
RESEARCH SUPPORTING
ReadingHorizons
IN **ELEMENTARY** SETTINGS

Reading Horizons helps beginning and struggling readers in elementary classrooms find lasting reading success. Research proves it.

ACKNOWLEDGMENTS

We are particularly indebted to each site that implemented the Reading Horizons program and agreed to collect and share student outcome data. Without their willingness and efforts, this summary of studies would not have been possible.

Data collection was organized and analyzed by a variety of research entities including the Institute for Behavioral Research in Creativity (IBRIC), in partnership with the Utah State Office of Education. In addition, the RISE Institute for Literacy provided valuable insights throughout the duration of the research.

Additionally, we would like to recognize the contribution of Holly A. Hyte, a representative of the independent educational research firm Clear Insight for guidance in the tasks of data analysis and interpretation of outcomes. We would also like to recognize the Reading Horizons representatives who supported the data collection efforts across dozens of research sites and who worked to extend product use to communities that will benefit from the systematic Reading Horizons approach.

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****Protecting the privacy of data is an essential component of our school partnerships. The names of schools with an * have been changed to meet confidentiality requirements.***

Reading Horizons

IN ELEMENTARY SETTINGS

Overview of the Reading Horizons Approach

Reading Horizons is a program designed to help beginning and struggling readers develop skills that make reading automatic, fluent, meaningful, and enjoyable. The Reading Horizons method (formerly known as Discover Intensive Phonics) 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) that represents 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 Reading Horizons method enhances learning and memory by engaging auditory, visual, and kinesthetic modalities simultaneously during instruction. A unique marking system is employed to draw student attention to the features and patterns of English as well as to give visual cues for pronunciation. Throughout the course of instruction, students are provided with motivating activities for practice and application of the skills learned.

Reading Horizons Discovery™ was created to teach the Reading Horizons method to students in kindergarten to third grade. *Reading Horizons Elevate™* was created for older students and is used as an intervention for elementary students in fourth grade to sixth grade.

Reading Horizons Discovery is designed to complement and supplement basal reading programs by employing explicit, systematic phonics instruction. *Reading Horizons Elevate* is used as a reading intervention for older students. Both the *Reading Horizons Discovery* and *Reading Horizons Elevate* programs correlate with the five pillars of effective reading instruction as identified by the National Reading Panel (National Institute of Child Health and Human Development [NICHD]) in 2000. (See the Reading Horizons Research Base white paper for more detailed information at www.ReadingHorizons.com/RESEARCH.)

Research Proving the Effectiveness of the Reading Horizons Approach

Reading Horizons recognizes the importance of conducting research to demonstrate the validity of its method and the effectiveness of its products. Reading Horizons research has been conducted over the last two decades in a variety of educational settings. The following studies provide a summary of results from just a few of these settings and represent diverse student populations. Ongoing research relating to Reading Horizons method and products continues, as true research is a continuous process.

IRON SPRINGS ELEMENTARY SCHOOL
BURROWS ELEMENTARY SCHOOL
ATKIN ELEMENTARY SCHOOL
LANE ELEMENTARY SCHOOL [ELL]
WILSON SCHOOL DISTRICT [SPED]
STAR ELEMENTARY SCHOOL
MORGAN SCHOOL DISTRICT
HARRIET ELEMENTARY SCHOOL

IRON SPRINGS ELEMENTARY SCHOOL

TYPE OF STUDY

Comparison group

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

General education

GRADE LEVEL

*Early elementary
(grades K – 3)*

LENGTH OF DATA COLLECTION

3 years

LOCATION

*Western United States,
Mountain Region*

POPULATION OF CITY

27,500 people

SOCIOECONOMIC STATUS

*39.2% of total enrollment
qualified for free or
reduced lunch*

NUMBER OF SCHOOLS

*1 school (Reading Horizons)
+ 1 comparison school (no RH)
+ district and statewide schools*

NUMBER OF STUDENTS

≥ 365 students

READING HORIZONS MATERIALS

*Direct instruction
and interactive software*

ASSESSMENT TOOLS

*State core assessment, IOWA Test
of Basic Skills, teacher survey,
student survey, interviews*

Summary of Findings

Students who received Reading Horizons instruction scored higher as a group on both criterion-referenced tests and norm-referenced tests than did students at a comparison school who did not receive Reading Horizons instruction. Additionally, teacher and student surveys showed positive attitudes about Reading Horizons use.

Background

The state office of education tasked an independent research firm to investigate the impact of Reading Horizons implementation on the reading outcomes of elementary students.

Resources

Reading Horizons direct instruction materials, Reading Horizons interactive software, teachers trained in the Reading Horizons method, and a school-wide educator mentor with specialization in reading instruction.

Implementation

Kindergarten through third grade teachers participated in training in the Reading Horizons program. Student achievement outcome data were gathered via multiple assessments (criterion-referenced and norm-referenced) and were compared with data from a control school similar in socioeconomic status and in suburban extent. Teachers and students also participated in surveys and interviews.

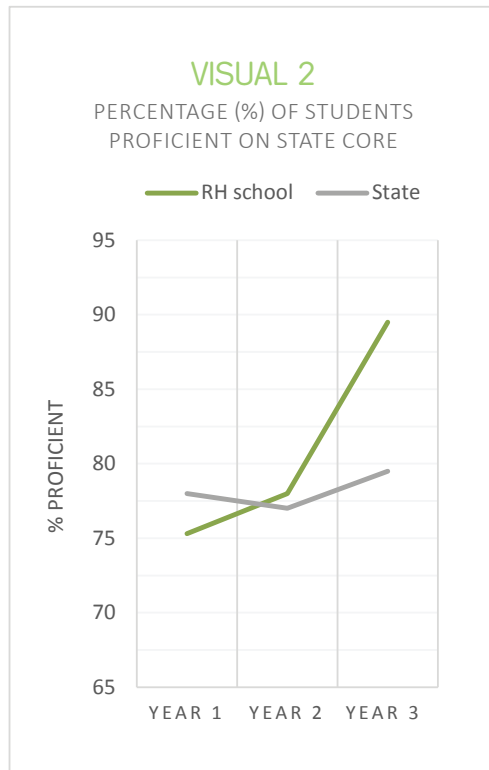
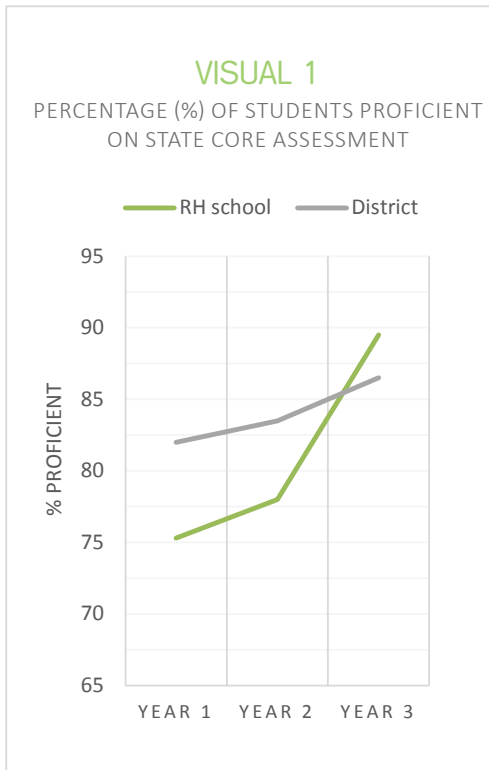
“ *I really feel like Reading Horizons is the best phonics program I've ever taught. And I've taught for over 18 years with several other phonics programs.”*

– Second grade teacher

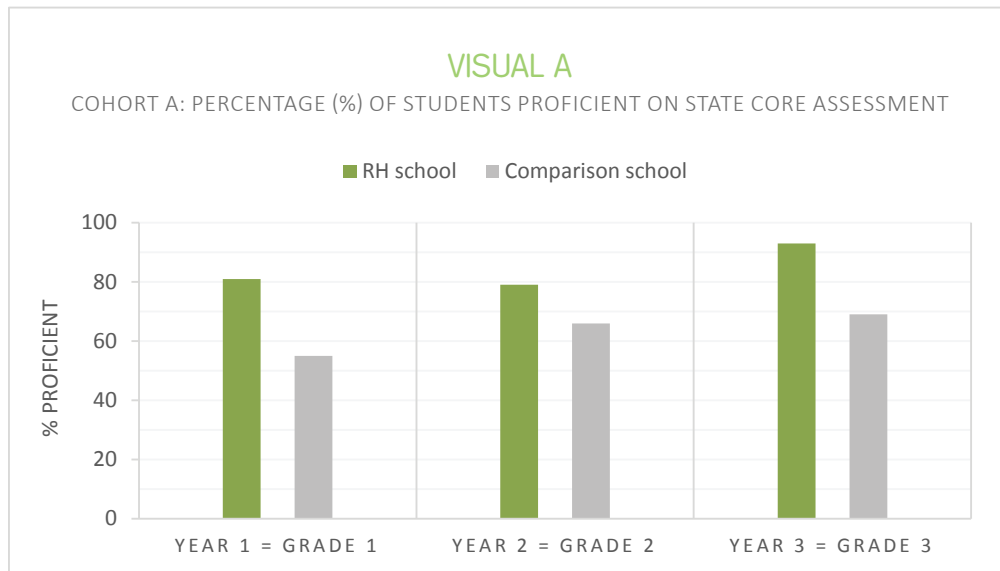
State Core Assessment Data

Outcomes reported as the percentage of students proficient on the state core assessment

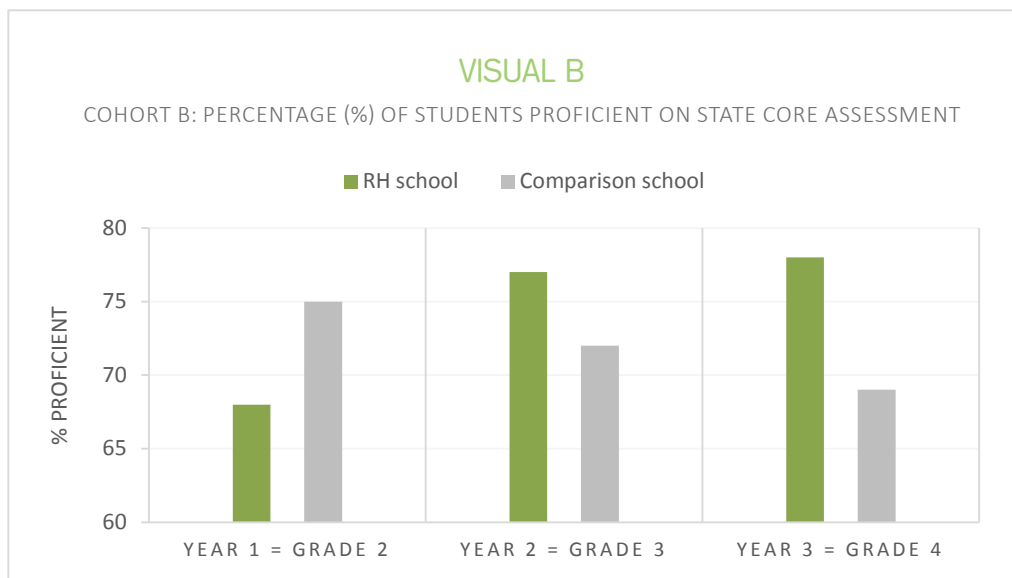
In the initial year of data collection, 75% of students (grades 2-3) at Iron Springs had proficient scores on the state core assessment, a lower proportion compared to students at the district or the state. Therefore, students at Iron Springs were a lower performing group compared to students grouped by district or state. This had changed by the third year of Reading Horizons instruction. At least 90% of students at Iron Springs were proficient on the state core assessment, surpassing the percent proficient at both the district and the state (Visual 1 and Visual 2).



Cohort A began Reading Horizons instruction in first grade. For all years of the study, more students in this cohort demonstrated proficient scores than did students in the same grade cohort at the comparison school (Visual A).

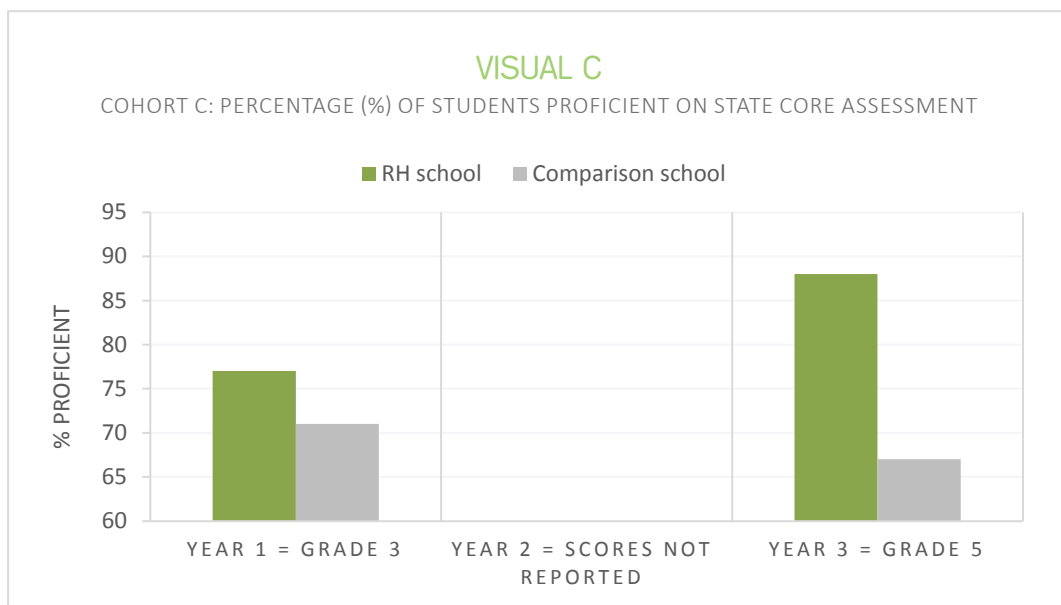


Cohort B began Reading Horizons instruction in second grade. In year one of data collection, students at the comparison school demonstrated higher proficiency on the state core assessment than did students at Iron Springs. However, in the second and third year of data collection, a greater percentage of students at Iron Springs were proficient on the state core assessment (Visual B). Across the three years of the study, the data show a steady increase in percent proficient for students who received Reading Horizons instruction and a steady decline for students who did not.



