



Reading Plus Students Across all Tier Groups Achieved Significant Reading Proficiency Gains

NATIONAL RESULTS FOR THE 2018 – 2019 SCHOOL YEAR | JUNE 2020

Study Sample

- 259,140 students who completed two or more InSight reading assessments

Schools

- 2,571

School Districts

- 1,220

Study Inclusion Requirements

- Students in grades 2–12
- 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 (grades 2–5)
n=46,007
- Middle School (grades 6–8)
n=133,543
- High School (grades 9–12)
n=79,590

Purpose of Report

This report describes the reading progress achieved by DreamBox Reading Plus students who were enrolled in grades 2–12 during the 2018 – 2019 school year. The focus of the report is on 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 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. 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 test results ([see correlations here](#)). For example, the InSight reading proficiency index is strongly correlated with the Smarter Balanced Assessment Consortium (SBAC) English Language Arts scale scores (see [InSight Technical Brief](#) for details and additional assessment comparisons). 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 achieved significantly larger reading proficiency gains

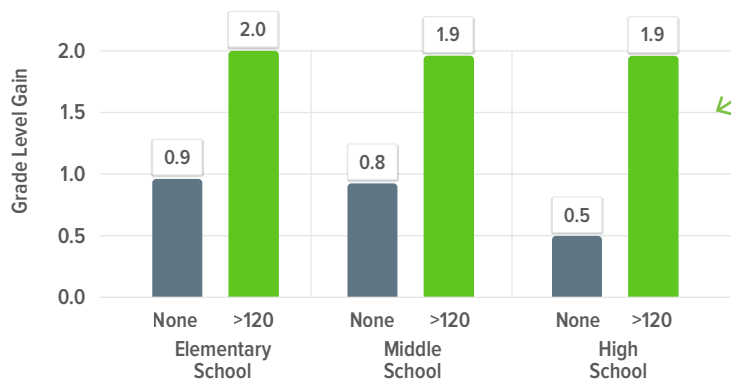
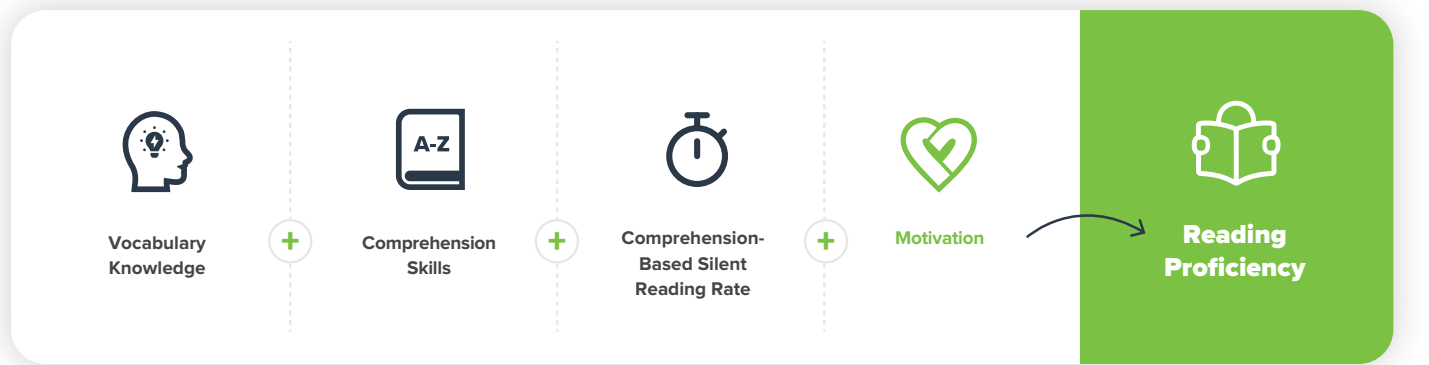


Figure 1. Across all grade and ability groups, students who completed at least 120 Reading Plus lessons (~50 hours) during the school year achieved reading proficiency gains that were significantly larger than those achieved by students who completed no lessons.

