



Elementary School Students Across All Tier Groups Achieved Significant Reading Proficiency Gains

NATIONAL RESULTS FOR THE 2019 – 2020 SCHOOL YEAR | JULY 2020

Study Sample

- 39,447 elementary school students who completed two or more InSight reading assessments

Schools

- 910

School Districts

- 613

Study Inclusion Requirements

- Students in grade 2–5
- 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 assume 2.5 SeeReader lessons per hour

Purpose of Report

This report describes the progress achieved by DreamBox Reading Plus students who were enrolled in grades 2–5 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, AI MSWeb, 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.

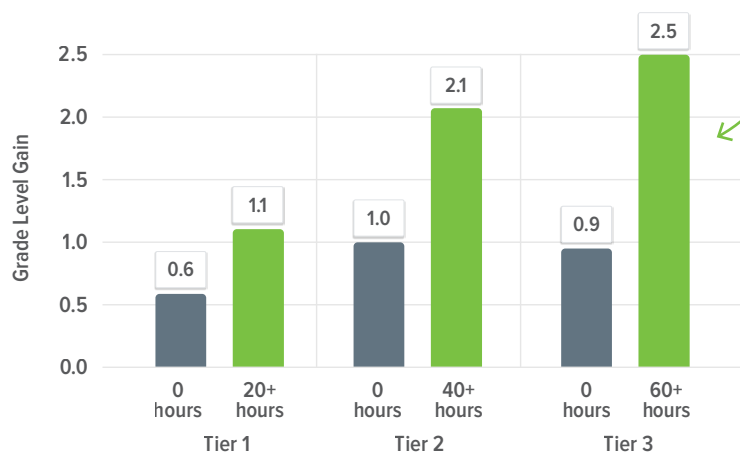
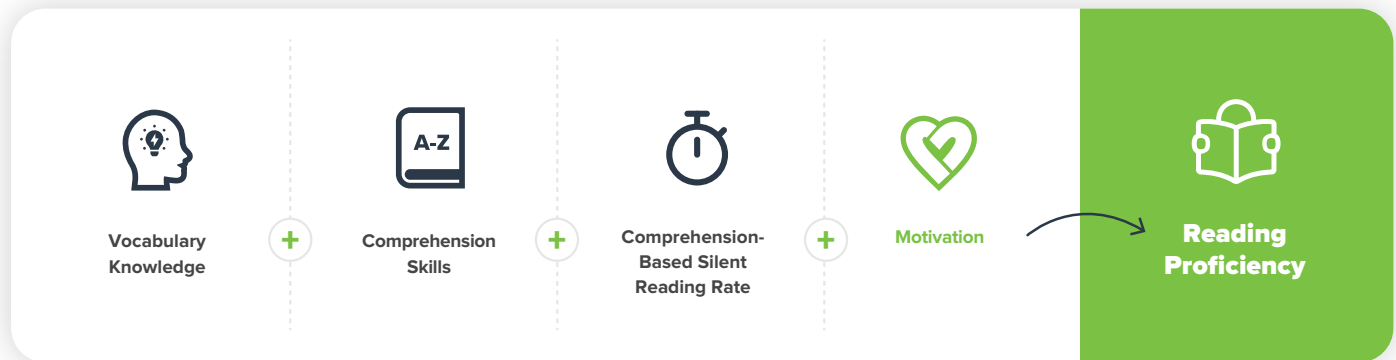


Figure 1. Across all tier groups, students who completed the recommended amount of Reading Plus instruction during the school year achieved significantly larger proficiency gains than students who did not engage in Reading Plus instruction.

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, elementary 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 2). Research has shown that students who increase their reading proficiency using Reading Plus also report increased levels of reading interest and confidence (see [Reading Motivation and Reading Success: A Two-Way Street](#)), a finding that was partially replicated in this study (see page 4).