Cohort C received Reading Horizons instruction in third grade only. Scores in fifth grade were collected to understand the long-term impact of skills gained. At Iron Springs, the percentage of students proficient on the state core assessment increased from third grade to fifth grade, whereas it decreased at the comparison school. The gap of improved performance of students who received Reading Horizons instruction grew from 6% to 21% (Visual C).

Scores for this cohort of students at Iron Springs (in third grade during year one of data collection and fifth grade during year three), the comparison school, the Iron Springs district, and the state were analyzed. A pattern of decline was observed in the comparison school, district, and state data; fewer students demonstrated proficient skills in reading concepts in fifth grade compared to themselves two years prior in third grade. The decline was slight in the district and state data (-1%). However, students at Iron Springs did not match this pattern. The cohort of students who received Reading Horizons instruction demonstrated a trend of improvement during the school years following direct instruction in the method.

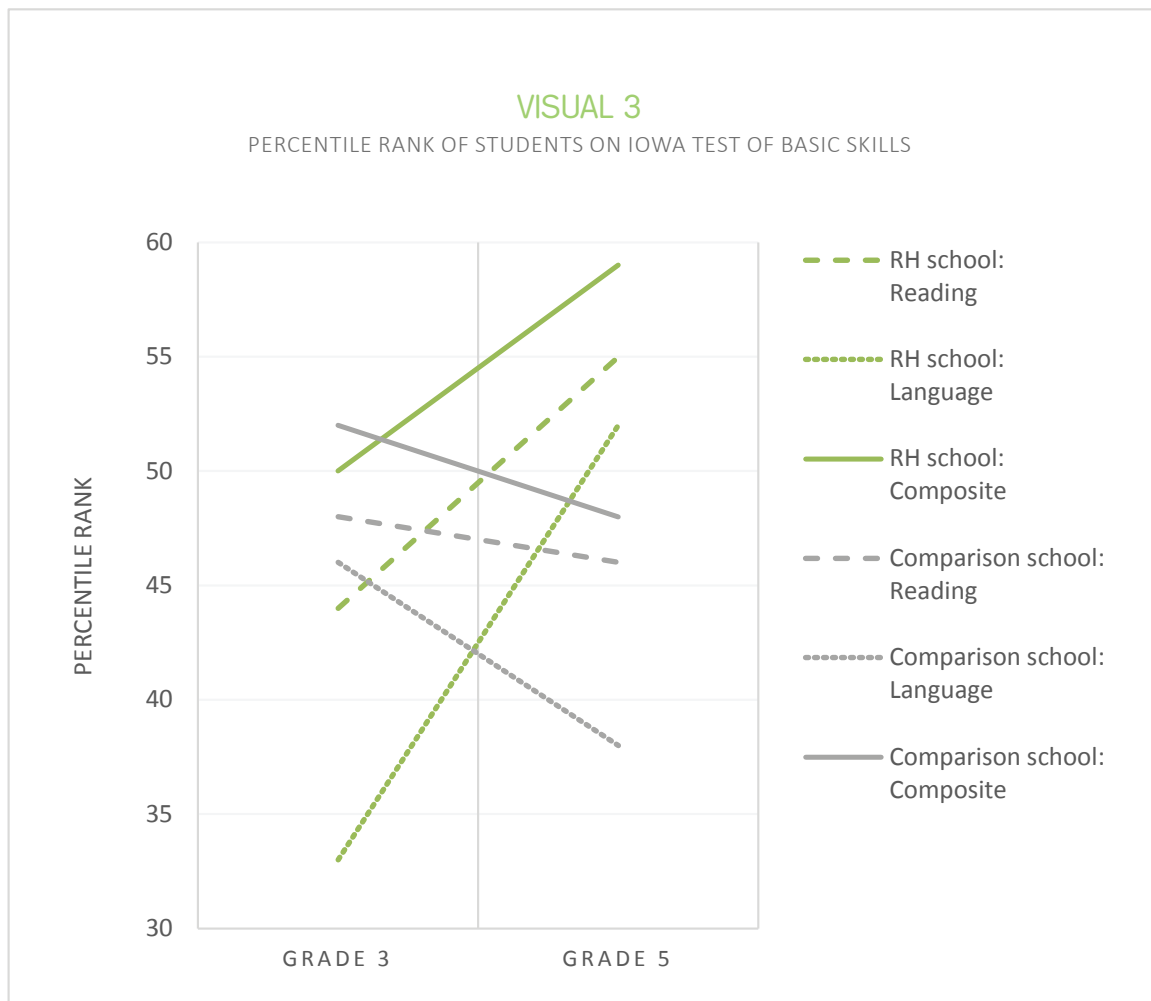


IOWA Test of Basic Skills Data

Outcomes reported as percentile rank on IOWA Test of Basic Skills

IOWA test scores were collected for students in Cohort C. There was skill retention and a positive trajectory on the norm-referenced test for students who received Reading Horizons instruction (Visual 3). Three portions of the IOWA test were reported in the study. The percentile rank scores of students who received Reading Horizons instruction improved on all three portions, whereas the scores of students at the comparison school declined. Although in third grade the scores of students who received Reading Horizons instruction were below the scores of students at the comparison school, two years later, the scores of Iron Springs students had surpassed those of students at the comparison school.

Fifth graders’ scores ranked below the 50th percentile (below average) on all three sections of the IOWA test at the comparison school. Fifth grade students who received Reading Horizons instruction in third grade had above average scores (scores which ranked above the 50th percentile) in all sections of the IOWA test.



Teacher Survey and Interviews

Overall, teachers reported a very positive professional development experience for all three years of the study.

Overall, teachers reported a very positive experience with key areas of the program elements.

Student Survey

Attitudes about reading remained consistent across cohorts. Groups of students with significantly more positive reading attitudes than the national norm retained that attitude as they moved through their elementary grades.

Overall, attitudes about reading improved over the duration of the study.

BURROWS ELEMENTARY SCHOOL

TYPE OF STUDY

Comparison group

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

General education

GRADE LEVEL

Early elementary (grades K – 2)

LENGTH OF DATA COLLECTION

6 years

LOCATION

*Western United States,
Pacific Region*

POPULATION OF CITY

72,307 people

SOCIOECONOMIC STATUS

*12% of total enrollment qualified
for free or reduced lunch*

NUMBER OF SCHOOLS

*1 school (RH)
+ district schools (no RH)
+ schools statewide (no RH)*

NUMBER OF STUDENTS

*Unknown. All kindergarten to
grade 2 students at one school.*

READING HORIZONS MATERIALS

*Direct instruction and interactive
software. All teachers were
trained in the method.*

ASSESSMENT TOOLS

*State core reading test (CRT),
Comprehensive Test of
Basic Skills (NRT)*

Summary of Findings

More Reading Horizons students met or exceeded state standards than did students at the district or the state level as measured by a criterion-referenced test (CRT). The national percentile rank of Reading Horizons students improved each year as measured by a norm-referenced test. Administrators and staff at the school reported that they attribute improvements in student reading outcomes to the Reading Horizons program.

Background

School administrators and educators made the decision to include intensive phonics instruction in early elementary grades and began the use of the Reading Horizons method in all kindergarten, first, and second grade classrooms. All teachers received training in the method.

Resources

Reading Horizons direct instruction materials, Reading Horizons interactive software, teachers trained in the Reading Horizons method, support of administrators, and dedicated teachers.

Implementation

Student outcome data was continuously gathered from the time of program implementation until at least six years later. Both criterion-referenced and norm-referenced tests were included in determining the effectiveness of the Reading Horizons method. Although changes in staff occurred over the six years of data collection, an ongoing commitment to the program resulted in continued student growth.

Outcomes

Students who received Reading Horizons instruction displayed continuous improvement over a six-year period. A decline in these students’ outcomes was never observed.

90.4% of students who received Reading Horizons instruction in kindergarten were reading at or above the state standards five years later.

Criterion-Referenced Test Outcomes

After four years of including Reading Horizons instruction in early elementary grades (Visual 1):

- Nearly 75% of Reading Horizons students in grades K–2 met or exceeded the state standard.
- Nearly 17% more students who were instructed in Reading Horizons met or exceeded the state standard when compared to students in the district who did not use Reading Horizons.
- 27% more students who used Reading Horizons met or exceeded the state standard when compared to students in the state who did not use Reading Horizons.

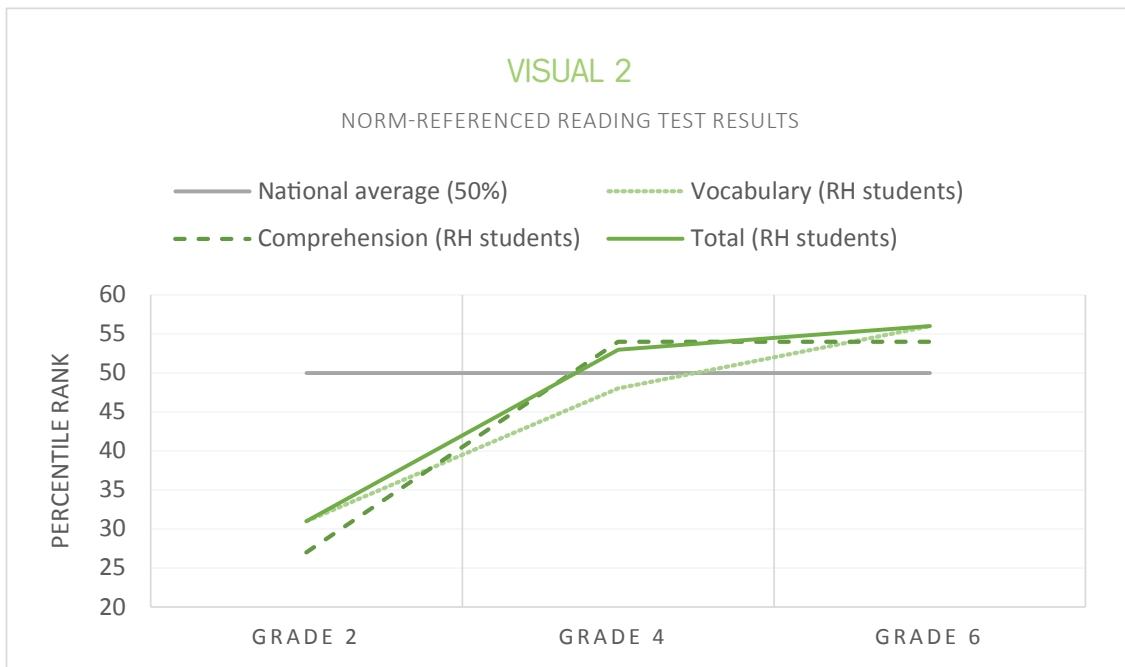
After five years of including Reading Horizons instruction in early elementary grades (Visual 1):

- More than 90% of Reading Horizons students in grades K–2 met or exceeded the state standard.
- 18% more students who were instructed in Reading Horizons met or exceeded the state standard when compared to students in the district who did not use Reading Horizons.
- Nearly 35% more students who used Reading Horizons met or exceeded the state standard when compared to students in the state who did not use Reading Horizons.

VISUAL 1			
PERCENTAGE (%) OF K–2 STUDENTS WHO MET OR EXCEEDED STATE STANDARDS BASED ON THE STATE CRT			
	INSTRUCTED IN READING HORIZONS	NOT USING READING HORIZONS	
	STUDENTS AT THE SCHOOL	STUDENTS IN THE DISTRICT	STUDENTS STATEWIDE
AFTER 4 YEARS	74.50%	57.70%	47.60%
AFTER 5 YEARS	90.40%	72.30%	55.60%

Norm-Referenced Test Outcomes

There was continuous improvement in the percentile rank on three measurements of a norm-referenced reading test for the first cohort of students to receive instruction in Reading Horizons. Percentile rank data are included for second, fourth, and sixth grades in Visual 2.