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 and proficiency tiers, students who completed at least 120 Reading Plus lessons (~50 hours) 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, also see Figures 7 – 9). This is great news because research has found that reading interest and confidence increase significantly among students who increase their reading proficiency using Reading Plus (see brief). Those results were replicated in this study (see page 4).

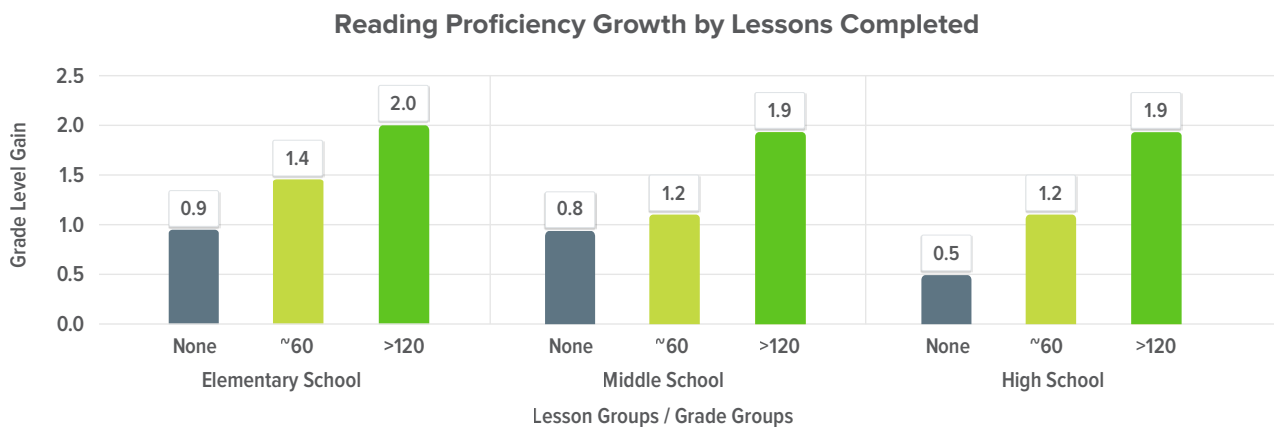


Figure 2. Reading proficiency gains achieved by students in grades 2–5 (elementary school, ES), 6–8 (middle school, MS), and 9–12 (high school, HS), at each of three levels of Reading Plus use (no lessons between benchmarks, ~60, and 120+ lessons). Students who completed 120+ Reading Plus lessons achieved large reading proficiency gains in all grade groups (ES, 2.0 grade-levels, $p < .001$, $d = .79$; MS, 1.9 grade-levels, $p < .001$, $d = .67$; HS, 1.9 grade-levels, $p < .001$, $d = .75$). These gains were significantly larger than those of their peers who did not use Reading Plus (ES, $p < .001$, $d = .67$; MS, $p < .001$, $d = .63$; HS, $p < .001$, $d = .79$).

Comprehension Growth (Sub-Score)

Across all grade groups, students who completed at least 120 Reading Plus lessons (~50 hours) during the school year increased their reading comprehension levels to a significantly greater extent than did students who completed fewer or no lessons (Figure 3).

