

Students Receiving Special Education Services Achieved Significant Reading Proficiency Gains

Study Sample

7,828 students who completed two or more InSight reading assessments

Schools

693

School Districts

381

Study Inclusion Requirements

Requirements

- Students receiving special education services
- Students in grade 2 through 12
- Students with fall 2018 (pre) and spring 2019 (post) InSight assessment scores

Students Excluded

- Students for whom valid reading rates could not be calculated

Distribution of Students:

- Elementary School (ES, Grades 2 through 5) n=899
- Middle School (MS, Grades 6 through 8) n=3,274
- High School (HS, Grades 9 through 12) n=3,655

Purpose of Report

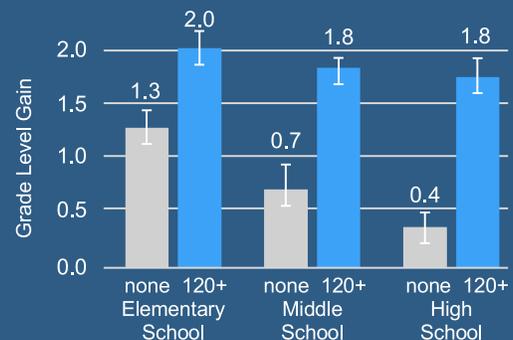
This report describes the progress achieved by Reading Plus students who received special education services while enrolled in grades 2 through 12 during the 2018-2019 school year. Data are reported for all students who completed the Reading Plus InSight silent reading assessment on at least two occasions, once near the start of the school year and again during the spring, so that growth over the school year was measured.

InSight – Computer Adaptive Assessment

InSight provides measures of reading comprehension, vocabulary, comprehension-based silent reading rate, and motivation, as well as a composite reading proficiency grade-level score. Students receive no instructional support while completing InSight. As such, this assessment gauges reading proficiency in the “real world” and yields results that can readily be compared with nationally normed standardized assessments such as the Smarter Balanced Assessment Consortium (SBAC) English Language Arts assessment, NWEA’s MAP, the Partnership for Assessment of Readiness for College and Careers (PARCC), STAR Reading, AIMSweb, and others (see [InSight Technical Brief](#) for more information). A detailed review and evaluation of InSight’s reliability, validity, and classification accuracy can be found on the [National Center on Intensive Intervention](#) website.

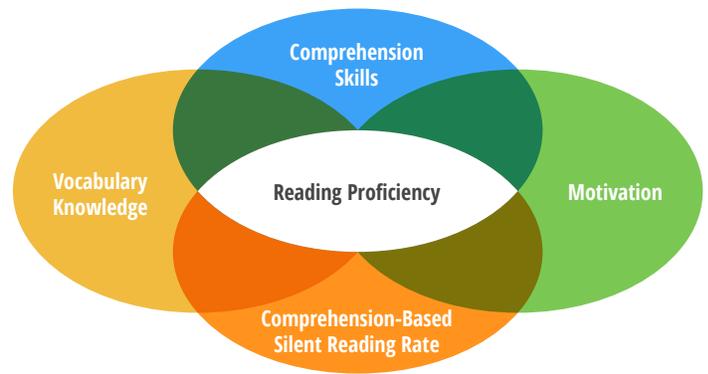
Summary of Findings: Reading Plus Students in Special Education Achieved Significantly Larger Gains.

Across all grade groups, students in special education who completed at least 120 Reading Plus lessons (about 50+ hours) during the school year achieved significantly larger reading proficiency gains than students who did not engage in Reading Plus instruction.



Components of Reading Proficiency

Once foundational skills are established, students must continue to develop vocabulary knowledge, comprehension skills, and reading efficiency to become proficient readers. The Reading Plus InSight assessment measures each of these aspects of reading and then combines the measures to determine a student's overall level of reading proficiency. InSight also measures reading motivation, a critical element of proficiency that fosters productive reading behavior.



Overall Reading Proficiency (Composite Measure)

Across all grade groups, students enrolled in special education who completed more Reading Plus instruction during the school year increased their reading proficiency to a significantly greater extent than did those who completed fewer or no lessons (Figure 1). Research has shown that students who increase their reading proficiency using Reading Plus also report increased levels of reading interest and confidence ([see brief](#)).

