

Middle School Students Across all Tier Groups Achieved Significant Reading Proficiency Gains

Study Sample

123,730 middle school students who completed two or more InSight reading assessments

Schools

1,135

School Districts

666

Study Inclusion Requirements

- Students in grade 6 through 8
- Students with fall 2019 (pre) and spring 2020 (post) InSight assessment scores

Students Excluded

- Students for whom valid reading rates could not be calculated

Tier Groups

- Tier 1 – Fall 2019 Reading Proficiency Index scores were at/above students' grade level > Recommended Reading Plus Instruction: 20 hours
- Tier 2 – Fall 2019 Reading Proficiency Index scores were below the student's grade level but less than three grades below. > Recommended Reading Plus Instruction: 40 hours
- Tier 3 – Fall 2019 Reading Proficiency Index scores were three or more grade levels below the students' grade level > Recommended Reading Plus Instruction: 60 hours
- Analyses assumed 2.5 SeeReader lessons per hour

Purpose of Report

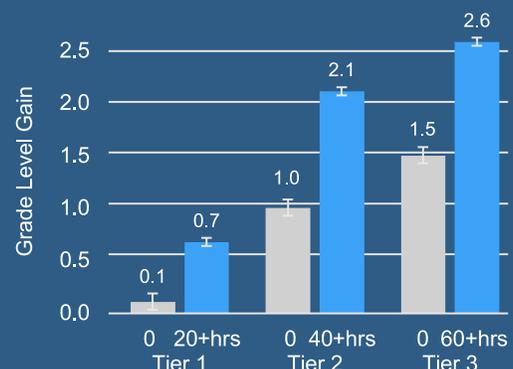
This report describes the progress achieved by Reading Plus students who were enrolled in grades 6 through 8 during the 2019-2020 school year. The focus is on students who completed the InSight silent reading assessment on at least two occasions, once near the start of the school year and again during the spring, so that growth over the school year was measured. Students were divided into three tier groups based on their performance on the initial assessment (see sidebar).

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 correlate well 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 of InSight's reliability, validity, and classification accuracy can be found on the [National Center on Intensive Intervention](#) website.

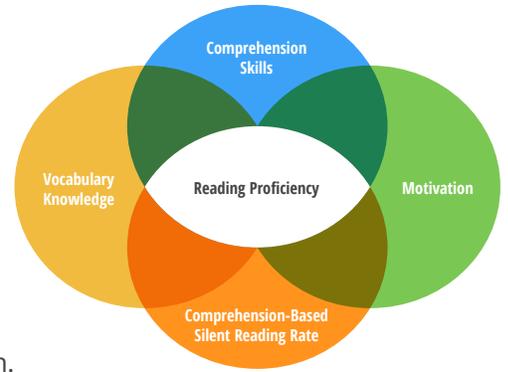
Summary of Findings: Across All Tier Groups, Reading Plus Students Achieved Significantly Larger Gains.

Across all tier groups, students who completed the recommended amount of Reading Plus instruction during the school year achieved significantly larger 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. This report shows the impact of Reading Plus practice on grade-level reading proficiency scores and on the components that contribute to this measure, as well as the program’s impact on motivation.



Overall Reading Proficiency (Composite Measure)

Across all tier groups, middle school students who engaged in the recommended amount of Reading Plus instruction during the school year increased their reading proficiency levels to a significantly greater extent than did students 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](#)), a finding that was replicated in this study (see page 4).