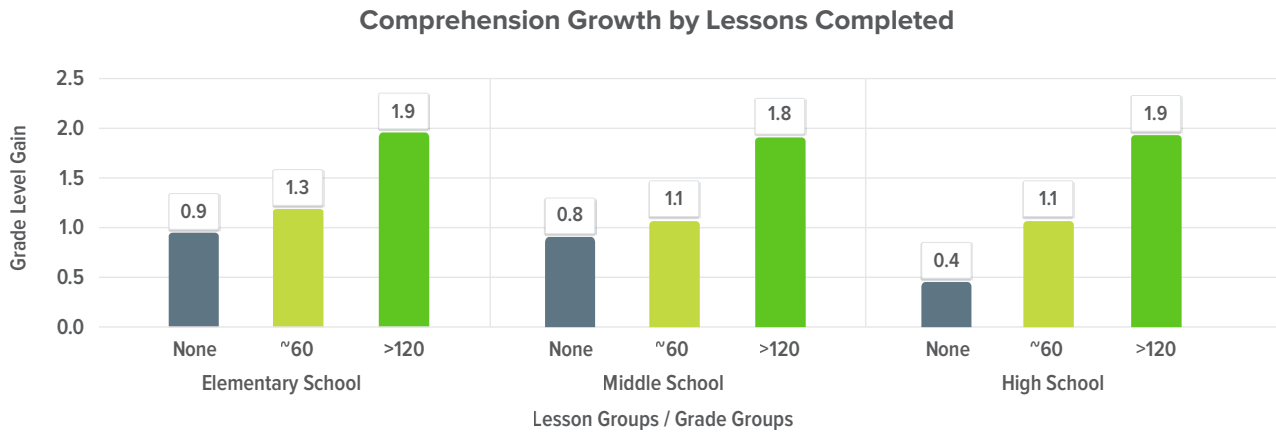


Figure 3. Reading comprehension level gains achieved by students in grades 2–5 (elementary school), 6–8 (middle school), and 9–12 (high school), at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons). Students with more Reading Plus use achieved significantly larger comprehension gains ($p < .001$) in all grade groups.

Vocabulary Growth (Sub-Score)

Across all grade groups, students who completed at least 120 Reading Plus lessons (~50 hours) during the school year increased their vocabulary levels to a significantly greater extent than did students who completed fewer or no lessons (Figure 4).

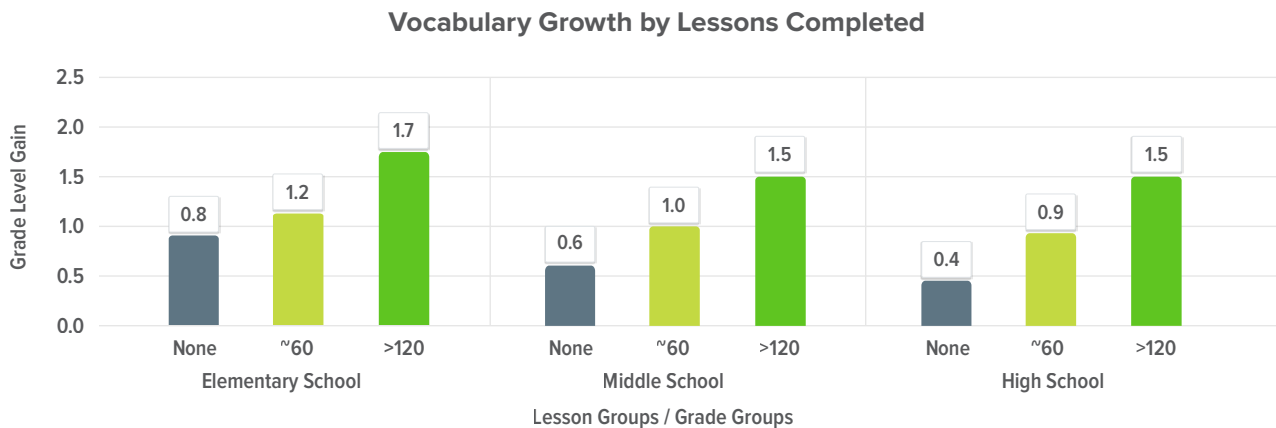


Figure 4. Vocabulary level gains achieved by students in grades 2–5 (elementary school), 6–8 (middle school), and 9–12 (high school), at each of three levels of Reading Plus use (no lessons, ~60 lessons, and 120+ lessons). Students with more Reading Plus use always achieved significantly larger vocabulary level gains ($p < .001$) in all grade 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.

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 (Figure 5).