Reading Proficiency Growth by Amount of Reading Plus Use

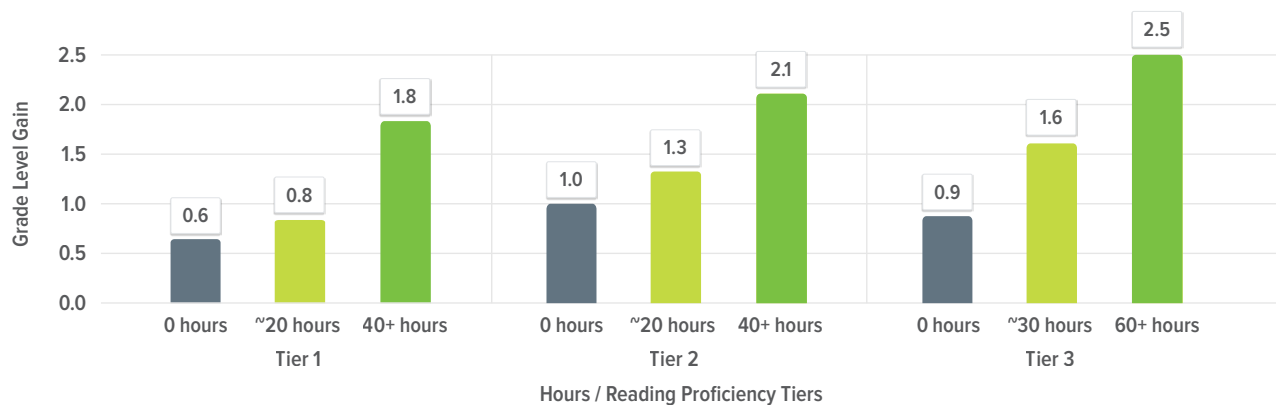


Figure 2. Reading proficiency gains (+/- SEM) achieved by elementary school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade-level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1 – 2 levels below grade-level), no use, half of recommended 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 who completed the recommended amount of Reading Plus practice achieved large reading proficiency gains in all tier groups (Tier 1, 1.1 grade-levels, $p < .001$, $d = .46$; Tier 2, 2.1 grade-levels, $p < .001$, $d = 1.90$). These gains were significantly larger than those of their peers who did not use Reading Plus (Tier 1, $p < .001$, $d = .17$; Tier 2, $p < .001$, $d = .75$; Tier 3, $p < .01$, $d = .54$).

Vocabulary Growth (Sub-Score)

Across all groups, elementary 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).

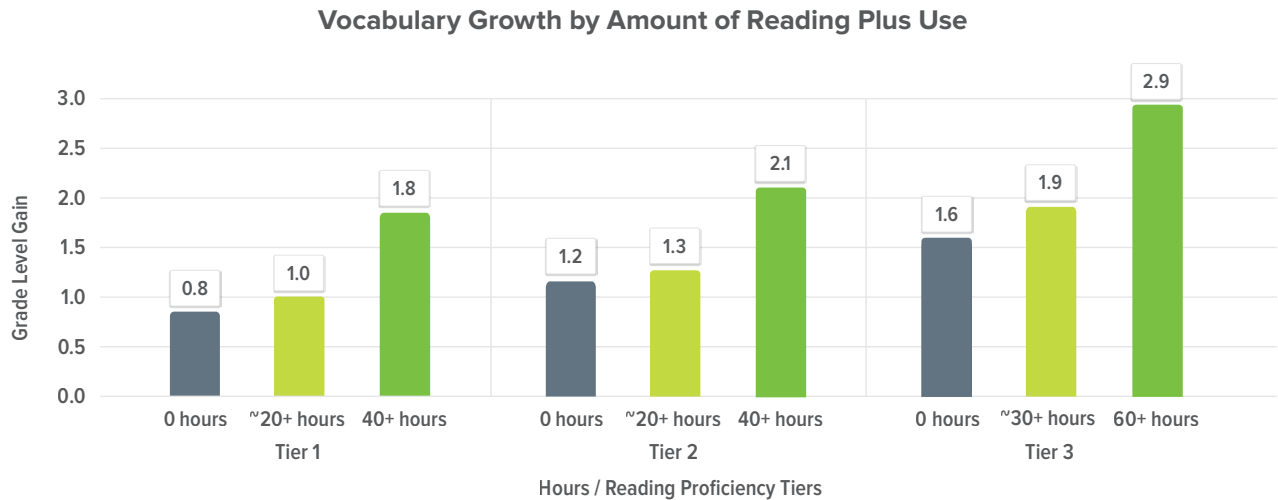


Figure 3. Vocabulary level gains (+/- SEM) achieved by elementary school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade-level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1 – 2 levels below grade-level), no use, half of recommended 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, elementary 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).

