



READING

Reading Motivation and Reading Success: A Two-Way Street

RESEARCH BRIEF | READING MOTIVATION

Pupils

142,223 students

Schools

1,346

School districts

574

Study inclusion requirements

- Students in grades 2 through 12.
- Students with valid fall and spring InSight assessment scores during one academic school year.

Students excluded

- None. All demographic groups are included.

Distribution of students:

- Elementary School (Grades 2 through 5) n=29,174 (26,030 completed Reading Plus lessons).
- Middle School (Grades 6 through 8) n=75,436 (70,947 completed Reading Plus lessons).
- High School (Grades 9 through 12) n=37,613 (33,989 completed Reading Plus lessons).
- All demographic groups are included in this study.

Background

Research has shown that students' perceptions about themselves as readers can affect not only their overall levels of reading effectiveness¹, but also the extent to which they engage in reading and use reading as a strategic learning tool². In fact, students with high intrinsic motivation are likely to read three times as many minutes per day as compared to students with low intrinsic motivation. This difference is far from trivial and reflects the reality that a reluctant reader is not likely to engage in reading unless compelled to do so, while an avid reader is likely to find reasons to open a book on a daily basis. The resulting differences in reading experience can amount to millions of words over the course of a single year, contributing to an ever expanding gap in reading proficiency and academic success.

Purpose of study

To document the relationship between reading motivation and proficiency, this report focuses on two key domains of motivation (reading interest and reading confidence) and how they relate to reading comprehension, efficiency and overall reading proficiency.

Study design

Data were evaluated from a national sample of students who completed both a fall and a spring InSight assessment during the one academic school year. The InSight assessment gauges reading proficiency during independent silent reading with no instructional support, and yields results that can readily be compared with the results of commonly used standardized tests (see [InSight Technical Brief](#) for details). InSight measures each student's comprehension level, vocabulary level, and silent reading rate. These performance measures are combined to create a composite Proficiency Index score that is reported on a grade level scale. InSight also measures a students' self-reported motivation for reading across several motivation domains. For the purpose of this report, students were divided into four motivation-level quartile groups and four proficiency growth quartile groups using national data from the InSight assessment.

Summary of findings

Across all grade groups, students who reported higher levels of interest and confidence also demonstrated significantly higher levels of reading comprehension and reading efficiency. As well, increases in interest and confidence over the school year were larger in students who increased their reading proficiency to a greater extent.

Interest and comprehension

Across all grade groups, students who reported higher levels of interest in reading demonstrated significantly higher levels of reading comprehension as measured by InSight (Figure 1).