Reading Rate Growth by Lessons Completed

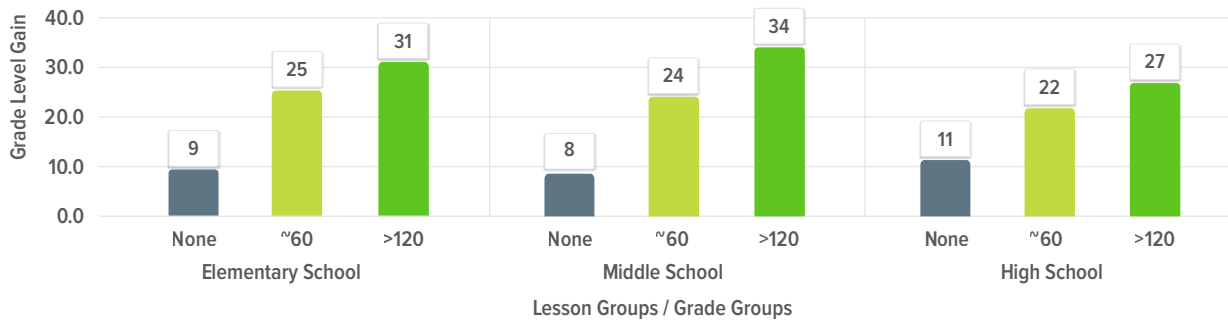


Figure 5. Mean comprehension-based silent reading rate gains in words per minute (wpm) achieved by students in grades 2–5 (elementary school), 6–8 (middle school), and 9–12 (high school), at each of three levels of Reading Plus use (no lessons, ~60 lessons, and >120 lessons). Students with more Reading Plus use always achieved significantly larger reading rate gains ($p < .001$) in all grade 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 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

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 6. Previous research has found that reading motivation and reading success are closely linked.

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

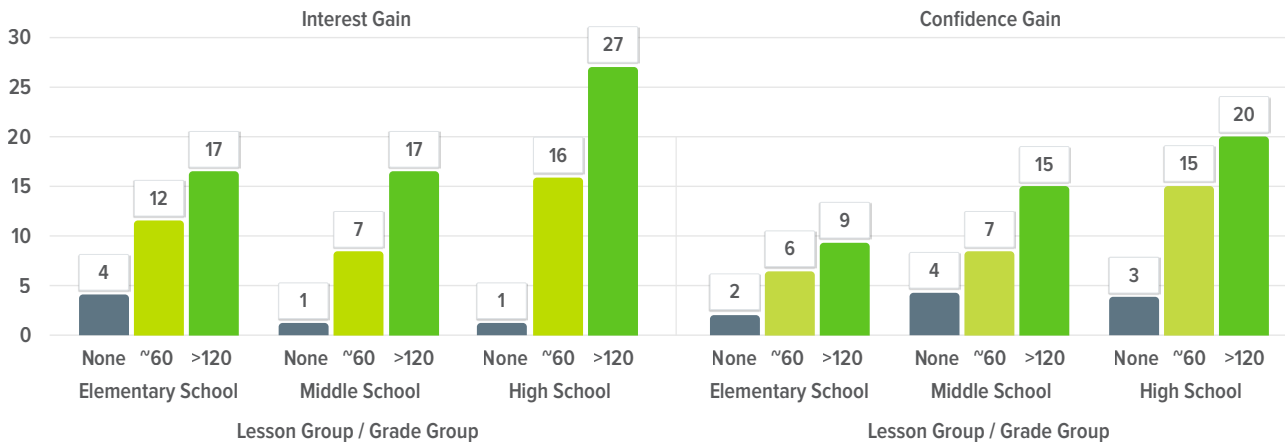


Figure 6. Changes in two motivational constructs as reported by students in grades 2–5 (elementary school), 6–8 (middle school), and 9–12 (high school), at each of three levels of Reading Plus use (no lessons, ~60 lessons, and >120 lessons). Students with more Reading Plus use reported significantly larger gains in reading interest and confidence in all grade groups ($p < .001$), except for confidence in elementary school, which was already near the top of the scale.