VISUAL 3
REDUCTION IN PERCENTAGE (%) OF READING HORIZONS STUDENTS SCORING IN LOWEST QUARTILE ON NORM-REFERENCED READING TEST

SUBJECT	PERCENTAGE OF STUDENTS SCORING IN LOWEST QUARTILE		% REDUCTION
	GRADE 2*	4 YEARS LATER	
READING VOCABULARY	34%	12%	22% REDUCTION
READING COMPREHENSION	46%	12%	34% REDUCTION
READING TOTAL	40%	15%	25% REDUCTION

*READING HORIZONS INSTRUCTION BEGAN IN GRADE 2

ATKIN ELEMENTARY

TYPE OF STUDY

Comparison group

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

*General education;
ethnically diverse*

GRADE LEVEL

First grade

LENGTH OF DATA COLLECTION

1 school year

LOCATION

*Midwestern United States,
East North Central Region*

POPULATION OF CITY

2.78 million people

SOCIOECONOMIC STATUS

*66% of total enrollment
qualify for free or
reduced lunch*

NUMBER OF SCHOOLS

*2 first grade classes (RH)
+ 1 comparison school (no RH)
+ district schools (no RH)*

NUMBER OF STUDENTS

Unknown

READING HORIZONS MATERIALS

Direct instruction

ASSESSMENT TOOLS

Standard Achievement Test

Summary of Findings

Students who received Reading Horizons instruction scored higher on tests of reading skills as compared to students at the school and the district who did not receive Reading Horizons instruction. Additionally, more than 90% of students who received Reading Horizons instruction scored average or above when tested in five areas related to reading.

Background

Two first grade teachers at one school were selected to include Reading Horizons instruction in their classrooms. To strengthen the validity of the results and to increase opportunities to generalize outcomes to other classrooms, administrators intentionally chose one teacher who was very good and one teacher who was average.

Resources

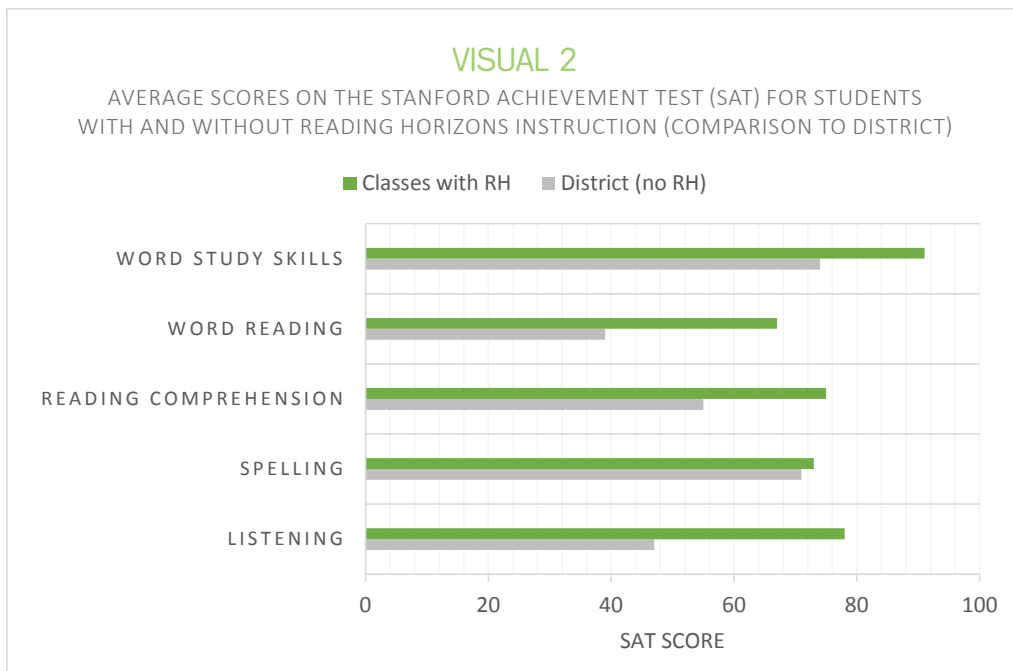
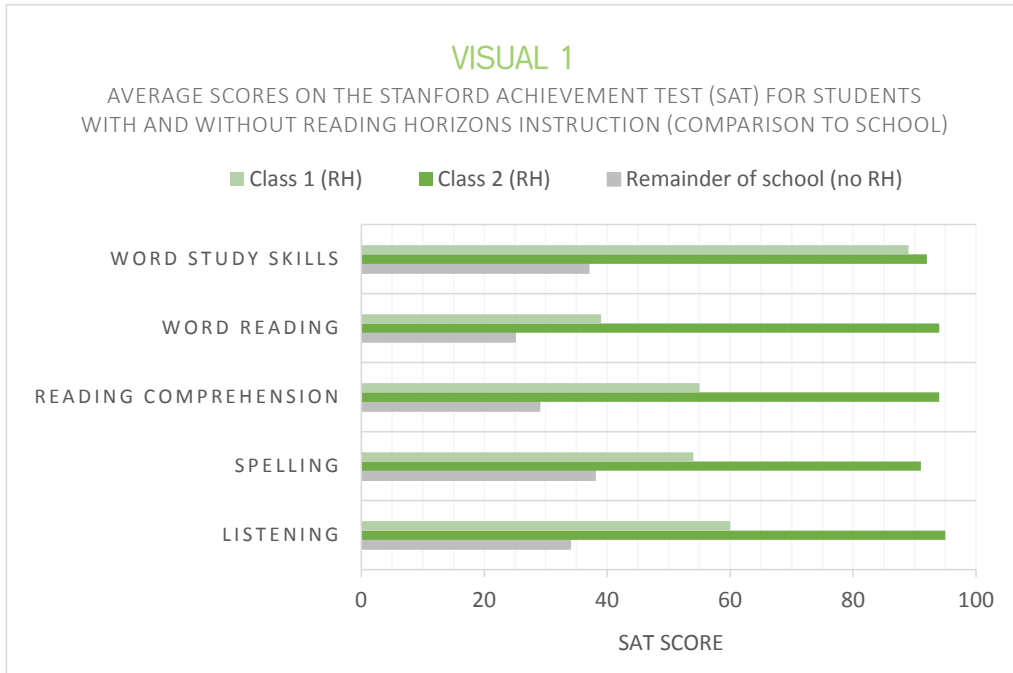
Reading Horizons direct instruction materials.

Implementation

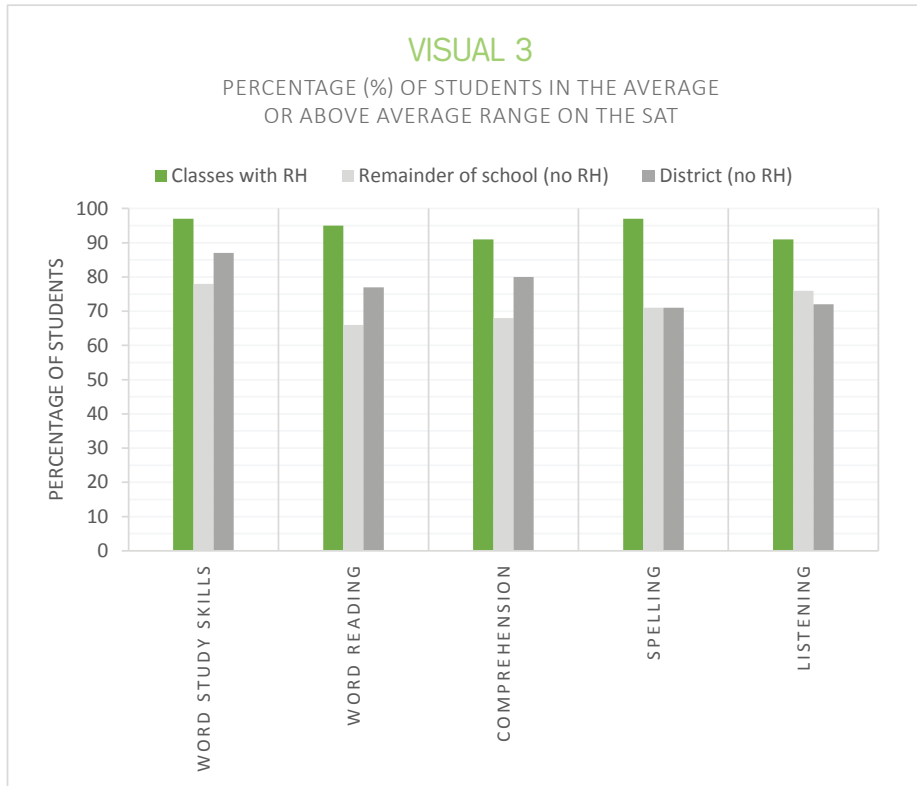
Outcomes were gathered for students in the two first grade classrooms and compared to scores of students at Atkin Elementary School who did not participate in Reading Horizons instruction. Scores were also compared to scores of students in the district who were also not receiving Reading Horizons instruction.

Outcomes

Students who received Reading Horizons instruction scored higher on reading skills tests than did students at the school and the district who did not receive Reading Horizons instruction (Visuals 1 and 2).



More than 90% of students who received Reading Horizons instruction scored at or above average on five subset areas of reading on the SAT (Visual 3). This is a higher percentage than that of students at the school who did not receive Reading Horizons instruction, whose student percentages ranged from 66–78% across the five areas. The Reading Horizons student percentage is also a higher percentage than that of students at the district who did not receive Reading Horizons instruction, whose student percentages ranged from 71–87% across the five areas.



LANE ELEMENTARY SCHOOL

TYPE OF STUDY

Data collected over time, before and after intervention

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

Linguistically diverse (ELL)

GRADE LEVEL

Elementary (grades K–4)

LENGTH OF DATA COLLECTION

5.5 years

LOCATION

*Northeastern US,
Mid-Atlantic Region*

POPULATION OF CITY

13,909 people

SOCIO-ECONOMIC STATUS

46% of total enrollment qualified for free or reduced lunch

NUMBER OF SCHOOLS

*1 school (RH)
+ district schools (no RH)
+ statewide schools (no RH)*

NUMBER OF STUDENTS

5 students

READING HORIZONS MATERIALS

*Direct instruction and
interactive software*

ASSESSMENT TOOLS

*Developmental Reading
Assessment*

Summary of Findings

Students made nearly double the progress by using Reading Horizons as compared to the progress they made prior to Reading Horizons use. Students retained reading skills and continued to make progress after completing the Reading Horizons program.

Background

Five elementary school students who were not proficient in spoken English when they began school received Reading Horizons instruction. Scores on the Developmental Reading Assessment (DRA) before, during, and after Reading Horizons instruction were reported.

Resources

Reading Horizons direct instruction materials, Reading Horizons interactive software, a teacher trained in the Reading Horizons method, and longitudinal scores from an assessment used consistently across school years.

Implementation

Student A: DRA scores reported from the end of kindergarten to the beginning of fifth grade; received Reading Horizons instruction in third to fifth grade.

Student B: DRA scores reported from the beginning of kindergarten to the beginning of fourth grade; received Reading Horizons instruction in third to fourth grade.

Student C: DRA scores reported from the middle of kindergarten to the middle of third grade; received Reading Horizons instruction in second grade. **Students D and E:** DRA scores reported from the beginning of second grade to the middle of fourth grade; received Reading Horizons instruction in second to third grade.

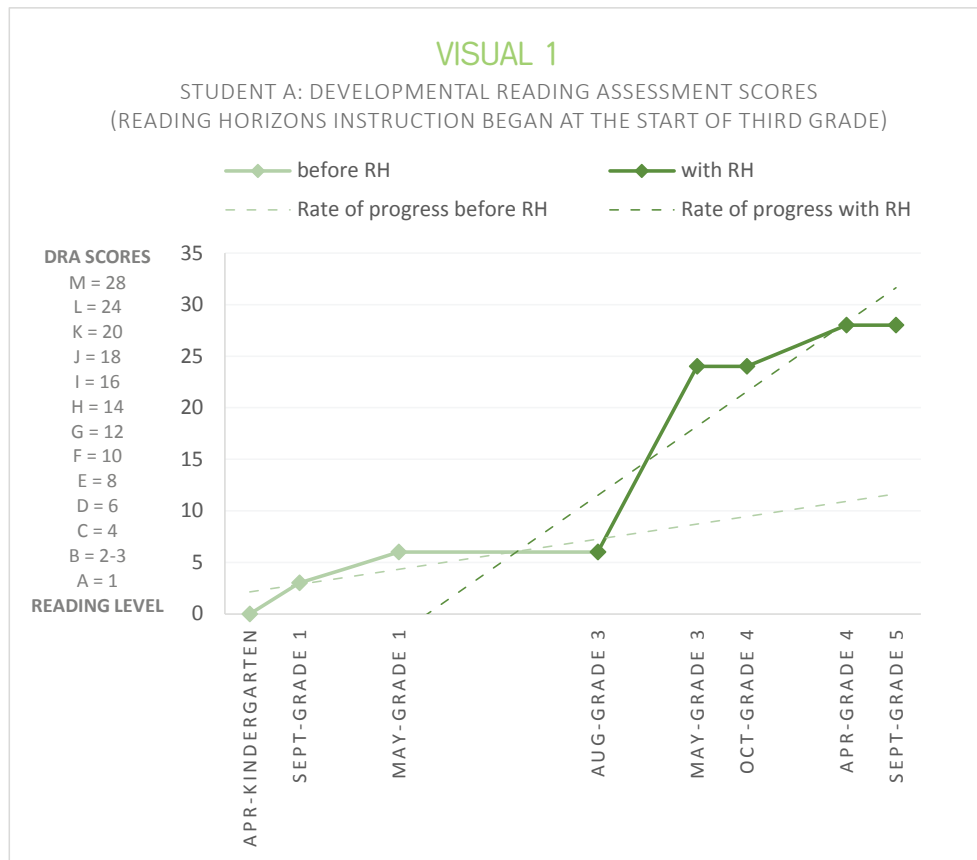
Outcomes

- Students made better progress while using Reading Horizons as compared to the progress they made prior to Reading Horizons use.
- Students retained reading skills and continued to make progress after Reading Horizons instruction ended.

