

DreamBox Reading Plus Students Across All Tier Groups Achieved Significant Reading Proficiency Gains

NATIONAL RESULTS FOR THE 2020-2021 SCHOOL YEAR | APRIL 2023

Study Sample

- 187,359 students in Grades 3-12
- · 2.511 schools in 1.288 districts
- 2020-2021 school year

Study Inclusion Requirements

- Students in grades 3 through 12
- Students with pre and post InSight assessment scores at least 90 days apart
- Only students for whom valid reading rates could be calculated
- Students for whom no proficiency warning flags were raised

Distribution of Students

- 36,367 Students in grades 3-5
- 98,201 Students in grades 6-8
- 52,791 Students in grades 9-12

Purpose of report

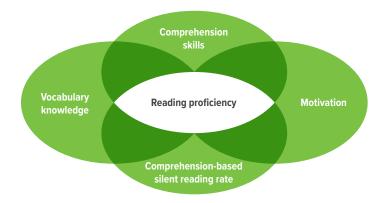
This report describes the learning gains achieved by DreamBox Reading Plus students who were enrolled in grades 3 to through 12 during the 2020-2021 school year. The focus is on students who completed the InSight silent reading assessment at start of the school year and again during late winter or spring, so that growth over the school year could be 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. Changes in scores over time are reflective of growth in grade level proficiency, vocabulary, etc. 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 SBAC ELA assessment, NWEA MAP, the Partnership for Assessment of Readiness for College and Careers, 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.

Components of Reading Proficiency

Upon obtaining proficiency in reading foundational skills (see DreamBox Reading Park for more information), 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 and proficiency tiers, students who completed at least 120 DreamBox Reading Plus lessons during the school year increased their reading proficiency levels to a significantly greater extent than students who completed fewer or no lessons. This is great news because research has found that reading interest and confidence increase significantly among students who increase their reading proficiency using DreamBox Reading Plus (see brief). Those results were replicated in this study (see Graph 5)

Reading Proficiency Growth by Lessons Completed



Figure 1. Reading proficiency gains achieved by students in grades 3-5 (elementary school, ES), 6-8 (middle school, MS), and 9-12 (high school, HS), at each of three levels of Reading Plus use (no/few lessons between benchmarks, ~60, and 120+ lessons).

Comprehension Growth (Sub-Score)

Across all grade groups, students who completed at least 120 Reading Plus lessons during the school year increased their reading comprehension levels to a significantly greater extent than did students who completed fewer or no lessons.

Comprehension Growth by Lessons Completed

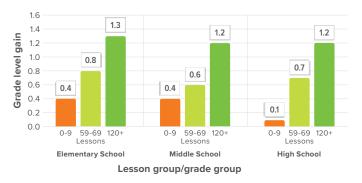


Figure 2. Reading comprehension level gains achieved by students in grades 3-5 (elementary school), 6-8 (middle school), and 9-12 (high school), at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons).

Vocabulary Growth (Sub-Score)

Across all grade groups, students who completed at least 120 Reading Plus lessons during the school year increased their vocabulary levels to a significantly greater extent than did students who completed fewer or no lessons.

Vocabulary Growth by Lessons Completed



Figure 3. Vocabulary level gains achieved by students in grades 3-5 (elementary school), 6-8 (middle school), and 9-12 (high school), at each of three levels of Reading Plus use (no or few lessons, ~60 lessons, and 120+ lessons).

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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.

Across all grade groups, students who completed more Reading Plus lessons 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 (Graph 4). Previous research has shown that increased reading efficiency is the gateway to increased reading comprehension and motivation (see research brief).

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).

Reading Proficiency Growth by Lessons Completed

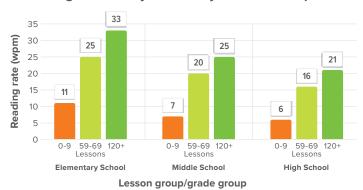


Figure 4. Mean comprehension-based silent reading rate gains in words per minute (wpm) achieved by students in grades 3-5 (elementary school), 6-8 (middle school), and 9-12 (high school), at each of three levels of Reading Plus use (no or few lessons, ~60 lessons, and >120 lessons).

Motivation Growth

Across all grade groups, Reading Plus instruction had a significantly 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

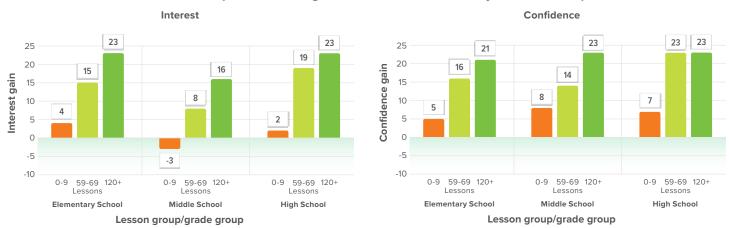


Figure 5. Changes in two motivational constructs as reported by students in grades 3-5 (elementary school), 6-8 (middle school), and 9-12 (high school), at each of three levels of Reading Plus use (no or few lessons, ~60 lessons, and >120 lessons)

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Proficiency Growth by Reading Proficiency Tier

More intensive use of DreamBox Reading Plus is recommended for students who are reading below grade level and need to catch up with their peers. Graphs 6-8 below shows the amount of reading proficiency growth achieved by students who started the school year at or above grade level (Tier 1), below grade level (Tier 2), or well below grade level (Tier 3), and completed no or few Reading Plus lessons, approximately 60 lessons, or at least 120 lessons.

Elementary School: Reading Proficiency Growth by Amount of Reading Plus Use



Figure 6. Proficiency gains achieved by elementary school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level); Tier 2 (below grade level but less than three grades below); Tier 3 (3+ levels below grade level).

High School: Reading Proficiency Growth by Amount of Reading Plus Use



Figure 8. Reading proficiency gains achieved by high school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above 7th grade level); Tier 2 (reading between 5 and 6.99 grade level); Tier 3 (reading below 5th grade level).

Middle School: Reading Proficiency Growth by Amount of Reading Plus Use

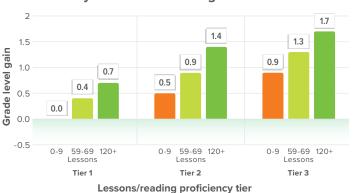


Figure 7. Reading proficiency gains achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level); Tier 2 (below grade level but less than three grades below); Tier 3 (3+ levels below grade level).

Conclusion/Summary

The results of this study show that students in all grade levels who engaged in Reading Plus instruction over the course of the 2020-2021 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.

In all cases, 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 the students who engaged in more Reading Plus instruction 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.



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