Imagine Reading Middle School Students Outperform Peers on the Renaissance Star Reading® Test

OVERVIEW

During the 2020–2021 school year, a public school district in Texas piloted Imagine Reading with students in Grades 6-8. On average, students read 6.5 passages. To assess program impact, Imagine Learning analyzed Fall 2020 and Spring 2021 Renaissance Star Reading scores from 2,018 Imagine Reading students, as well as from a matched comparison group of 2,018 nonparticipating peers.¹

RESULTS

Imagine Reading participants demonstrated significantly greater growth on the Renaissance Star Reading test from Fall 2020 to

Spring 2021 than nonparticipating students in the matched comparison group. Overall, Imagine Reading students evidenced a statistically significant gain of 46 points on the Renaissance Star Reading test, while the comparison group demonstrated a 12-point gain. Further, the effect size for Imagine Reading students overall was .15 compared with 0.04 for the comparison group. When the data were disaggregated by grade level, a similar trend emerged (Figure 1).

Figure 1. Change in Scale Score on the Renaissance Star Reading Test, Fall 2020 to Spring 2021 Public School District Texas Students, Treatment and Comparison Groups (N = 4,036) Fall 2020 Spring 2021 Ν 60 M (SD) M(SD) Change in Renaissance Star Reading Scale Score 669 (298) Comparison 2,018 681 (336) 50 Overall Imagine Reading 2,018 669 (290) 715 (323) 40 Comparison 691 619 (276) 633 (326) Grade 6 605 (244) 658 (294) Imagine Reading 663 30 681 675 (301) 684 (337) Comparison Grade 7 20 719 662 (291) 708 (321) Imagine Reading 10 Comparison 646 716 (310) 730 (339) Grade 8 Comparison 636 783 (342) Imagine Reading 743 (315) Imaaine Readina Full Sample 6th Grade 7th Grade 8th Grade

Note: Asterisks denote a statistically significant difference in mean scaled score growth between Imagine Reading and comparison students, *p < .05, *** p < .001.

Note: M = Mean. SD = Standard Deviation.

¹This study used a matched-comparison group design to evaluate the effects of Imagine Reading on student reading achievement. The analytical sample consisted of (1) a group of students who used Imagine Reading; and (2) a comparison group of equivalent students who did not use the program. Imagine Reading students were included in the analysis if they completed at least one lesson. Researchers used exact matching to identify a comparison group whose baseline characteristics were like those of Imagine Reading students at the beginning of the intervention. First, researchers identified comparison students whose grade level, Fall Renaissance Star Reading score, ender, ethnicity, English learner, at risk, and economically disadvantaged, special education, and 504 status were identical to the Imagine Reading sample. If a match using these procedures was not available for the Imagine Reading student, that student was removed from the analysis. Finally, researchers used independent sample-t tests and chi square tests to verify that the Fall Renaissance Star Reading assessment scores and distributions across demographic characteristics were not significantly different between the treatment and comparison groups. No significant differences were found based on chi-squared analysis (demographic variables) and a paired samples t-test (see Appendix A); therefore, the matching procedures used were successful in creating equivalent groups

| Demographics | | | | |
|--------------|-----|--|--|--|
| Hispanic | 70% | | | |
| Black | 15% | | | |
| White | 11% | | | |
| Asian | 3% | | | |
| Low Income | 74% | | | |
| Female | 54% | | | |
| | | | | |

Public School District Texas

Demographics





Appendix A

| Demographic | | Comparison n (% Sample) | Imagine Reading n (% Sample) | p |
|--|----------------------|-----------------------------------|--|------|
| Grade Level | 6 | 691 (34.2%) | 663 (32.9%) | .430 |
| | 7 | 681 (33.7%) | 719 (35.6%) | |
| | 8 | 646 (32%) | 636 (31.5%) | |
| Gender | Male | 884 (43.8%) | 933 (46.2%) | .129 |
| | Female | 1134 (56.2%) | 1085 (53.8%) | |
| Ethnicity | Asian | 38 (1.9%) | 54 (2.7%) | .013 |
| | Black | 272 (13.5%) | 302 (15%) | |
| | Hispanic | 1503 (74.5%) | 1419 (70.3%) | |
| | White (Not Hispanic) | 187 (9.3%) | 212 (10.5%) | |
| English Learner | Yes | 607 (30.1%) | 558 (27.7%) | .095 |
| | No | 1411 (69.9%) | 1460 (72.3%) | |
| At Risk | Yes | 727 (36%) | 681 (33.7%) | .137 |
| | No | 1291 (64%) | 1337 (66.3%) | |
| Economically | Yes | 1571 (77.8%) | 1495 (74.1%) | .006 |
| Disadvantaged | No | 447 (22.2%) | 523 (25.9%) | |
| Special Education | Yes | 134 (6.6%) | 142 (7%) | .662 |
| | No | 1884 (93.4%) | 1876 (93%) | |
| 504 | Yes | 90 (4.5%) | 117 (5.8%) | .064 |
| | No | 1928 (95.5%) | 1901 (94.2%) | |
| Average Fall 2020 Renaissance Star Reading Scale Score (<i>SD</i>) | | 669.3 (298.2) | 669.5 (289.7) | .931 |

Note: For each demographic variable, the sample is considered statistically equivalent if the p-value is greater than 0.05. Average Fall 2020 Renaissance Star Reading scores were not significantly different between the Imagine Reading and comparison group. The two groups were statistically equivalent.