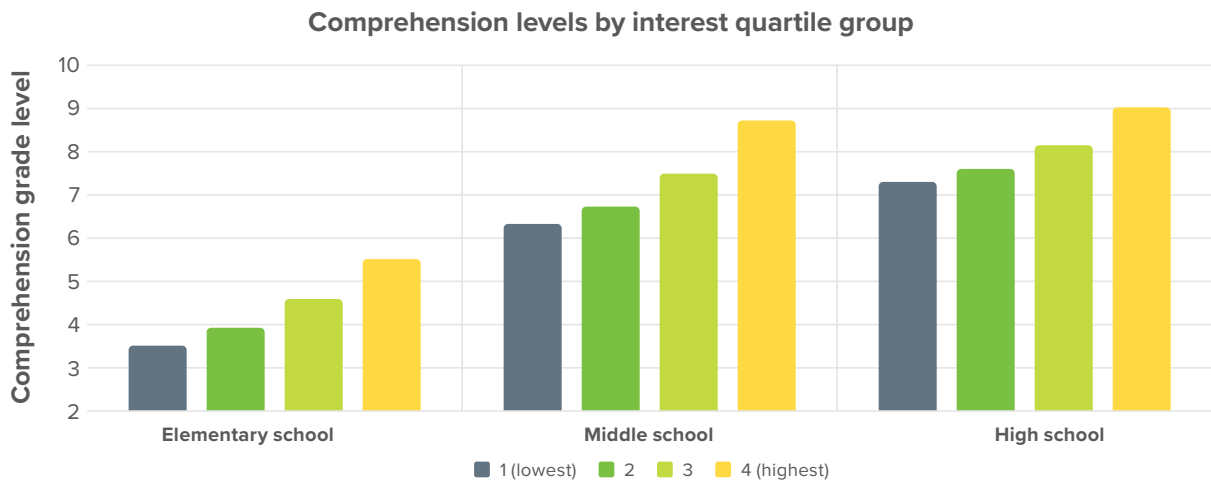


Figure 1. Mean comprehension levels of students in each of four reading interest quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups, students in higher reading interest quartile groups demonstrated significantly higher comprehension levels ($p < .001$).

Interest and reading efficiency

Across all grade groups, students who reported higher levels of interest in reading demonstrated significantly higher comprehension-based silent reading rates (rates at which students can read and then succeed on a comprehension test) as measured by InSight (Figure 2).

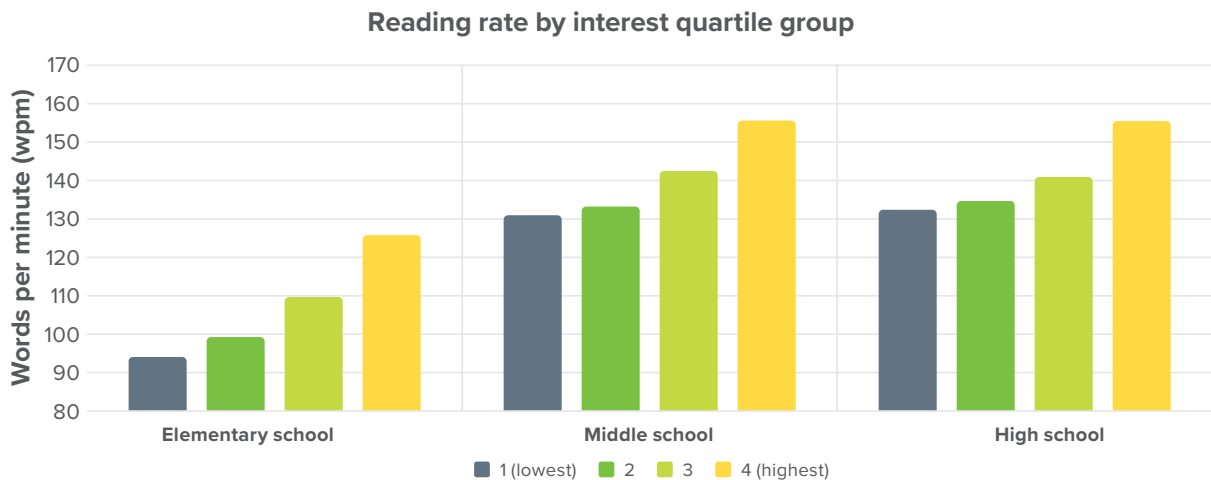


Figure 2. Mean comprehension-based silent reading rates demonstrated by students in each of four reading interest quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade level groups, students in higher reading interest quartile groups demonstrated significantly higher reading rates ($p < .001$).

Confidence (self-efficacy) and comprehension

Across all grade groups, students who reported higher levels of reading confidence demonstrated significantly higher levels of reading comprehension as measured by InSight (Figure 3).