Proficiency Growth by Reading Proficiency Tier

More intensive use of Reading Plus is recommended for students who are reading below grade-level and need to catch up with their peers. Figures 7 – 9 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 Reading Plus lessons, approximately 60 lessons, or at least 120 lessons.

Elementary School: Reading Proficiency Growth by Amount of Reading Plus

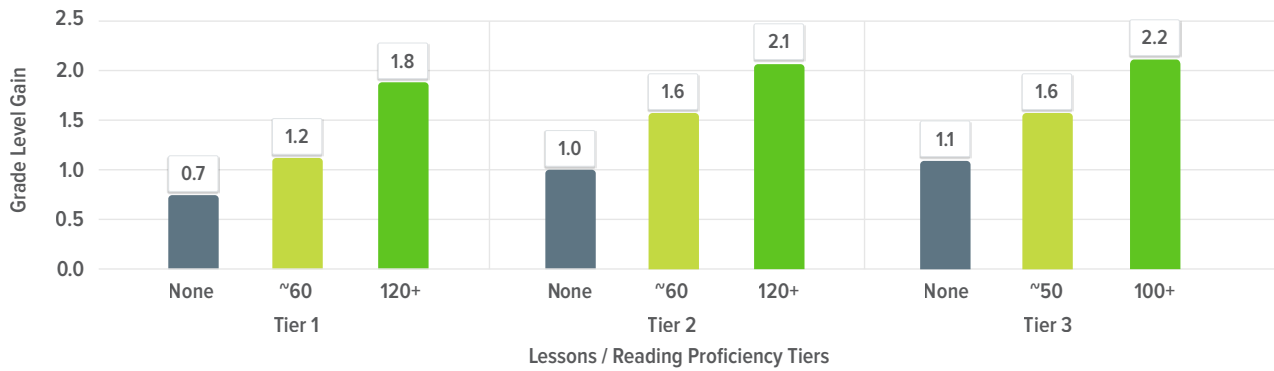


Figure 7. Proficiency gains (+/- SEM) achieved by elementary school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade-level); Tier 2 (below grade-level but less than three grades below); Tier 3 (3+ levels below grade-level). Elementary school students who completed 120+ Reading Plus lessons achieved large reading proficiency gains in all tier groups (Tier 1, 1.8 grade-levels, $p < .001$, $d = .78$; Tier 2, 2.1 grade-levels, $p < .001$, $d = 1.56$; Tier 3, 2.2 grade-levels, $p < .001$, $d = 1.93$). These gains were significantly larger than those of their peers who did not use Reading Plus (Tier 1, $p < .001$, $d = .59$; Tier 2, $p < .001$, $d = .77$; Tier 3, $p < .001$, $d = .77$).