Outcomes of Individual Students

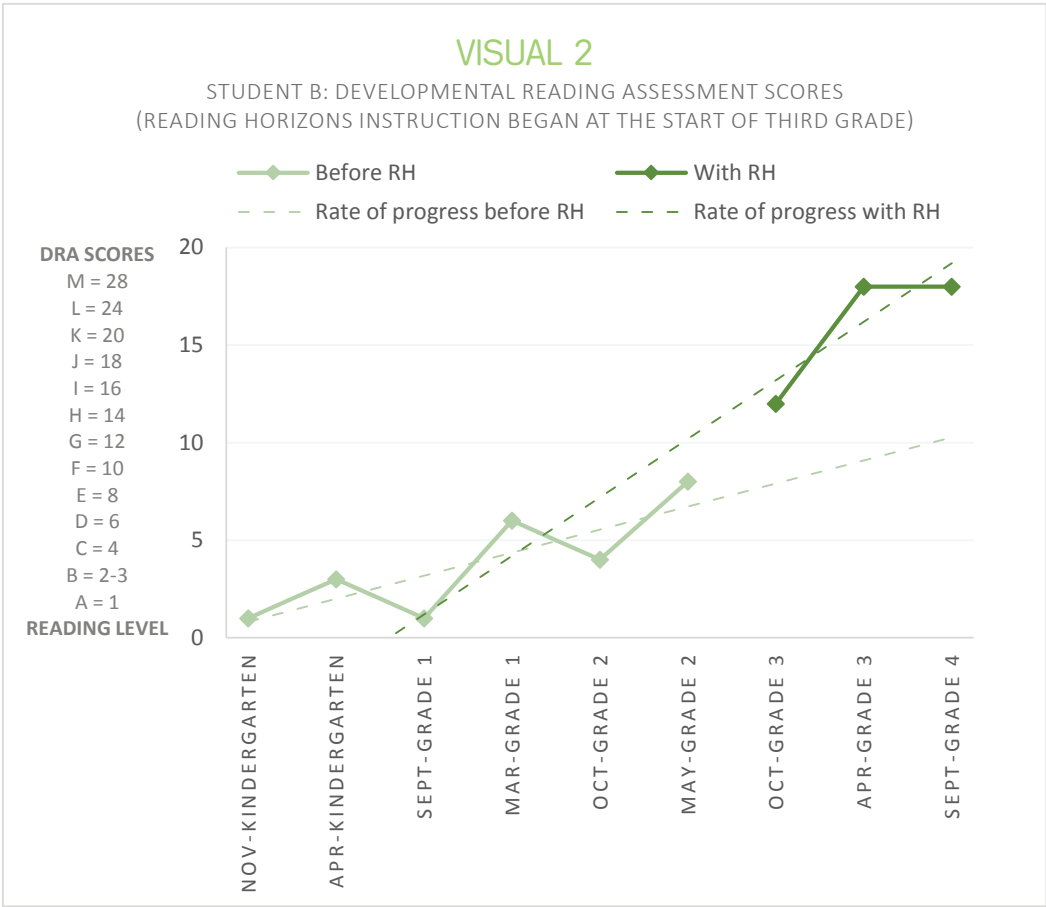
Student A (Visual 1):

- Length of data collection: four school years; kindergarten (April) to fifth grade (September).
- Student A was eligible for special education services based on a diagnosis of cognitive delays.
- At the end of kindergarten, student A scored as a non-reader.
- No scores were reported during second grade; however, the score for the beginning of third grade was the same as the score from the end of first grade.
- Completed the Reading Horizons program at the end of fourth grade.
- Maintained score of 28 (M) over the summer months between fourth and fifth grade.
- Before Reading Horizons: gained 4 levels in two school years [non-reader(0) to D(6)].
- With Reading Horizons: gained 9 levels in two school years [D(6) to M(28)].



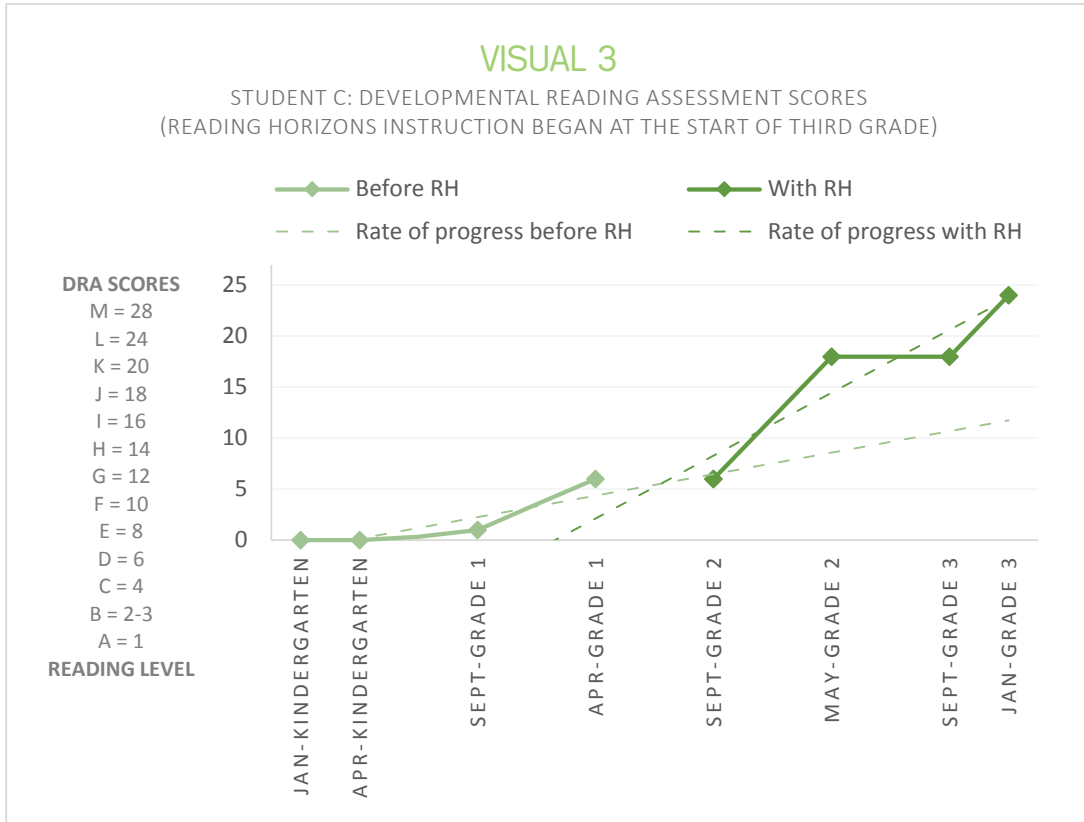
Student B (Visual 2):

- Length of data collection: four school years; kindergarten (November) to fourth grade (September).
- Prior to Reading Horizons, student B did not retain skills during summer months. Fall testing showed skill regression.
- With Reading Horizons, student B retained reading skills during summer months. Fall testing showed skills remained consistent.
- Began fourth grade with English Language Proficiency of 4.0 according to WIDA Access for ELLs.
- Before Reading Horizons: gained 4 levels in three school years [A(1) to E(8)].
- With Reading Horizons: gained 3 levels in one school year [G(12) to J(18)].



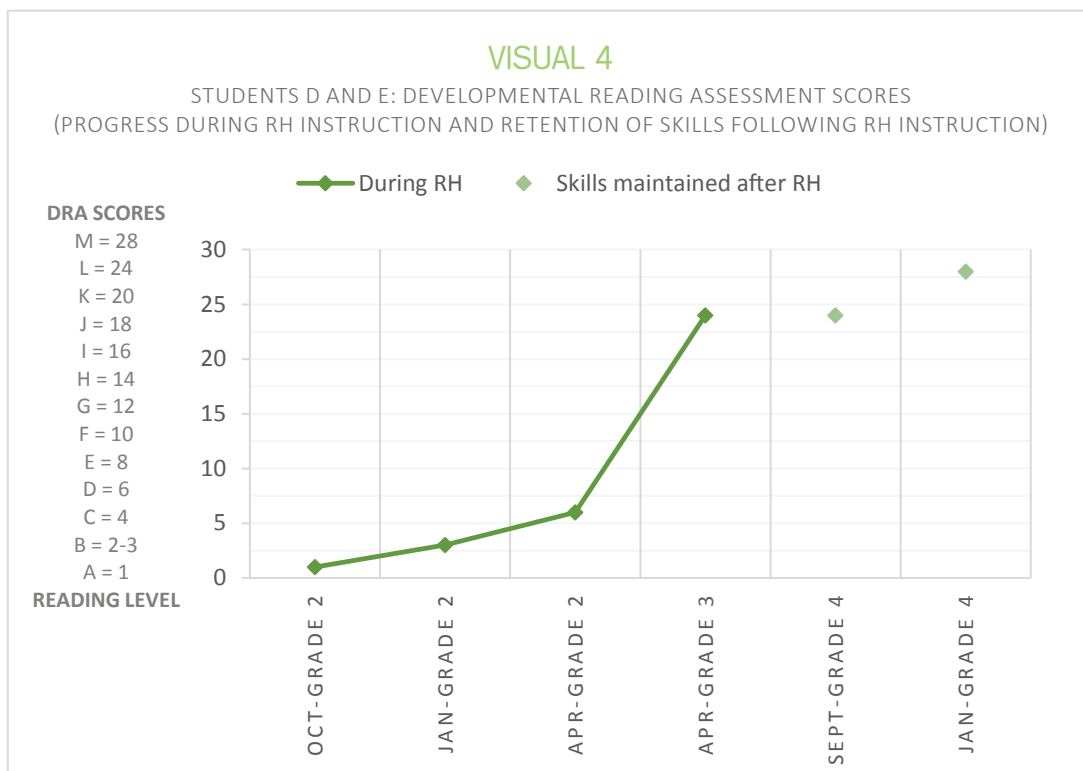
Student C (Visual 3):

- Length of data collection: 3 school years; kindergarten (January) to third grade (January).
- Mid-grade 3, student C had an English Language Proficiency of 4.3 according to WIDA Access for ELLs.
- Before Reading Horizons: gained 4 levels in 1.5 school years [non-reader(0) to D(6)].
- With Reading Horizons: gained 8 levels in 1.5 school years [D(6) to L(24)].



Students D and E (Visual 4):

- Length of data collection: 2.5 school years; second grade (October) to fourth grade (January).
- Both students began school in the United States in second grade and spoke no English.
- Both students completed the Reading Horizons program at the end of third grade.
- Reading skills continued to improve after completion of the program.
- Mid-fourth grade, student D had an English Language Proficiency of 3.5 according to the WIDA Access for ELLs.
- Mid-fourth grade, student E had an English Language Proficiency of 3.9 according to the WIDA Access for ELLs.
- With Reading Horizons, each student gained 11 levels in two school years [from A(1) to L(24)].
- After Reading Horizons, each student gained 1 level in four months [from L(24) to M(28)].



WILSON SCHOOL DISTRICT

TYPE OF STUDY

Pre-/Post-

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

Special education

GRADE LEVEL

Elementary (grades 2 – 4)

LENGTH OF DATA COLLECTION

1 school year

LOCATION

*Midwestern US,
East North Central Region*

POPULATION OF CITY

1,202 people

SOCIO-ECONOMIC STATUS

*49% of total enrollment qualified
for free or reduced lunch*

NUMBER OF SCHOOLS

1 school

NUMBER OF STUDENTS

5 students

ASSESSMENT TOOLS

*Accelerated Reader,
Scholastic Reading Inventory,
Dynamic Indicators of Basic
Early Literacy Skills*

Summary of Findings

All students made gains in reading skills during Reading Horizons instruction as measured by three different assessments administered pre-to-post instruction. All assessments used in the study have moving benchmarks from the beginning to the end of the school year. Even within the framework of the moving benchmarks, some students in the study made significant gains, matching or exceeding what is expected for typically developing students.

Background

Five elementary school students who were receiving special education services received instruction in the Reading Horizons program for one year. Participants included one student in fourth grade, two students in third grade, and two students in second grade.

Resources

Reading Horizons method and multiple assessments.

Implementation

Scores from three assessments measured growth from pre-instruction to post-instruction. Students were assessed prior to using the program and at the end of one school year of instruction. Assessments included: (a) Accelerated Reader (AR) grade equivalents; (b) Scholastic Reading Inventory (SRI) Lexile® scores; and (c) Dynamic Indicators of Basic Early Literacy Skills (DIBELS) measuring words per minute and accuracy.