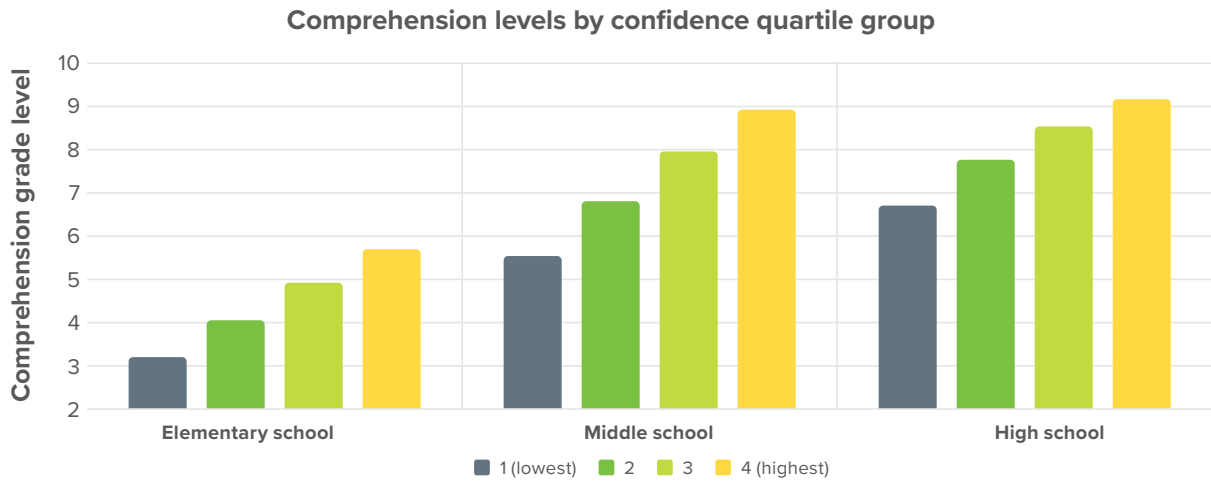


Figure 3. Mean comprehension levels of students in each of four reading confidence quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups, students in higher reading confidence quartile groups demonstrated significantly higher comprehension levels ($p < .001$).

Confidence (self-efficacy) and reading efficiency

Across all grade groups, students who reported higher levels of reading confidence demonstrated significantly higher comprehension-based silent reading rates as measured by InSight (Figure 4).

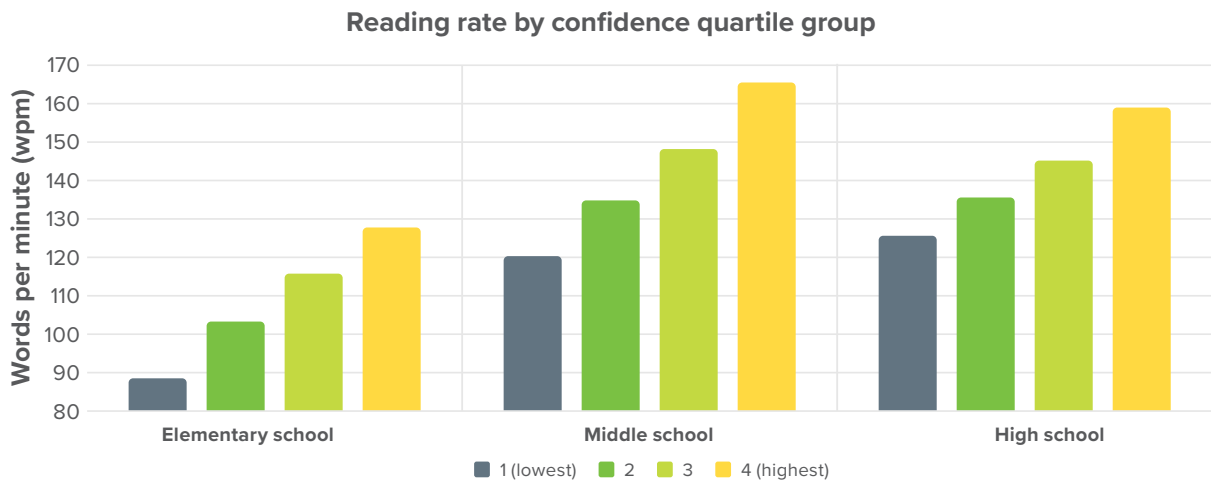


Figure 4. Mean comprehension-based silent reading rates demonstrated by students in each of four reading confidence quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade level groups, students in higher reading confidence quartile groups demonstrated significantly higher reading rates ($p < .001$).

Reading proficiency growth

Figures 5 and 6 show students' overall reading proficiency growth over the course of one academic school year. Students were divided into quartile groups based on their self-reported levels of reading interest (Figure 5) and reading confidence (Figure 6). Across all grade groups, students who engaged in at least 100 DreamBox Reading Plus lessons achieved significantly larger reading proficiency gains than students who did not engage in Reading Plus. Notably, students who completed at least 100 Reading Plus lessons achieved similar reading proficiency growth (always exceeding one year's worth of growth), regardless of their initial level of interest in reading (Figure 5). Students in middle school and above who did not use Reading Plus did not achieve one year's worth of growth, including those who reported high levels of interest. The same patterns were apparent when dividing students into reading confidence quartiles (Figure 6).

