

# Positive Association Between Use of Imagine Language & Literacy and NWEA MAP Reading Performance

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## Background

Research indicates that computer-assisted instruction can positively impact students' performance in language and literacy development (Cassady, Smith, & Thomas, 2018; Cheung & Slavin, 2012; Macaruso & Walker, 2008). Imagine Language & Literacy is instructional software designed to build language and literacy skills among students in Pre-K through sixth grade, and for English language learner (EL) students in Pre-K through eighth grade. To improve language and literacy achievement, Imagine Language & Literacy features instruction in phonemic awareness, phonics, vocabulary, fluency, comprehension, grammar, and language development (both academic and conversational). The program aligns with educational standards and addresses skills students need to become proficient in reading.

During the 2017-2018 school year, seven elementary schools in a southern California school district implemented Imagine Language & Literacy as a supplemental tool for students in kindergarten through grade five. To determine the impact of the program on student growth, the association between the number of lessons students passed within the Imagine Language & Literacy program and the NWEA MAP RIT score growth students experienced was evaluated. Students who used Imagine Language & Literacy logged an average of approximately twenty-eight hours in the program across the school year.

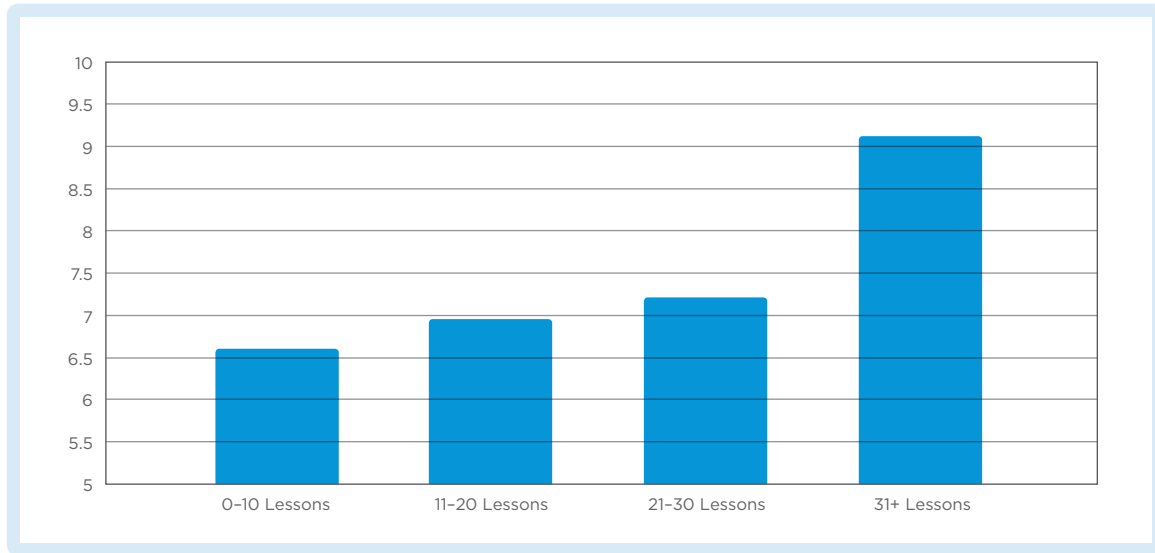
## Results

The figures below present the average NWEA MAP Reading RIT score growth for students who used Imagine Language & Literacy during the 2017-2018 school year. The results from the beginning of the year to the middle of the year (Figure 1) and beginning of the year to the end of the year (Figure 2) are disaggregated by program-usage levels. Ultimately, these results demonstrate positive and statistically significant associations between increasing use of the Imagine Language & Literacy program and score growth on the NWEA MAP Reading assessment.

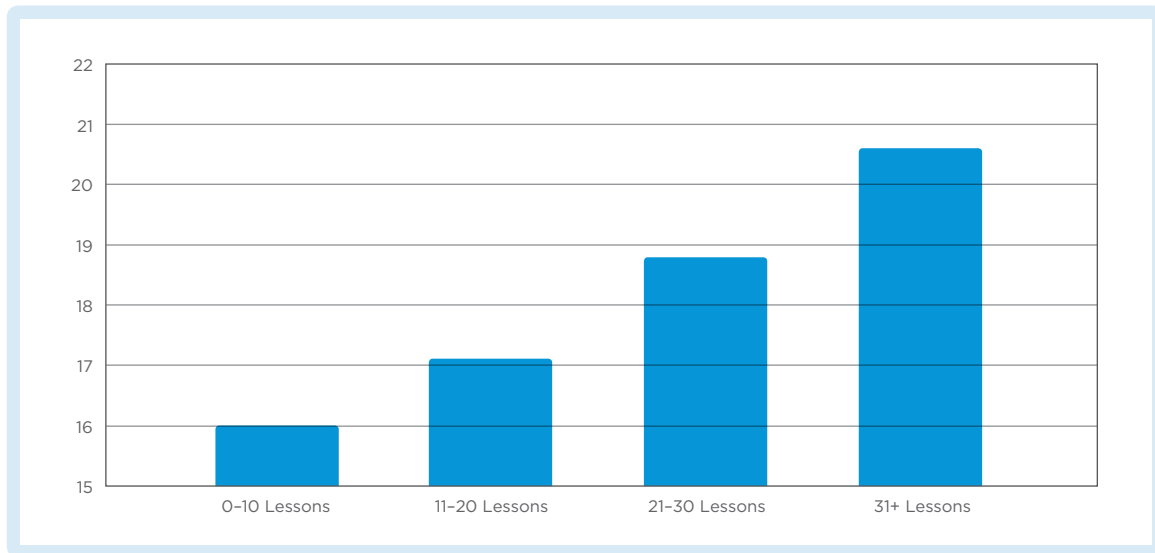
## Conclusions

The results of this study support the role of Imagine Language and Literacy as a supplemental tool for the development of language and literacy achievement. Students who used the program in this California school district for the 2017-2018 school year experienced significant improvements in language and literacy proficiency as demonstrated by middle-of-year and end-of-year performance on the NWEA's MAP assessment. Given these findings, we would expect similar results for other students who use the Imagine Language and Literacy program with fidelity.

**Figure 1.** Average Increase in BOY to MOY RIT Score Growth by Imagine Language & Literacy Usage Level for Grades 2-5



**Figure 2.** Average Increase in BOY to EOY RIT Score Growth by Imagine Language & Literacy Usage Level for Grades 2-3



## References

- Cassady, J. C., Smith, L. L., & Thomas, C. L. (2018). Supporting emergent literacy for English language learners with computer-assisted instruction. *Journal of Research in Reading, 41*(2), 350-369. doi:10.1111/1467-9817.12110
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- Macaruso, P., & Walker, A. (2008). The efficacy of computer-assisted instruction for advancing literacy skills in kindergarten children. *Reading Psychology, 29*, 266-287. doi:10.1080/02702710801982019