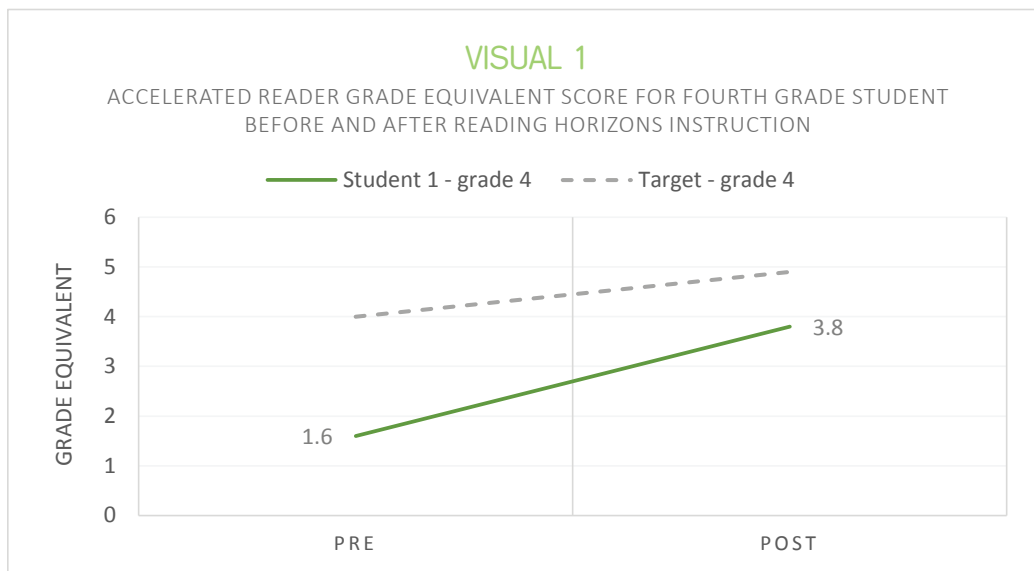
Outcomes

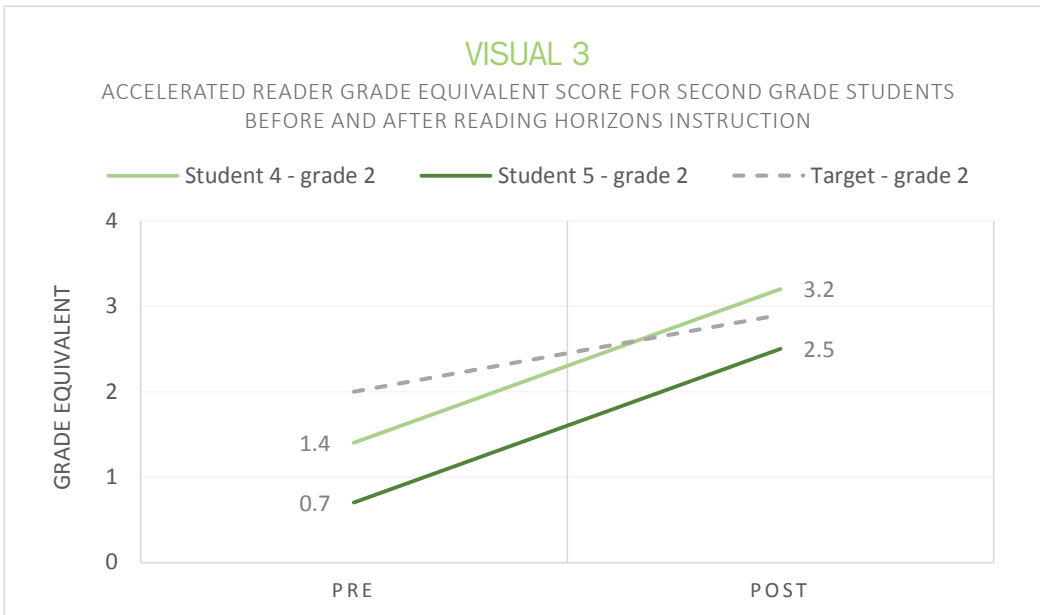
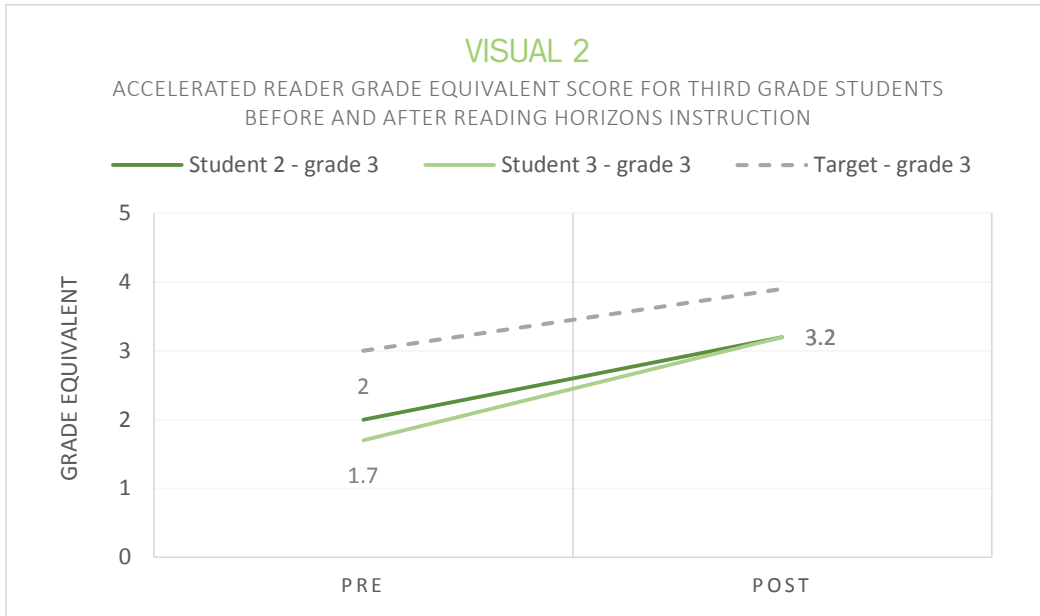
- Student 1: fourth grade
- Students 2 and 3: third grade
- Students 4 and 5: second grade

Accelerated Reader (Visuals 1–3):

Note: A score of 3.8 is equivalent to scores of students in third grade in the 8th month of the school year.

- Students closed the gap; their post-scores were nearer the scores of typical readers in their grade than were their pre-scores. (Visuals 1–3)
- Demonstrated gains in one year were 1.7 grade equivalents on average [range: 1.2–2.2].
- The post-score of student 4 exceeded the end-of-year benchmark for his/her grade.
- Although the remaining students’ post-scores did not match the end-of-year benchmark for their grade, post-scores for student 2, student 3, and student 5 did match or measure above the beginning-of-year benchmark for their grade, indicating that their scores were closer to typically-developing peers in their grade.





SRI Lexile® Scores (Visuals 4–6):

At pre-test:

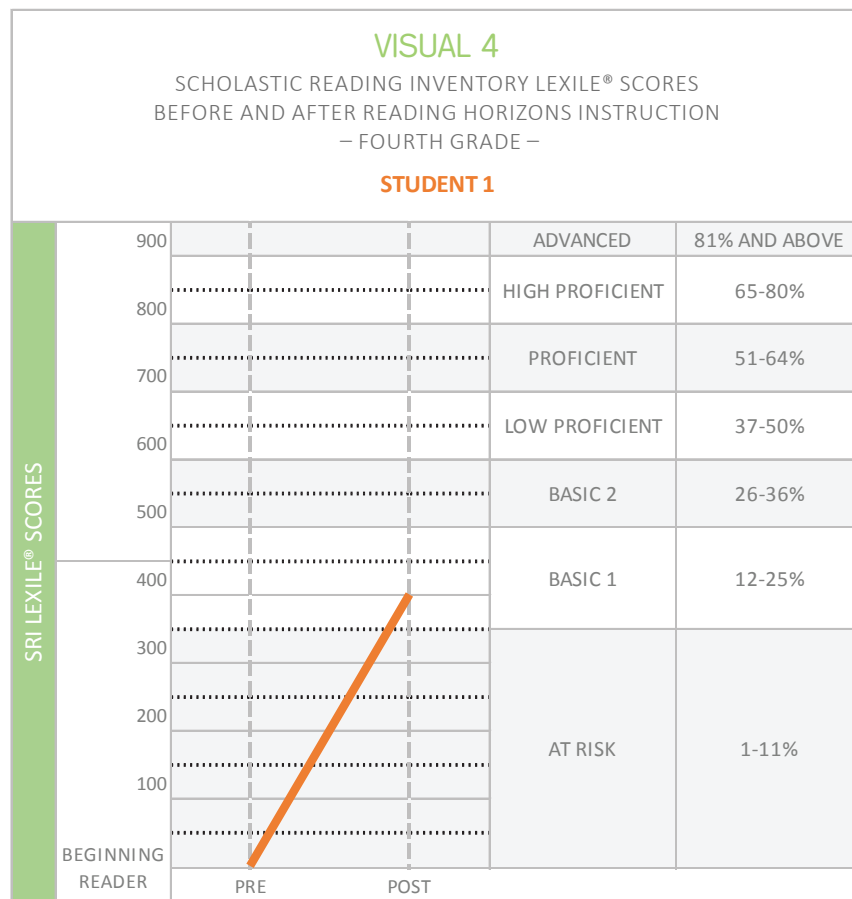
- Four students’ demonstrated reading skills were at a beginning reader level (at risk).
- One student pre-tested at the Basic 1 level.

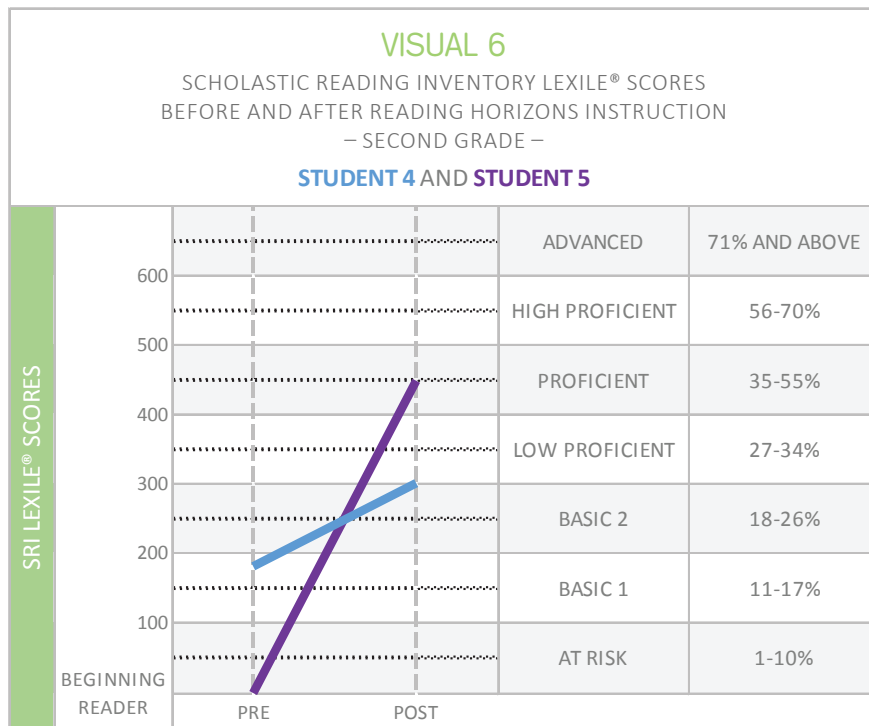
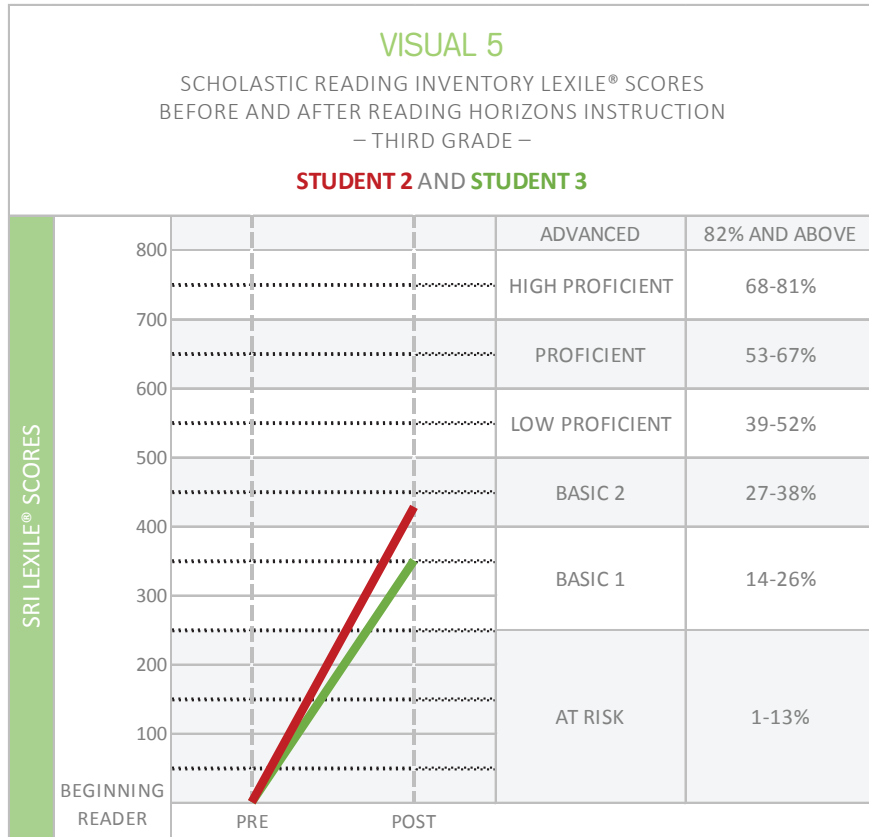
At post-test:

- Two students gained one level pre-to-post (student 1 and student 3).
- Two students gained 2 levels (student 2 and student 4).
- One student gained 4 levels (student 5).