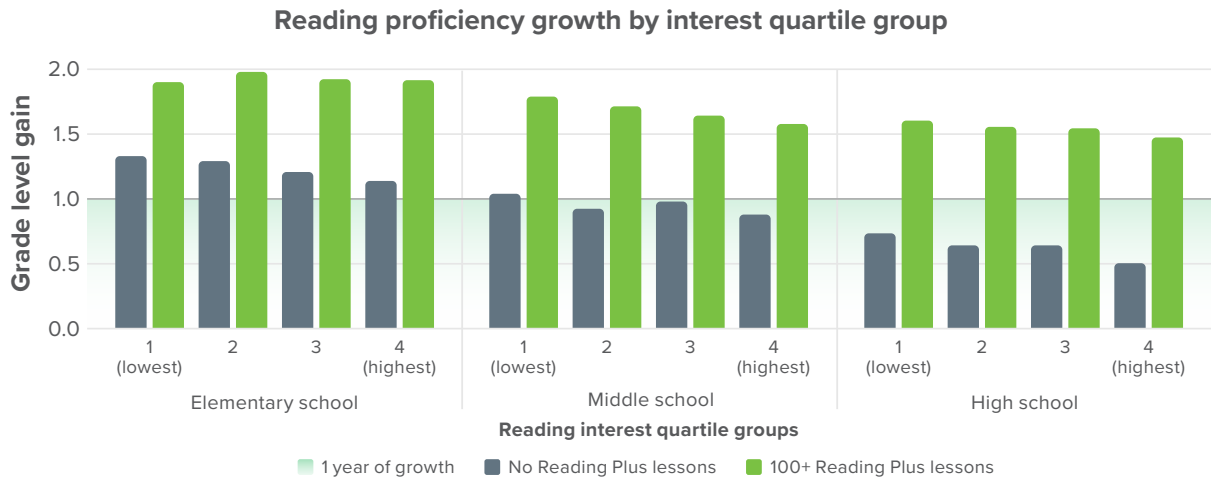


Figure 5. Mean reading proficiency growth of students at each of four levels of interest, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups and interest levels, students who engaged in Reading Plus achieved significantly larger reading proficiency gains than students who did not engage in Reading Plus practice ($p < .001$).

