessment as the student literacy achievement outcome. The assessment included Phonological Awareness, Phonics, and Language Comprehension scaled domain scores.

Overview Of Program Implementation

Anderson County Schools (District 3), South Carolina, has five PK–12 schools, serving 2,654 students, and 183 teachers. The population is 84 percent White, 9 percent Black or African American, 4 percent Hispanic or Latino, and 4 percent Two or More Races. Approximately 69.6 percent of families are low income. During the 2022–2023 school year, Anderson County Schools (District 3) implemented the direct instruction curriculum and software for the third consecutive year in kindergarten through second-grade classrooms. They supported their implementation by offering the Reading Horizons’ in-person professional learning to all teachers during the initial implementation.

All three elementary schools implemented *RH Discovery* in K–2 classrooms as their Tier 1 phonics curriculum. A typical Tier 1 (full class) lesson occurred in the whole class on a daily basis, for approximately 30 minutes, from August through May.

Results

Question 1: Was teacher participation in professional learning associated with student literacy outcomes?

Researchers examined how many different professional learning supports teachers used during the 2022–2023 school year. The most common support was participation in self-paced professional learning modules, reported by 87 percent (n = 31) of teachers. The next most used supports, initial training from a Reading Horizons facilitator and other resources were reported by 77 percent and 63 percent respectively (n = 27 and 22). The least common support was software training (43 percent, n = 16; Figure 1).

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Most teachers used self-paced professional learning modules. Over half of teachers completed the initial training with a RHD-facilitator and/or participated in one or more coaching days.



Figure 1. Teacher participation in Reading Horizons professional learning (n = 35)

Participation in RHD-facilitated professional learning was not statistically significantly related to student literacy achievement across grades K–2 (Figure 2). This suggests that schools where teachers completed more Reading Horizons-facilitated professional learning did not have higher Phonological Awareness, Phonics Word Recognition, or Language Comprehension scores.

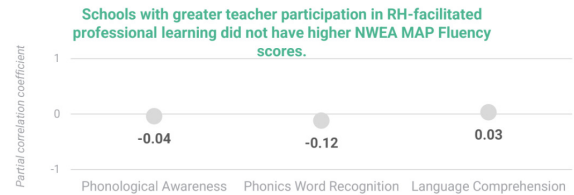


Figure 2. Partial correlations between school average RHD facilitated professional learning participation and student spring 2023 NWEA MAP Fluency scores (n = 268)

Participation in online self-paced RHD professional learning was statistically significant (p < .05) (Figure 3), such that schools where teachers completed more RHD self-paced professional learning had higher Phonological Awareness, Phonics Word Recognition, and Language Comprehension scores.

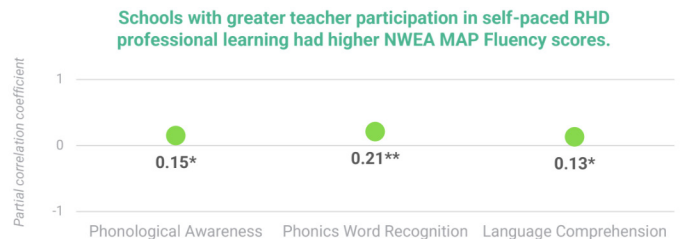


Figure 3. Partial correlations between school average self-paced RHD professional learning participation and student spring 2023 NWEA MAP Fluency scores (n = 268)

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Question 2: Was implementation of RHD (Daily Core 4) associated with student literacy outcomes?

Researchers examined relationships between school-wide Daily Core 4 implementation and spring NWEA MAP Fluency scores. All relationships were positive and statistically significant, indicating that schools with a greater percentage of teachers using all Daily Core 4 practices had higher Phonological Awareness, Phonics Word Recognition, and Language Comprehension scores ($p < .05$; Figure 4).

Conclusions

Teacher participation in RHD-facilitated professional learning was not statistically significantly related to student literacy achievement in K–2. However, teachers who completed more RHD self-paced professional learning had higher Phonological Awareness, Phonics Word Recognition, and Language Comprehension scores than those who completed less.

Schools with a greater percentage of teachers using all Daily Core 4 practices had higher Phonological Awareness, Phonics Word Recognition, and Language Comprehension scores.

Daily Core 4 implementation. Researchers examined relationships between school-wide Core4 implementation and spring NWEA MAP Fluency scores. All relationships were positive and statistically significant, indicating that schools with a greater percentage of teachers using all Core 4 practices daily had higher Phonological Awareness, Phonics Word Recognition, and Language Comprehension scores ($p < .05$; Figure 11).

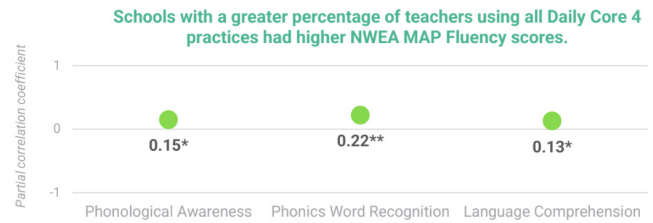


Figure 11. Partial correlations between school average percentage of teachers implementing all Core 4 daily and student spring 2023 NWEA MAP Fluency scores (n = 268 students)

Figure 4. Partial correlations between school average percentage of teachers implementing Daily Core 4 and student spring 2023 NWEA MAP Fluency scores (n = 268)

Daily Core 4				
Review	Instruction	Dictation	Transfer	
			Initial Transfer 	Extended Transfer/ Differentiation
5 minutes	10 minutes	10–15 minutes	5 minutes	