Expected progress information (based on Scholastic’s Growth Expectations for SRI):

- Students 1 and 2 exceeded the expected progress for students in their grades who score at a beginning reader level in the fall.
- Student 3 achieved the expected progress for students in his/her grade who score at a beginning reader level in the fall.
- Expected progress information not available for students in second grade (student 4 and student 5).
- Student 4 and student 5 reached a proficient reading level for their grade (proficient and low proficient, respectively).





DIBELS (Visuals 7–9):

All students made gains on the DIBELS in both correct words per minute and accuracy (Visuals 7–9).

Correct words per minute:

- Student 1 correctly read 50 more words per minute pre to post. Correct word per minute (WPM) scores were in the “well below benchmark” range at pre- and post-test, however, progress was observed within that range. Student 1 began 33 words below the lowest score in the higher benchmark and ended only eight words below the higher level.
- Student 2 correctly read 45 more words per minute pre to post. Student 2 moved 1 level in WPM from “below benchmark” to “at or above benchmark”.
- Student 3 correctly read 69 more words per minute pre to post. Student 3 moved 1 level in WPM from “well below benchmark” to “below benchmark”.
- Student 4 correctly read 41 more words per minute pre to post. Student 4 made gains within the “at or above benchmark” level.
- Student 5 correctly read 22 more words per minute pre to post.






Accuracy:

- Student 1 increased reading accuracy by 10% pre to post, with a post-test score of 94% accuracy. Accuracy scores were in the “well below benchmark” range at pre- and post-test; however, progress was observed within that range. Student 1 began 9% below the lowest score in the higher benchmark and ended only 1% away. Therefore, with 1% more gain, student 1 would have moved one level pre to post.
- Student 2 increased reading accuracy by 45% pre to post, with a post-test score of 75% accuracy. Accuracy scores began at the lower end of the “below benchmark” range and ended only 1% away from the next level. Therefore, student 2 was 1% away from scoring in the “at or above benchmark” range in reading accuracy.
- Student 3 increased reading accuracy by 23% pre to post, with a post-test score of 98% accuracy. Student 3 moved 2 levels in accuracy – from “well below benchmark” to “at or above benchmark”.
- Student 4 increased reading accuracy by 9% pre to post, with a post-test score of 98% accuracy. Student 4 moved 1 level in accuracy – from “below benchmark” to “at or above benchmark”.
- Student 5 increased reading accuracy by 9% pre to post, with a post-test score of 89% accuracy.






VISUALS 7-9—KEY

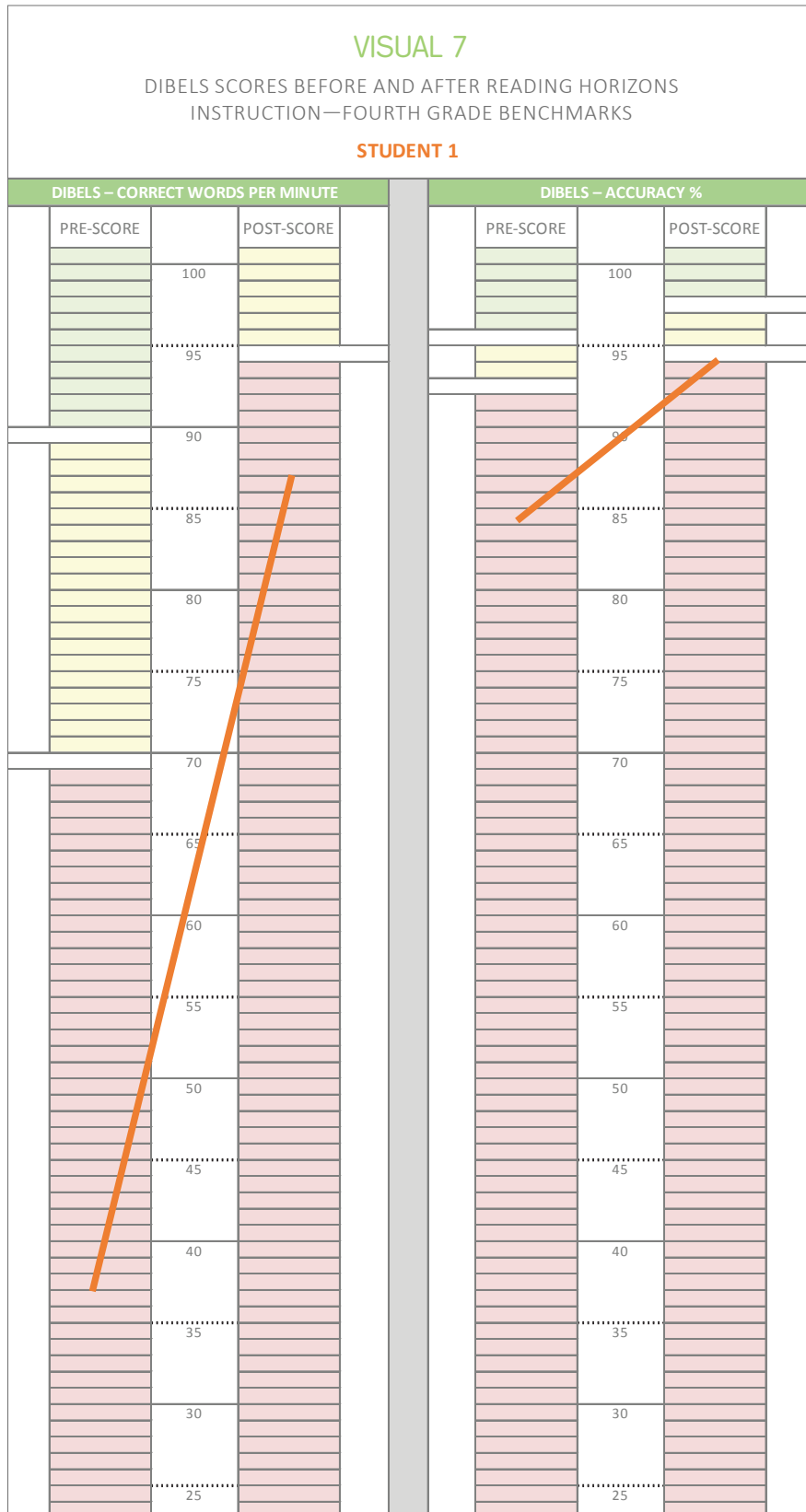
SCORES ON THE DYNAMIC INDICATORS OF BASIC EARLY LITERACY SKILLS (DIBELS) ASSESSMENT INCLUDING BENCHMARKS BEFORE AND AFTER READING HORIZONS INSTRUCTION

KEY:

-  AT OR ABOVE BENCHMARK – LIKELY TO NEED CORE SUPPORT
-  BELOW BENCHMARK – LIKELY TO NEED STRATEGIC SUPPORT
-  WELL BELOW BENCHMARK – LIKELY TO NEED INTENSIVE SUPPORT
-  PRE-TEST SCORE TO POST-TEST SCORE MOVED ONE CATEGORY
-  PRE-TEST SCORE TO POST-TEST SCORE MOVED TWO CATEGORIES

KEY:

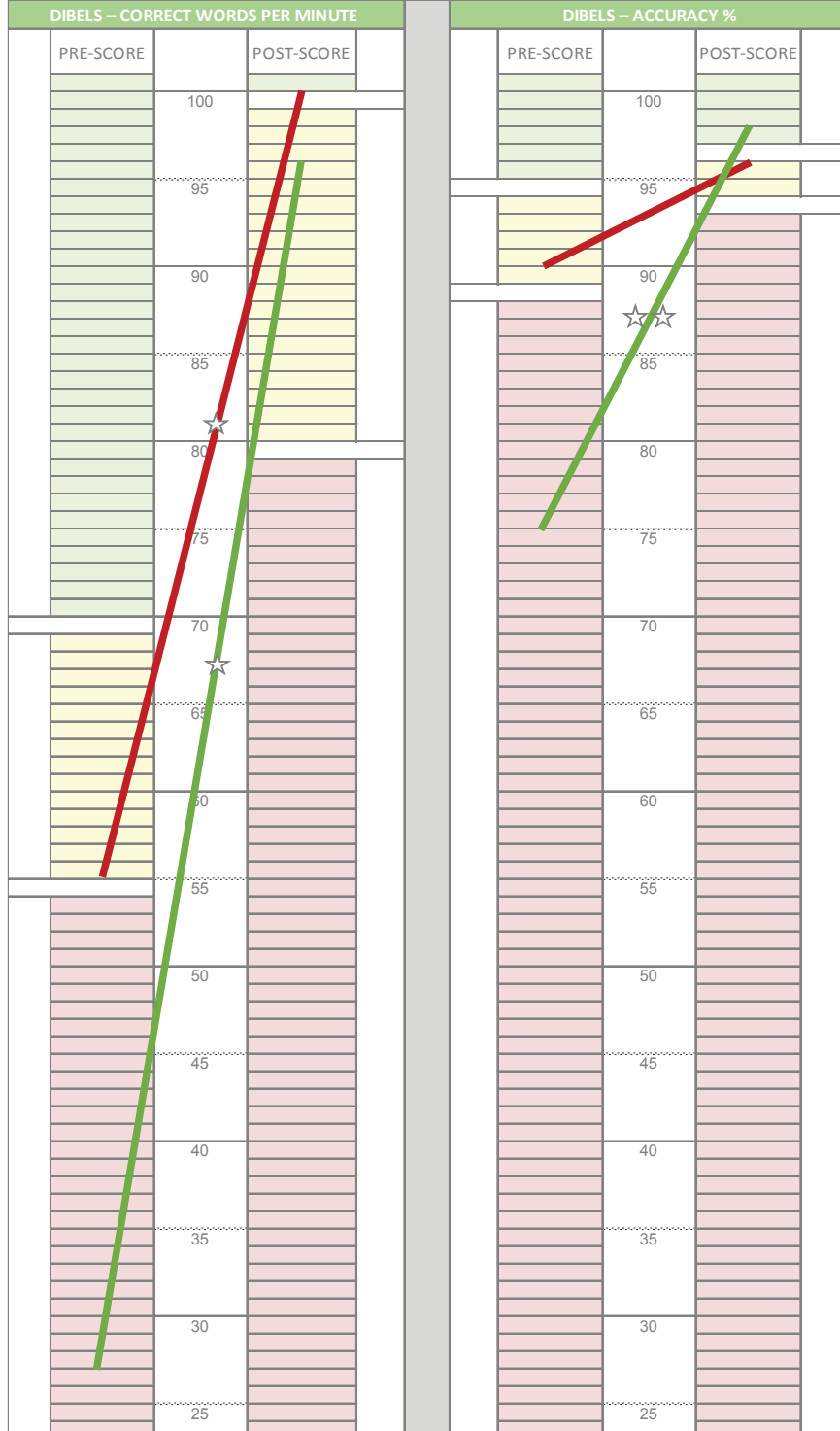
-  STUDENT 1 – GRADE 4
-  STUDENT 2 – GRADE 3
-  STUDENT 3 – GRADE 3
-  STUDENT 4 – GRADE 2
-  STUDENT 5 – GRADE 2