Reading Proficiency Growth by Lessons Completed

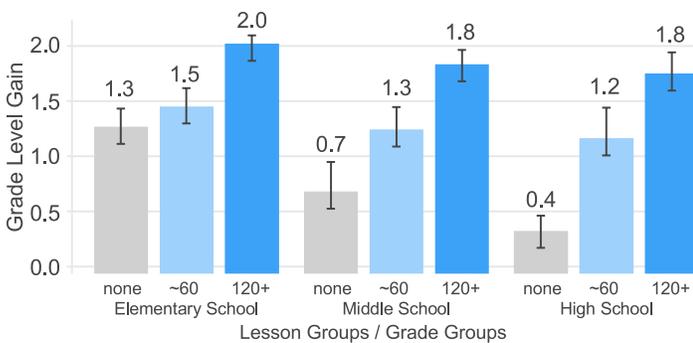


Figure 1. Reading proficiency gains (+/- SEM) achieved by students in grades 2-5 (elementary school, ES), 6-8 (middle school, MS), and 9-12 (high school, HS) who were enrolled in special education, at each of three levels of Reading Plus use (no lessons between benchmarks, ~60, or 120+ lessons). Students with more Reading Plus use achieved large reading proficiency gains in all grade groups (ES, 2.0 grade levels, $p < .001$, $d = .85$; MS, 1.8 grade levels, $p < .001$, $d = .76$; HS, 1.8 grade levels, $p < .001$, $d = .62$). These gains were significantly larger than those of their peers who did not use Reading Plus (ES, $p < .001$, $d = .46$; MS, $p < .001$, $d = .69$; HS, $p < .001$, $d = .71$).

Comprehension Growth (Sub-Score)

Across all grade groups, students enrolled in special education who completed more Reading Plus instruction during the school year increased their reading comprehension levels to a significantly greater extent than did students who completed fewer or no lessons (Figure 2).

Comprehension Growth by Amount of Reading Plus Use

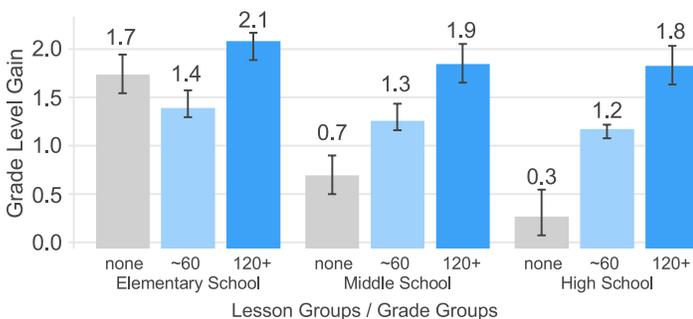


Figure 2. Reading comprehension level gains (+/- SEM) achieved by students in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school) who were enrolled in special education, at each of three levels of Reading Plus use (no lessons, ~60, or 120+ lessons). Students with more Reading Plus use achieved significantly larger reading proficiency gains ($p < .001$) in all grade groups.

Vocabulary Growth (Sub-Score)

Across all grade groups, students enrolled in special education who completed more Reading Plus instruction during the school year increased their vocabulary levels to a significantly greater extent than did students who completed fewer or no lessons (Figure 3).

Vocabulary Growth by Amount of Reading Plus Use

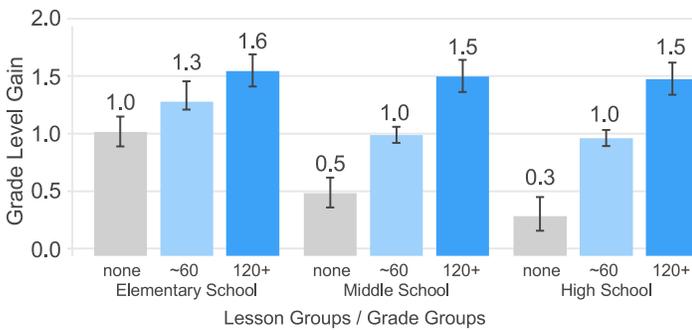


Figure 3. Vocabulary level gains (+/- SEM) achieved by students in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school) who were enrolled in special education, at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons). Students with more Reading Plus use achieved significantly larger vocabulary level gains in all grade groups (ES, $p < .02$; MS and HS, $p < .001$).

Comprehension-Based Silent Reading Rate Growth (Sub-Score)

Silent reading rates collected in the absence of adequate comprehension cannot be regarded as valid and characteristic reflections of a student’s reading efficiency. The label ‘comprehension-based silent reading rate’ distinguishes the rate (words per minute; wpm) at which a student is capable of silently reading and comprehending text.

Elementary and middle school students enrolled in special education who completed more Reading Plus instruction during the school year increased their comprehension-based silent reading rates to a significantly greater extent than did students who had completed few or no lessons. A comparable trend was seen in high school students enrolled in special education as well (Figure 4).