Reading Proficiency Growth by Amount of Reading Plus Use

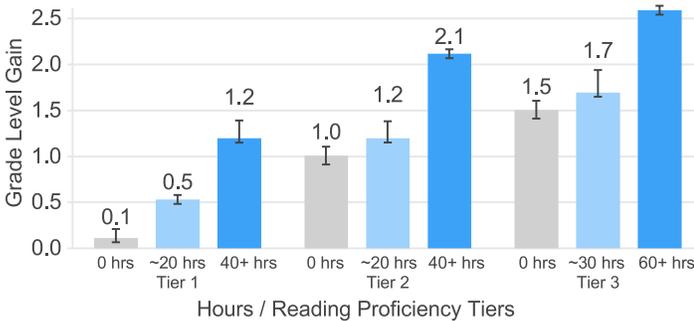


Figure 1. Reading proficiency gains (+/- SEM) achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1-2 levels below grade level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade level), no use, half of recommended use (30 hours), and recommended use (60+ hours). Middle school students who completed the recommended amount of Reading Plus practice achieved significant reading proficiency gains in all tier groups (Tier 1, 0.5 grade levels, $p < .001$, $d = .35$; Tier 2, 2.1 grade levels, $p < .001$, $d = 1.20$; Tier 3, 2.6 grade levels, $p < .001$, $d = 1.33$). These gains were significantly larger than those of their peers who did not use Reading Plus (Tier 1, $p < .001$, $d = .35$; Tier 2, $p < .001$, $d = .56$; Tier 3, $p < .001$, $d = .50$).

Comprehension Growth (Sub-Score)

Across all tier groups, middle school students who engaged in the recommended amount of Reading Plus practice during the school year increased their 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

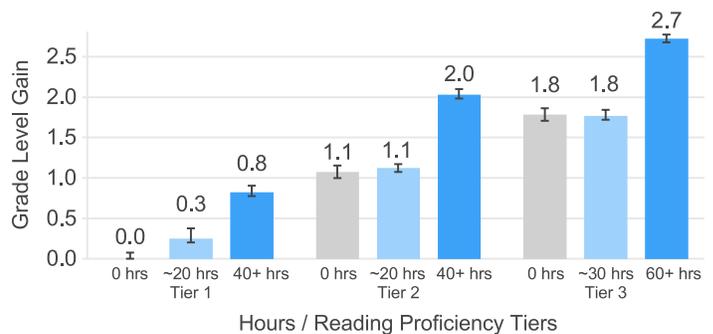


Figure 2. Mean reading comprehension gains (+/- SEM) achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1-2 levels below grade level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade level), no use, half of recommended use (30 hours), and recommended use (60+ hours). Students completing the recommended amount of Reading Plus instruction achieved significantly larger comprehension gains ($p < .001$) in all tier groups.

Vocabulary Growth (Sub-Score)

Across all tier groups, middle school students who engaged in the recommended amount of Reading Plus practice 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

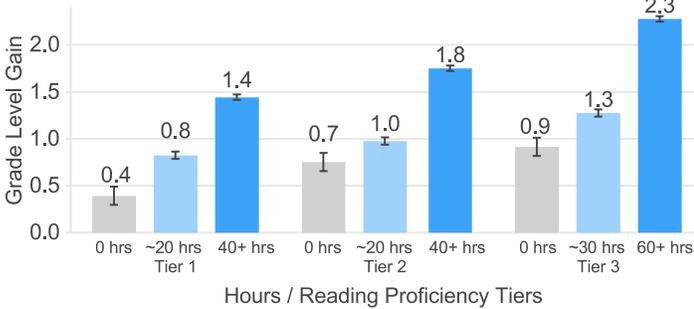


Figure 3. Vocabulary level gains (+/- SEM) achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1-2 levels below grade level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade level), no use, half of recommended use (30 hours), and recommended use (60+ hours). Students completing the recommended amount of Reading Plus instruction achieved significantly larger vocabulary gains ($p < .001$) in all tier groups.

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.

In all tier groups, middle school students who engaged in the recommended amount of 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 fewer or no lessons (Figure 4).

Reading Rate Growth by Amount of Reading Plus Use

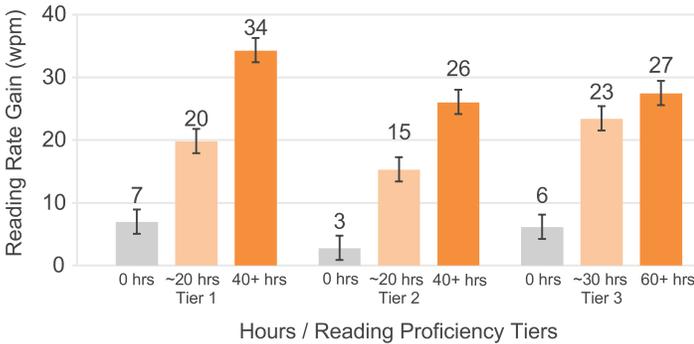


Figure 4. Mean comprehension-based silent reading rate gains (+/- SEM) in words per minute (wpm) achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1-2 levels below grade level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade level), no use, half of recommended use (30 hours), and recommended use (60+ hours). Students completing the recommended amount of Reading Plus instruction achieved significantly larger reading rate gains ($p < .001$) in all tier groups.