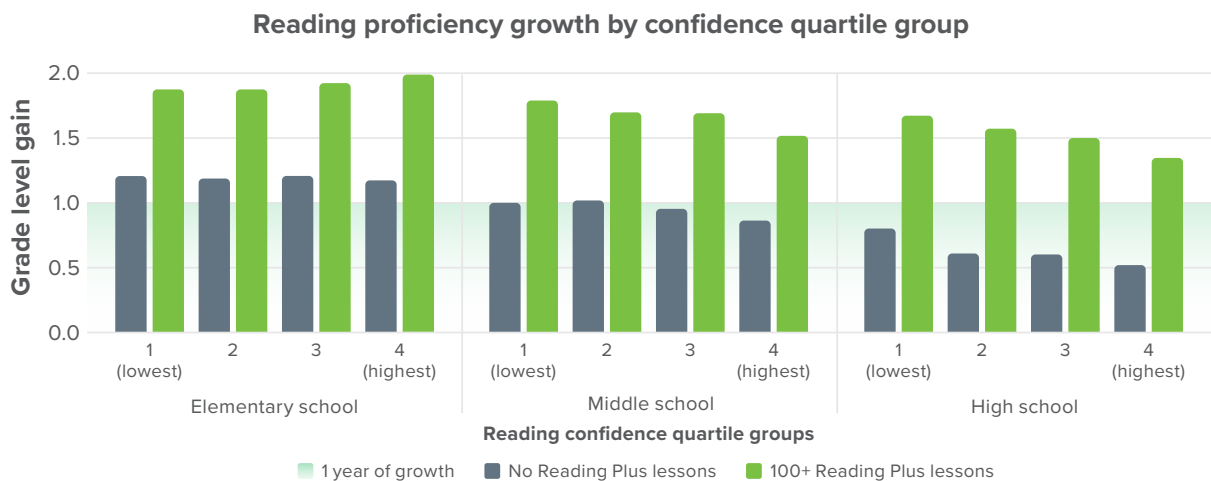


Figure 6. Mean reading proficiency growth of students at each of four levels of reading confidence, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups and confidence levels, students who engaged in Reading Plus achieved significantly larger reading proficiency gains than students who did not engage in Reading Plus practice ($p < .001$).

Variations in reading proficiency growth

This section examines the distribution of students across reading proficiency growth quartiles. Students were first divided into two groups, students who completed at least 100 DreamBox Reading Plus lessons and students who did not engage in Reading Plus practice. Students were then further divided into quartile groups based on their achieved proficiency growth as measured by the InSight assessment. Mean proficiency changes in these quartile groups ranged from a small decrease in the lowest quartile to increases of more than three grade levels in the highest quartile (across quartiles, proficiency gains averaged -0.7, 0.8, 1.8, and 3.4 grade levels respectively).

Figure 7 shows the percentages of students in each proficiency growth quartile, in elementary, middle, and high school, for students who completed no Reading Plus lessons and those who completed at least 100 lessons. At each grade level the percentages of students in the lower quartiles (small proficiency changes) were markedly smaller in the groups that completed at least 100 Reading Plus lessons. The percentages of students in the upper quartiles (large proficiency gains) were notably larger in the groups that completed at least 100 Reading Plus lessons. In other words, students who engaged in Reading Plus practice were far more like to achieve large reading proficiency gains.