Reading Rate Growth by Lessons Completed

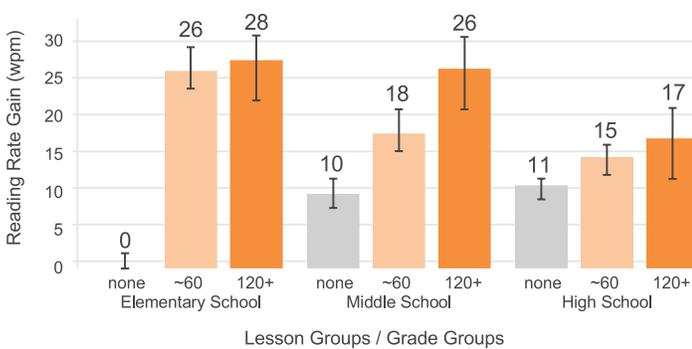


Figure 4. Mean comprehension-based silent reading rate gains (+/- SEM) in words per minute (wpm) achieved by students in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school) who were enrolled in special education, at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons). Students with more Reading Plus use achieved significantly larger reading rate gains in elementary ($p < .02$) and middle school ($p < .01$).

Research has shown that reading efficiency is positively associated with reading comprehension, interest, and confidence. Moreover, increases in reading efficiency among students who engage in Reading Plus practice have been shown to be associated with increases in reading proficiency, interest, and confidence. These results have led to reading efficiency being regarded as the ‘gateway’ to increased reading comprehension and motivation ([see research brief](#)).

Motivation Growth

Among students enrolled in special education, Reading Plus instruction generally had a positive effect on students' self-reported reading interest and reading confidence (self-efficacy), as shown in Figure 5. Previous research has found that reading motivation and reading success are closely linked ([see research brief](#)).

Growth in Self-Reported Reading Interest and Confidence by Lessons Completed

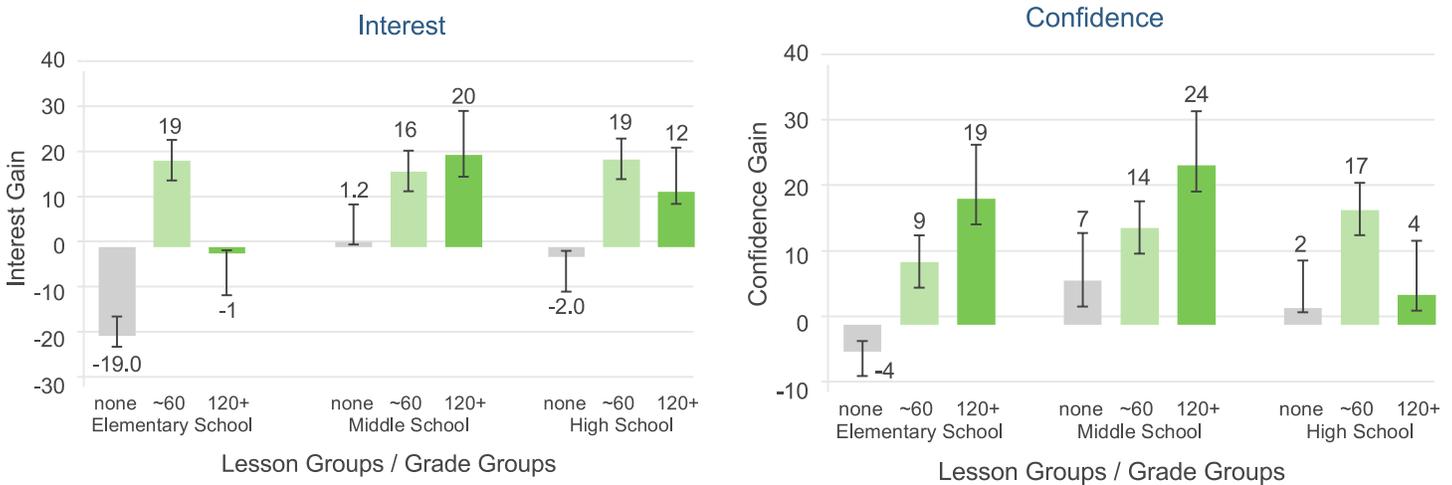


Figure 5. Changes in two motivational constructs (+/- SEM) as reported by students in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school) who were enrolled in special education, at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons). Students who used Reading Plus reported significantly positive shifts in reading interest and confidence in all grade groups ($p < .01$), except in elementary school where interest and confidence were already near the top of the scales.

Summary

These results show that students enrolled in special education who engaged in Reading Plus instruction over the course of the 2018-2019 school year significantly increased their capacity to comprehend increasingly complex texts, developed their capacity to understand higher levels of general academic vocabulary, and improved their reading efficiency. Students who completed more Reading Plus practice achieved significantly larger gains than their peers who engaged in little or no Reading Plus instruction. These results [replicate previous studies](#) documenting the effectiveness of using Reading Plus with students who have learning disabilities. These results also show that students who engaged in Reading Plus instruction generally developed more reading confidence and increased their interest in reading. This in turn increases the likelihood that they will continue to use reading as a means to expand their knowledge, to be entertained, and to seek inspiration.