VISUAL 8

DIBELS SCORES BEFORE AND AFTER READING HORIZONS INSTRUCTION—THIRD GRADE BENCHMARKS

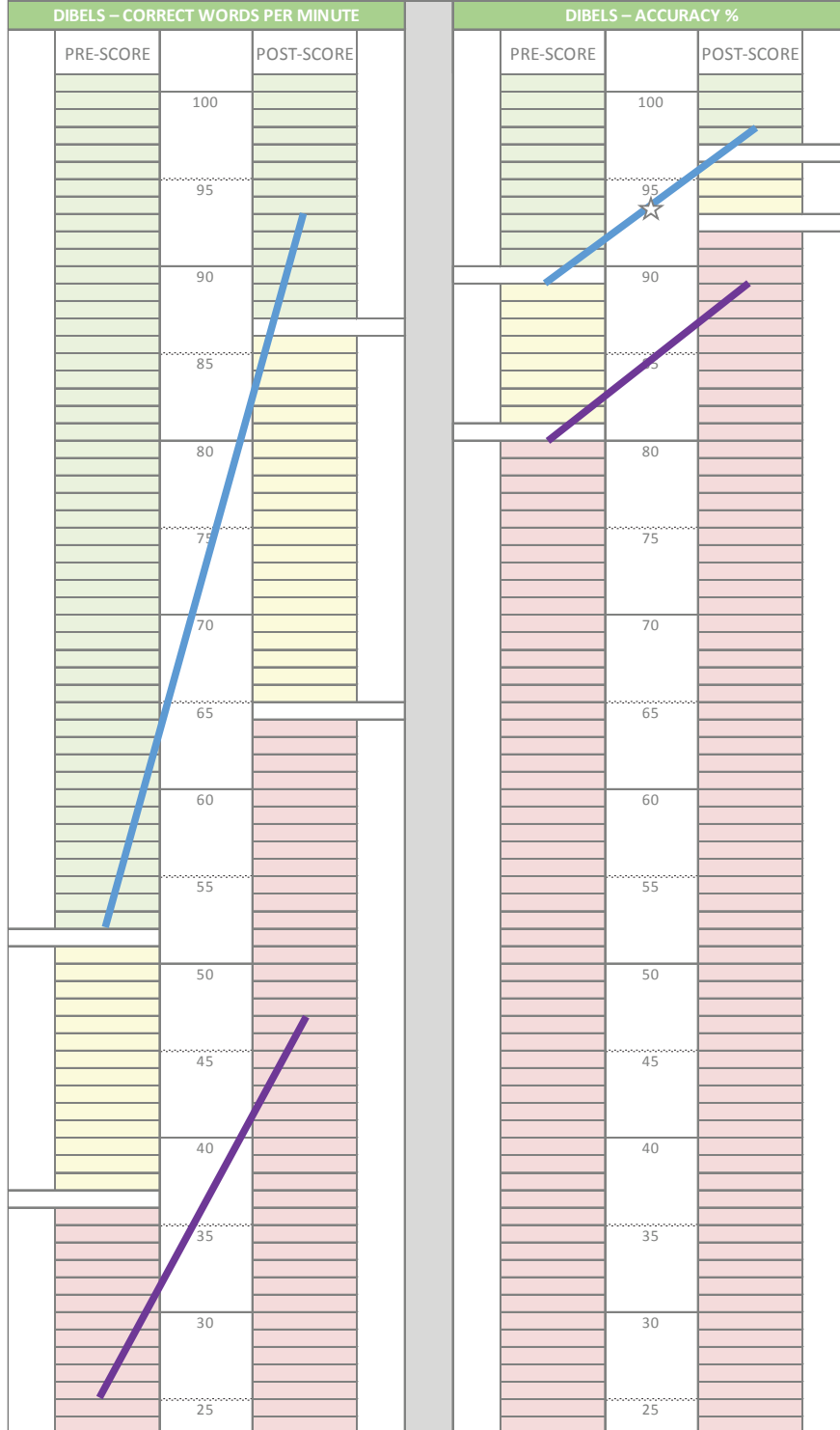
STUDENT 2 AND STUDENT 3



VISUAL 9

DIBELS SCORES BEFORE AND AFTER READING HORIZONS INSTRUCTION—SECOND GRADE BENCHMARKS

STUDENT 4 AND STUDENT 5



STAR ELEMENTARY SCHOOL

TYPE OF STUDY

*Study A: Pre-/Post-
Study B: Post-assessment*

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

General education

GRADE LEVEL

Elementary (grade 1)

LENGTH OF DATA COLLECTION

*Study A: 3 months
Study B: 2 school years*

LOCATION

*Western US,
Mountain Region*

POPULATION OF CITY

2,150 people

SOCIO-ECONOMIC STATUS

*51% of total enrollment qualified
for free or reduced lunch*

NUMBER OF SCHOOLS

1 school

NUMBER OF STUDENTS

*Study A: 21 students
Study B: 23 students*

READING HORIZONS MATERIALS

*Direct instruction and
interactive software*

ASSESSMENT TOOLS

*Study A: Qualitative Reading
Inventory (QRI)
Study B: State core reading
testing*

Summary of Findings

Despite a wide range of student reading abilities, all first grade students' scores were at or above a first grade reading level on the Qualitative Reading Inventory (QRI) following Reading Horizons instruction. This was an increase from 57% of students at or above level prior to Reading Horizons instruction. For two years in a row, every first grade student in the study who received Reading Horizons instruction scored above 90% on the state core reading test.

Background

A teacher with experience in upper elementary grades received a new assignment to teach first grade. Aware of the importance of teaching beginning readers, she discovered and implemented the Reading Horizons program. This teacher reported scores for two groups of students across two different school years (hereafter Study A and Study B).

Resources

Reading Horizons direct instruction materials and interactive software.

Implementation

Study A: The Qualitative Reading Inventory (QRI) was administered to 21 first grade students before and after Reading Horizons instruction to assess the impact of Reading Horizons instruction on reading skills. The pre- and post-tests were given three months apart. During the assessment timeframe, as part of a normally occurring process, the QRI benchmark for first graders moved from the primer level (mid-year first grade benchmark) to level one (end-year first grade benchmark).

Study B: A first grade class of students with a wide range of reading abilities participated in Reading Horizons instruction. The teacher reported end-of-year state core test scores for her students.

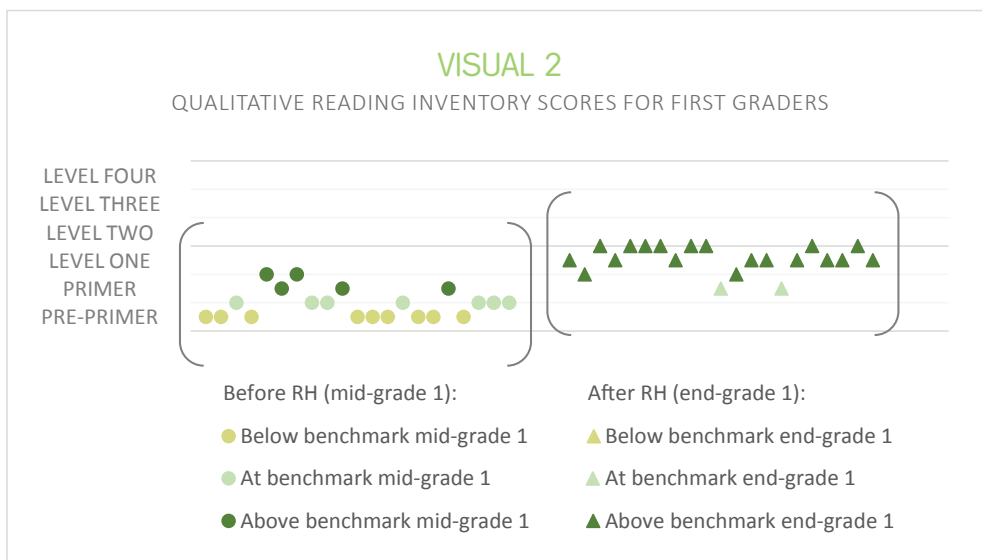
Outcomes

Study A:

- At pre-test (mid-year), 43% of students were below benchmark, and 57% were at or above benchmark. At post-test (end-year), after Reading Horizons instruction, 100% of students were at or above benchmark (Visual 1).
- Student progress on the QRI was remarkable considering that the QRI benchmark was raised a level between pre- and post-test.
- Despite a wide range of student reading abilities prior to Reading Horizons instruction, all first grade students' scores on the QRI were at or above a first grade level after Reading Horizons instruction (Visual 2).

VISUAL 1
QUALITATIVE READING INVENTORY BENCHMARK LEVELS (% OF STUDENTS)

	BEFORE READING HORIZONS	AFTER READING HORIZONS
% STUDENTS BELOW BENCHMARK	43%	0%
% STUDENTS AT OR ABOVE BENCHMARK	57%	100%



Study B:

Year 1: Students entered first grade with a wide range of reading abilities. After Reading Horizons instruction, all students in the class scored above 90% on the state core reading test.

Year 2: Students began the year with a wide range of reading abilities. After Reading Horizons instruction, all students scored above 90% on the state core reading test.

MORGAN SCHOOL DISTRICT

TYPE OF STUDY

Comparison study

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

General education

GRADE LEVEL

Early elementary (grades K – 3)

LENGTH OF DATA COLLECTION

4 months

LOCATION

*Southern United States,
West South Central Region*

POPULATION OF CITY

13,523 people

SOCIO-ECONOMIC STATUS

*50% of total enrollment qualified
for free or reduced lunch*

NUMBER OF SCHOOLS

12 schools

NUMBER OF STUDENTS

1,748 students

READING HORIZONS MATERIALS

*Direct instruction and interactive
software. All teachers trained in
the method.*

ASSESSMENT TOOLS

Gates-MacGintie Reading Test

Summary of Findings

On average, students who received Reading Horizons instruction demonstrated greater gains on the Gates-MacGintie Reading Test as compared to students who did not receive Reading Horizons instruction.

Background

Professionals in the state office of education supported school districts in the development of plans to improve student outcomes in reading and mandated that such plans include phonics instruction. Reading Horizons was a primary program element in Morgan schools.

Resources

Reading Horizons direct instruction materials, Reading Horizons interactive software, teachers trained in the Reading Horizons program, a district-wide commitment to implementation of Reading Horizons.

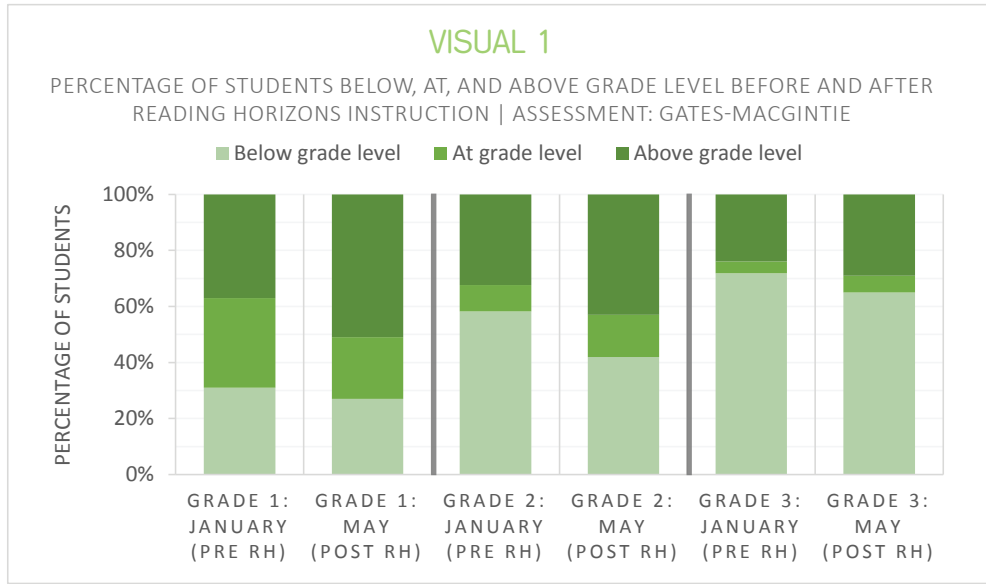
Implementation

The Reading Horizons program was implemented in ten schools; two schools did not participate in initial implementation. All teachers in the ten participating schools received Reading Horizons training. The data presented was gathered over half a school year in the initial year of implementation. Of the ten schools that incorporated Reading Horizons instruction, teachers and administrators at two schools, coded as A and B, reported high confidence levels in initial implementation. The remaining eight schools reported challenges in initial implementation.

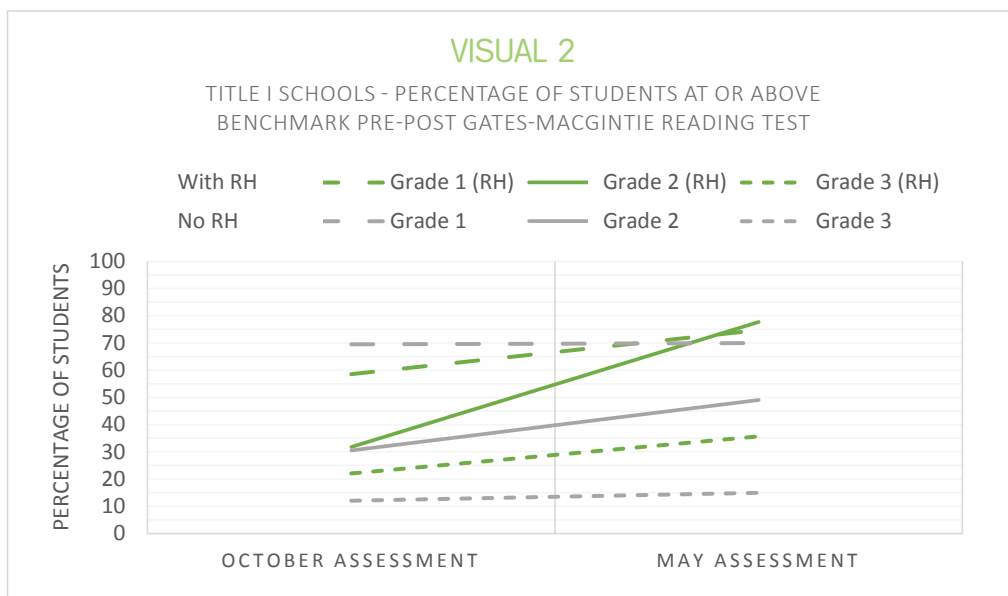
NOTE: The two schools in the district that did not implement Reading Horizons are coded as K and L. For some data analysis, schools A and B alone are compared to schools K and L. In other data sets, schools A – J are compared to schools K and L.

Outcomes

Following Reading Horizons instruction, there was a decrease in students who read below grade level and an increase in students who read above grade level across first grade, second grade, and third grade, as measured by the Gates-MacGintie Reading Test (Visual 1).



Among Title 1 schools in the study, more students who received Reading Horizons instruction moved from below benchmark to at or above benchmark on the Gates-MacGintie Reading Test as compared to students who were at Title 1 schools who did not receive Reading Horizons instruction. This finding was true for students across all three grades: first grade, second grade, and third grade. (Visual 2).