Distribution of students across proficiency growth quartiles

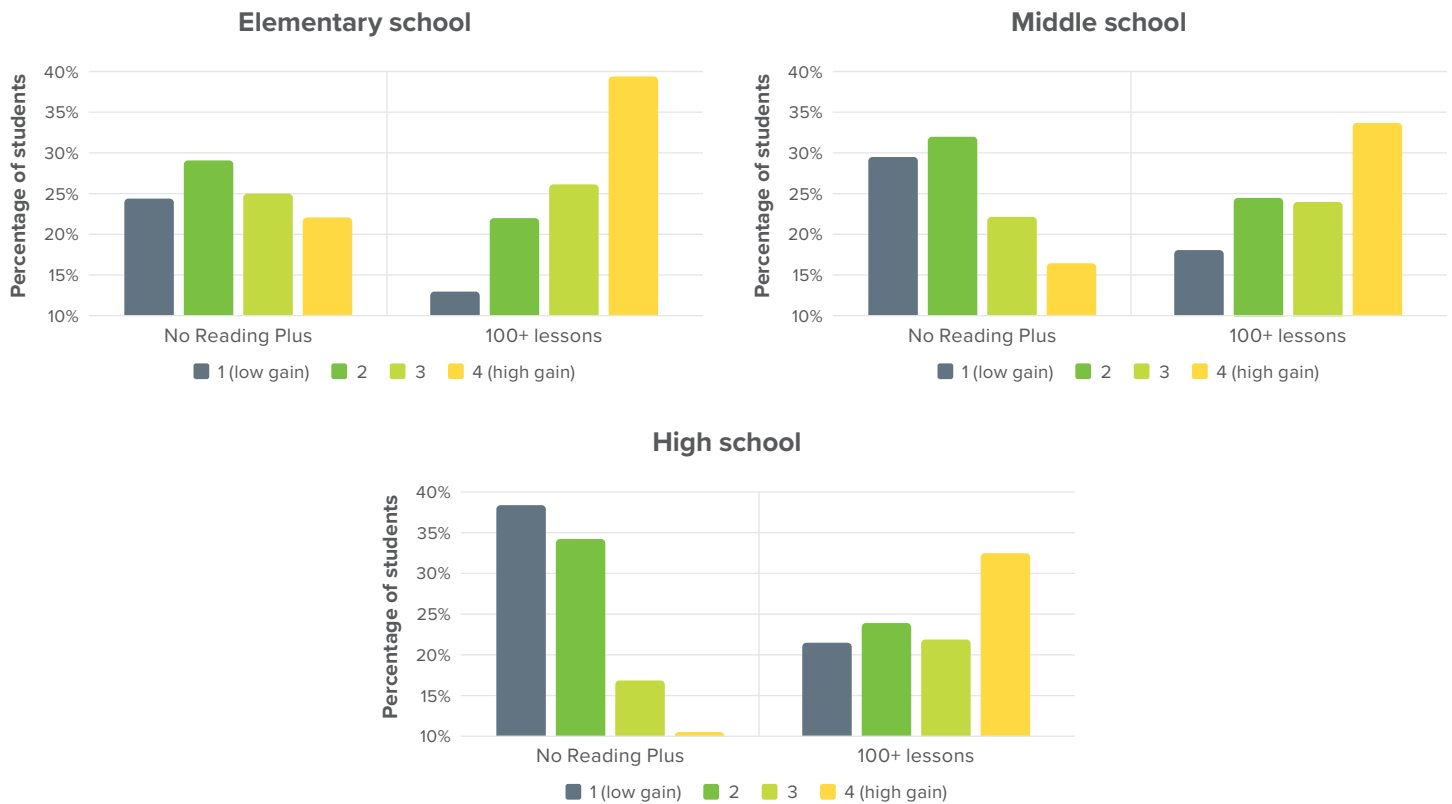


Figure 7. Percentages of students in each proficiency growth quartile, grouped by students who completed no Reading Plus lessons and those who completed at least 100 lessons. The differences in percentages were highly significant ($p < .001$).

Reading proficiency and reading motivation develop together

This section examines changes in motivation in relation to changes in reading proficiency growth. Students were again divided into quartile groups based on their achieved proficiency growth as measured by the InSight assessment. Changes in students' reported levels of reading interest and confidence (as measured by InSight) were then evaluated in each of the four reading proficiency growth quartile groups. The figures below show that across all grade groups, larger positive changes in reading interest and confidence were measured in students who also increased their reading proficiency to a greater extent over the school year (Figures 8 and 9).