Middle School: Reading Proficiency Growth by Amount of Reading Plus

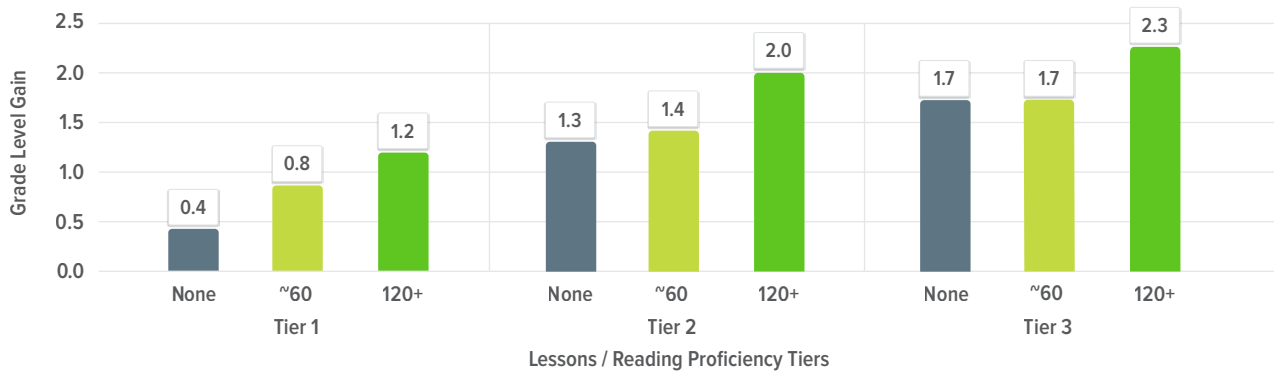


Figure 8. Reading proficiency gains (+/- SEM) achieved by middle school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade-level); Tier 2 (below grade-level but less than three grades below); Tier 3 (3+ levels below grade-level). Middle school students who completed 120+ Reading Plus lessons achieved large reading proficiency gains in all tier groups (Tier 1, 1.2 grade-levels, $p < .001$, $d = .62$; Tier 2, 2.0 grade-levels, $p < .001$, $d = 1.24$; Tier 3, 2.3 grade-levels, $p < .001$, $d = 1.51$). These gains were significantly larger than those of their peers who did not use Reading Plus (Tier 1, $p < .001$, $d = .50$; Tier 2, $p < .001$, $d = .37$; Tier 3, $p < .001$, $d = .36$).

High School: Reading Proficiency Growth by Amount of Reading Plus

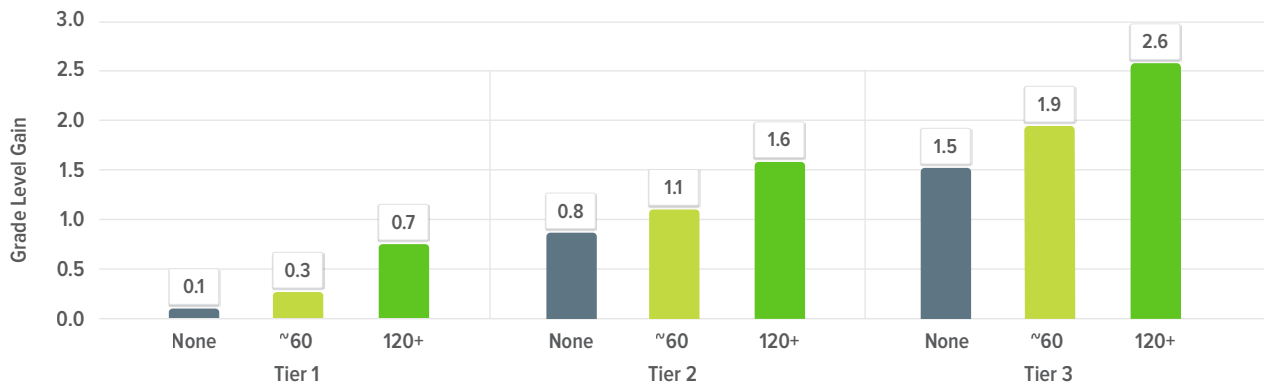


Figure 9. Reading proficiency gains (+/- SEM) achieved by high school students. Three levels of Reading Plus use are shown for each tier group: Tier 1 (at/above grade level); Tier 2 (reading at a middle school grade level); Tier 3 (reading at an elementary school grade level). High school students who completed 120+ Reading Plus lessons achieved large reading proficiency gains in all tier groups (Tier 1, 0.7 grade levels, $p < .001$, $d = .49$; Tier 2, 1.6 grade levels, $p < .001$, $d = 1.10$; Tier 3, 2.6 grade levels, $p < .001$, $d = 1.40$). These gains were significantly larger than those of their peers who did not use Reading Plus (Tier 1, $p < .001$, $d = .38$; Tier 2, $p < .001$, $d = .40$; Tier 3, $p < .001$, $d = .52$).

Summary

The results of this study show that students in all grade-levels 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 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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