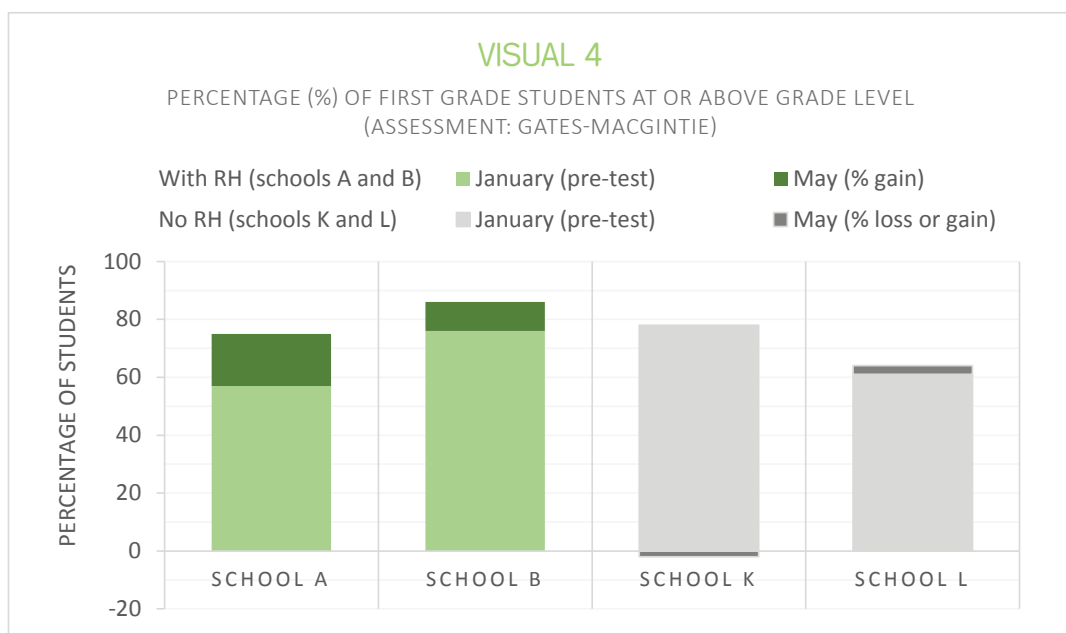
Comparison of results from the Gates-MacGintie Reading Test shows that the average gains made by students who received Reading Horizons instruction were greater than the average gains made by students who had not received Reading Horizons instruction (Visual 3).

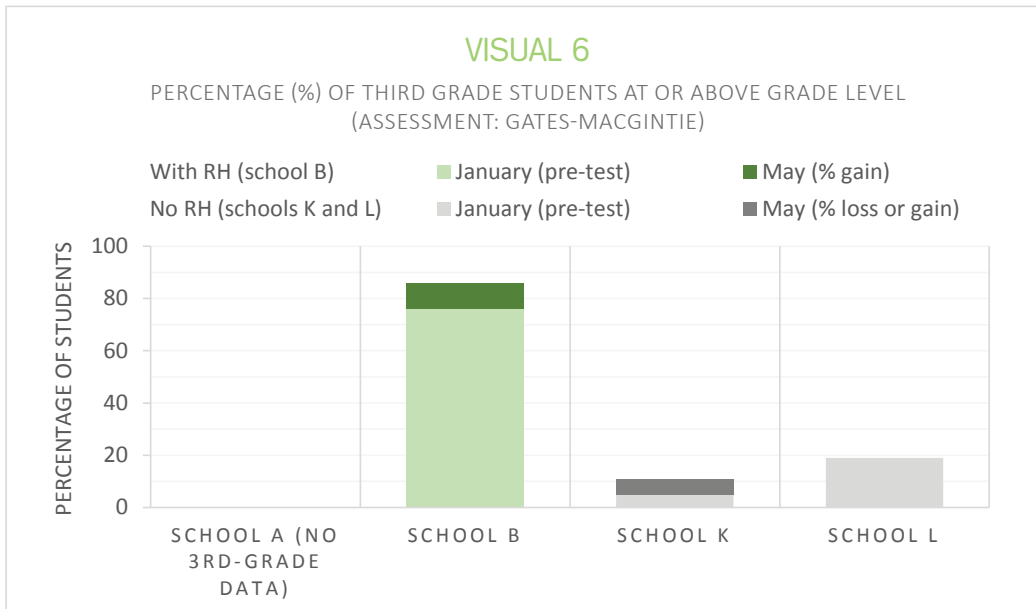
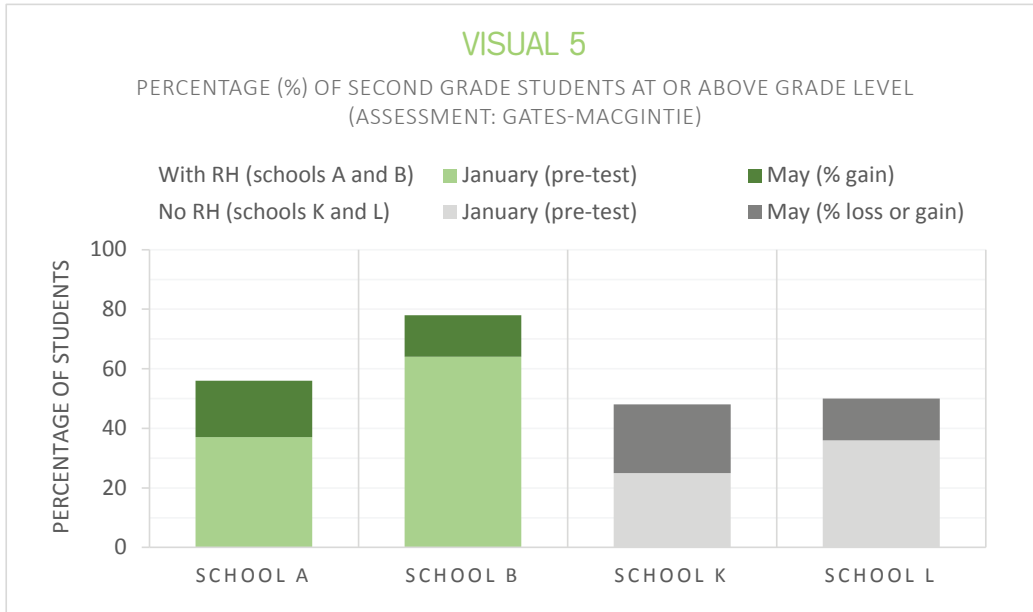
Gains on the Gates-MacGintie Reading Test were made by a larger proportion of the group of students who received Reading Horizons instruction than of the group who did not receive Reading Horizons instruction.

VISUAL 3
AVERAGE GAINS ON THE GATES-MACGINTIE READING TEST AND PERCENTAGE (%) OF STUDENTS WHO MADE GAINS

	WITH READING HORIZONS		NO READING HORIZONS	
	AVERAGE GAINS [RANGE]	% STUDENTS WHO MADE GAINS	AVERAGE GAINS [RANGE]	% STUDENTS WHO MADE GAINS
GRADE 1	.6 [-0.5 – 2.2]	89.40%	.31 [-0.9 – 2.2]	74.50%
GRADE 2	1.03 [-1.2 – 4.0]	96.50%	1.02 [-0.3 – 5.0]	91.50%
GRADE 3	.94 [-0.8 – 5.4]	94%	.678 [-0.6 to 2.4]	92%

Visuals 4–6 show that in most cases in grades 1–3, a higher proportion of students who received Reading Horizons instruction moved from below grade level to at or above grade level as compared to students who did not receive Reading Horizons instruction (Visuals 4–6).





HARRIET ELEMENTARY SCHOOL

TYPE OF STUDY

Pre-/Post-

TYPE OF SCHOOL

Public

POPULATION OF STUDENTS

Reading skills significantly below grade level

GRADE LEVEL

Early elementary (grade 2)

LENGTH OF DATA COLLECTION

1 school year

LOCATION

Midwestern Unites States, East North Central Region

POPULATION OF CITY

7,393 people

SOCIO-ECONOMIC STATUS

18% of total enrollment qualify for free or reduced lunch

NUMBER OF SCHOOLS

1 school

NUMBER OF STUDENTS

15 students

READING HORIZONS MATERIALS

Direct instruction and interactive software

ASSESSMENT TOOLS

AIMSweb

Summary of Findings

Prior to the implementation of the Reading Horizons interactive software program, all participants were significantly below grade level standards and identified as “struggling readers”. At the conclusion of the study, all students demonstrated a significant increase in oral reading fluency competencies. Eighty percent (80%) of participants met grade level expectations and were identified as demonstrating third grade reading readiness.

Background

As the academic rigor and performance expectations continue to increase, so does the imminent need for quality instructional interventions. Educators are continuously attempting to solve this problem by researching and implementing viable programs that meet the needs of each individual student while combating time constraints and classroom management obstacles. Teachers need to efficiently provide tools for a deeper learning experience and actively engage (student) audiences. The use of technology has greatly influenced the teaching and learning styles of today, as it has allowed for classrooms to be more dynamic and productive than ever. Teachers strive to utilize and implement quality computer-based academic programs to foster effective instruction with a focus on differentiation and individualized instruction. One challenge is to find effective programs that meet the standards of learning to address the foundational components of reading. The ultimate objective is to find a quality and effective computer-based program that provides individualized instruction and an accurate assessment component to measure student progress. This study was implemented to investigate the effectiveness of Reading Horizons interactive software with second grade struggling readers.

Resources

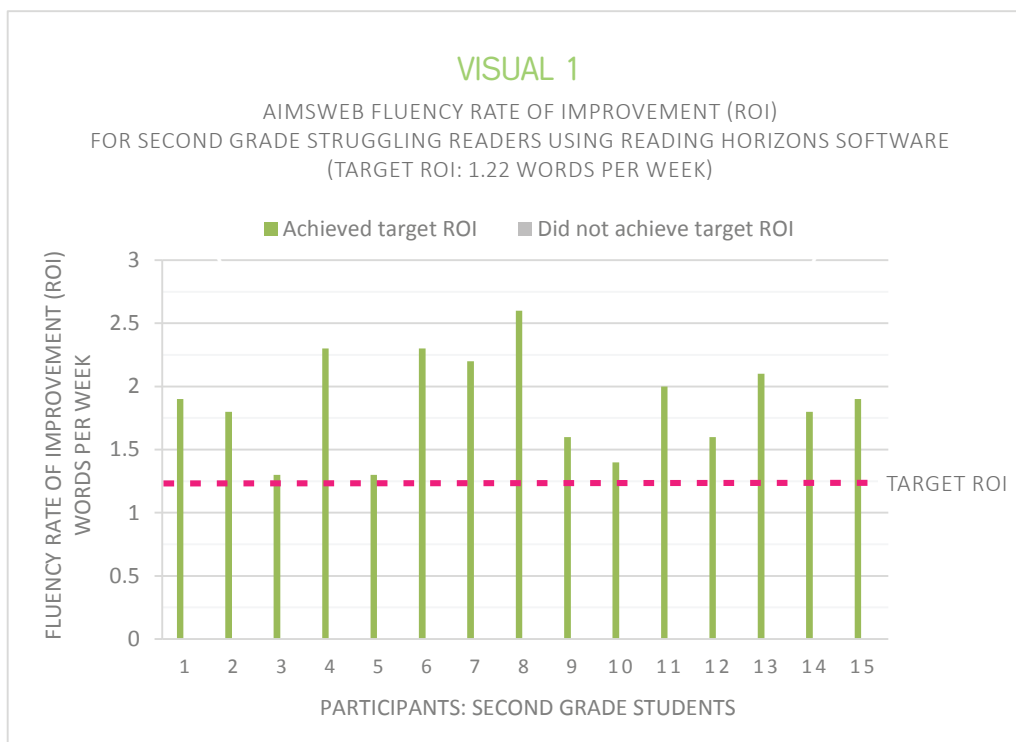
Reading Horizons interactive software.

Implementation

Fifteen second grade students who were significantly below grade level expectations according to initial screening data were chosen as participants for a 36-week study. All participants were pre-screened using AIMSweb benchmark assessments to determine a baseline rate of oral reading fluency. During the 36 weeks, students were exposed to the Reading Horizons software program for 150 minutes weekly (30 minutes daily of self-paced computer-based instruction). Students participated in weekly progress monitoring to determine frequent progress and rate of improvement. After the 36-week implementation phase, students were reassessed to determine their overall reading growth (words per minute) and rate of improvement. This was done by comparing baseline data to AIMSweb grade level expectancy with national aggregate norms in oral reading fluency and overall rate of improvement. Two strategies were implemented to increase consistency and validity: (a) an integrity log was kept for the duration of the study to validate that all participants were exposed to the intervention for at least 90% of instructional time (taking into account absences, schedules, meetings, etc.); and (b) students were supervised to ensure all students were actively working and completing course tasks and expectations.

Outcomes

According to AIMSweb aggregate norms, second grade students are expected to increase their fluency rates by 1.22 words per week. According to the data, all second grade students (100% of participants) exposed to the intervention met grade level Rate of Improvement (ROI) standards (Visual 1).



According to AIMSweb national aggregate norms, all second grade students should be able to accurately decode 90 correct words in one minute. Data shows that 80% of student participants met grade level oral reading fluency (ORF) expectations (Visual 2).



SOURCE: Mendes, J. (2014). The implementation of “Reading Horizons Discovery” interactive software with struggling second grade readers. Retrieved from: personal communication on March 6, 2014.

ACKNOWLEDGEMENT: Thank you to John Mendes for the development, implementation, and summary of this study.



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