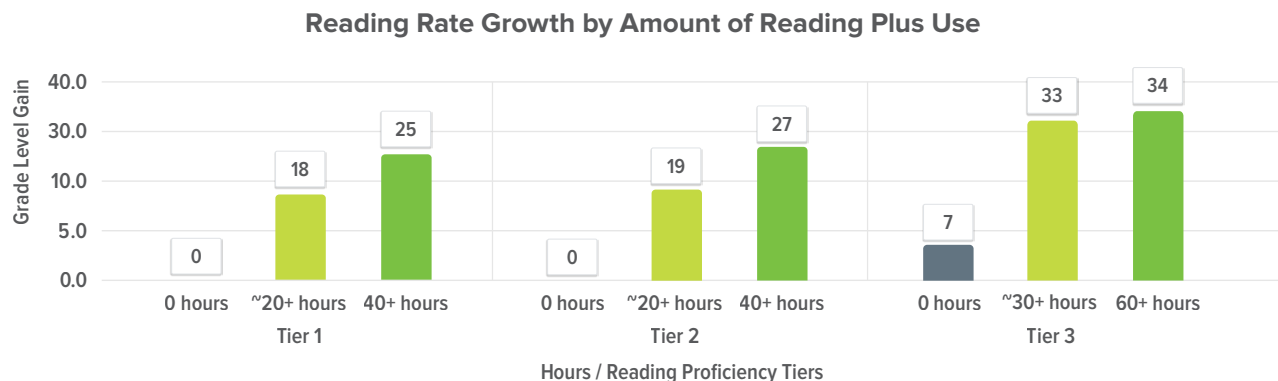


Figure 4. Mean comprehension-based silent reading rate gains (+/- SEM) in words per minute (wpm) achieved by elementary school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade-level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (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 [Reading Efficiency: The Gateway to Comprehension & Motivation](#)).

Motivation Growth

Across all tier groups, Reading Plus practice had a significantly positive effect on students’ self-reported reading interest. Differences in reading self-confidence (self-efficacy) were not significant, most likely because most elementary school students were near the top of the confidence scale to begin with. Changes in reading motivation are shown in Figure 5. Previous research has shown that reading motivation and reading success are closely linked.

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

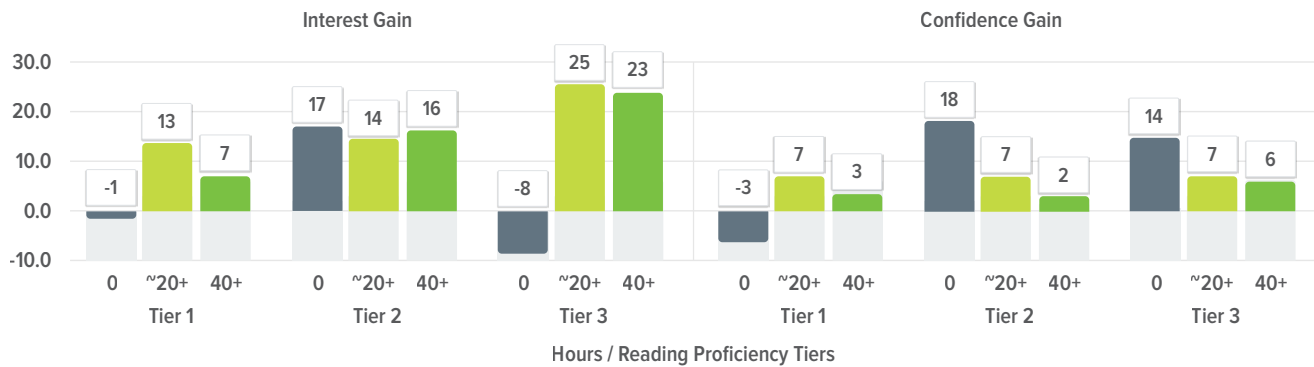


Figure 5. Changes in two motivational constructs (+/- SEM) as reported by elementary school students. Three levels of Reading Plus use are shown for each Reading Proficiency Tier group: Tier 1 (at/above grade-level), no use, recommended use (20 hours), and high use (40+ hours); Tier 2 (1 – 2 levels below grade-level), no use, half of recommended use (20 hours), and recommended use (40+ hours); Tier 3 (3+ levels below grade), no use, half of recommended use (30 hours), and recommended use (60+ hours). In all tiers, elementary school students who engaged in Reading Plus practice reported increases in interest and confidence. Many students who did not complete lessons in the program reported increases in reading motivations as well.

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 showed that many students increased their reading interest and confidence. 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.



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