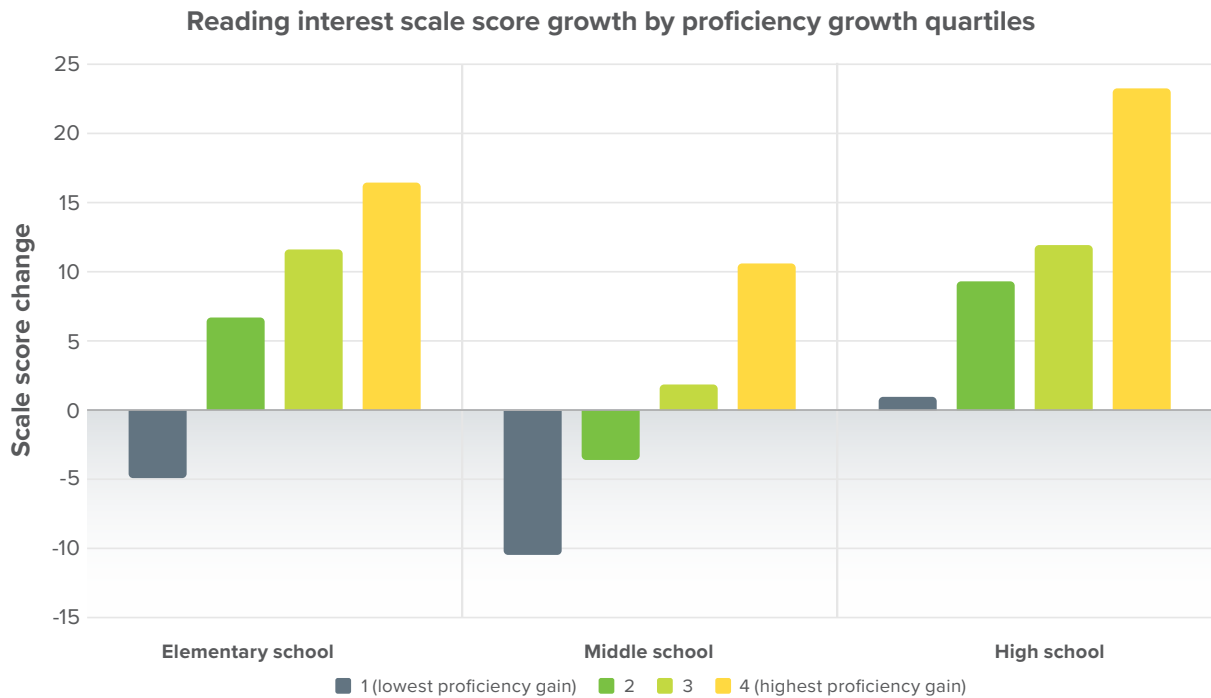


Figure 8. Mean increases in reading interest in each of four reading proficiency growth quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups, larger increases in reading interest were measured in students who achieved larger proficiency gains ($p < .001$).

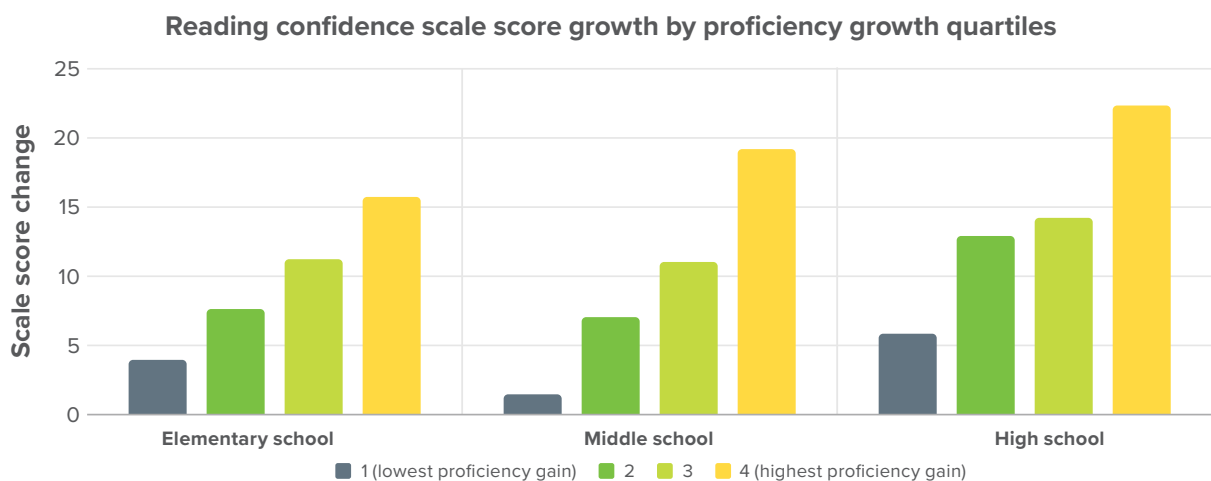


Figure 9. Mean increases in reading confidence in each of four reading proficiency growth quartile groups, in grades 2-5 (elementary school), 6-8 (middle school), and 9-12 (high school). Across all grade groups, larger increases in reading confidence were measured in students who achieved larger proficiency gains ($p < .001$).

Conclusion

These results add to a large body of research showing that reading motivation and reading success go hand-in-hand. Motivated readers accumulate more reading practice, and get better at reading. Proficient readers are better able to focus on the content of what they read rather than being distracted by the process of reading, so they can more fully comprehend and enjoy what they read.

DreamBox Reading Plus can help all students become more proficient readers, even students with low reading motivation. Further, the data just presented show that reading interest and reading confidence increase right along with a student's reading proficiency. Keeping this positive cycle going provides the momentum for further growth and achievement, along with setting the stage for discovering the joy of reading.

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2. Nist, S.L., & Simpson, M.L. (2000). College studying. In M. Kamil, P. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research*, vol. III. Mahwah, NJ: Erlbaum, pp. 645-666.

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