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 are 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 with below grade level reading proficiency, Reading Plus practice had a significantly positive effect on middle school students' self-reported reading interest and reading confidence (self-efficacy). Changes in reading motivation are shown in Figure 5. Previous research has shown that reading motivation and reading success are closely linked ([see research brief](#)).

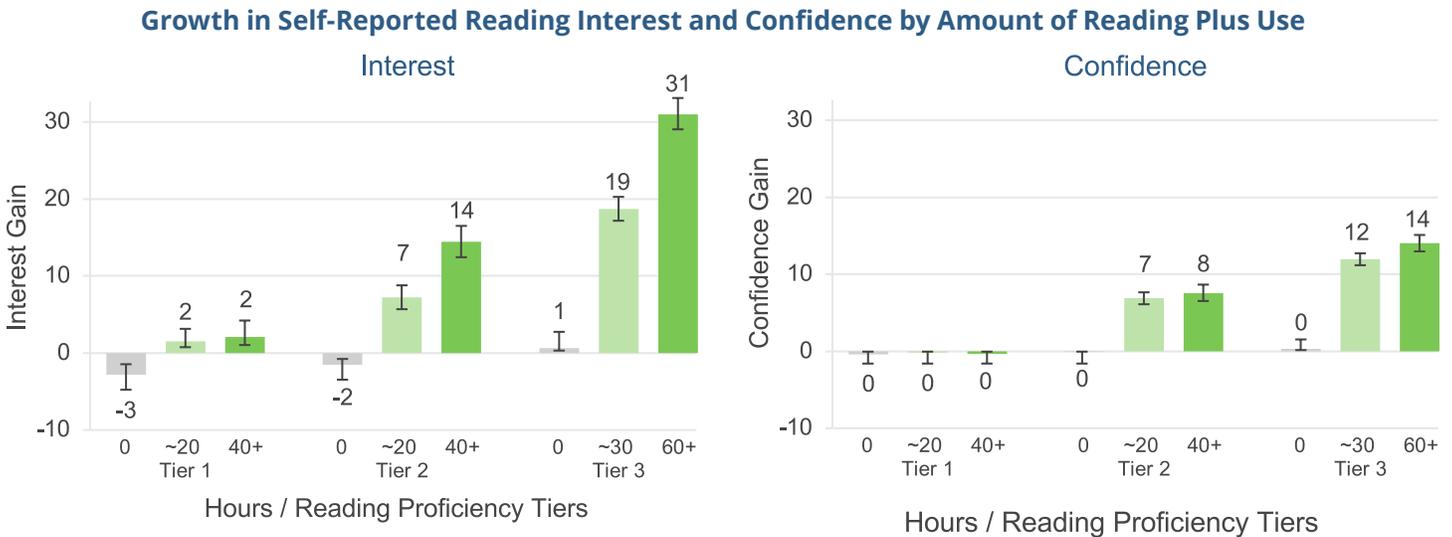


Figure 5. Changes in two motivational constructs (+/- SEM) as reported by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1-2 levels below grade level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade level), no use, half of recommended use (30 hours), and recommended use (60+ hours). Among students with below grade level reading proficiency (Tiers 2 and 3), those completing the recommended amount of Reading Plus instruction reported significantly larger gains in reading interest and confidence ($p < .01$).

Summary

These results show that students in all tier groups who engaged in the recommended amount of Reading Plus instruction over the course of the 2019-2020 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 lessons achieved significantly larger gains than their peers who engaged in little or no Reading Plus practice. The results also show that students who were below grade level and engaged in more Reading Plus instruction increased their reading confidence and 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.

