

ACER’s PAT– Vocabulary and PAT-Reading Comprehension tests were administered pre and post intervention to determine whether the SSR had measurable effects on vocabulary development and reading comprehension. The use of ACER PAT testing allowed us to compare gains to an Australian normed sample.

Research shows that significant changes in literacy skills take longer to develop than a year of SSR. Despite this, we did find some improvements in both Vocabulary and Reading Comprehension for our students in Years 5 to 12, 2020.

PAT-Vocabulary

Based on a paired t-test, vocabulary improved for students in all grades after the intervention, with the exception of Year 8, with individual improvement as high as 23%.

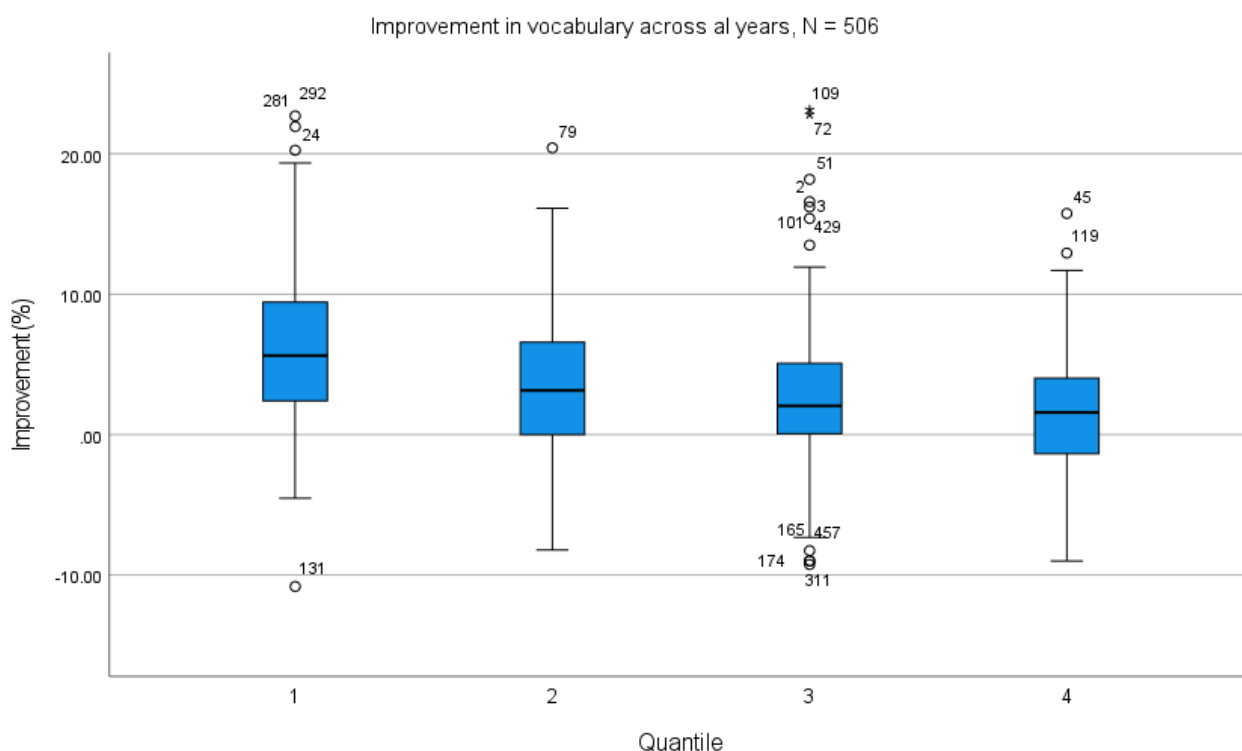


Figure 1: boxplot diagram showing improvements in vocabulary across the ability quartiles of all years.

A greater improvement in vocabulary was found for the bottom quartile of students than for all other quartiles, as shown in Figure 1. Improvement was smallest for the top quartile of students, possibly due to the ceiling effect of the PAT tests.

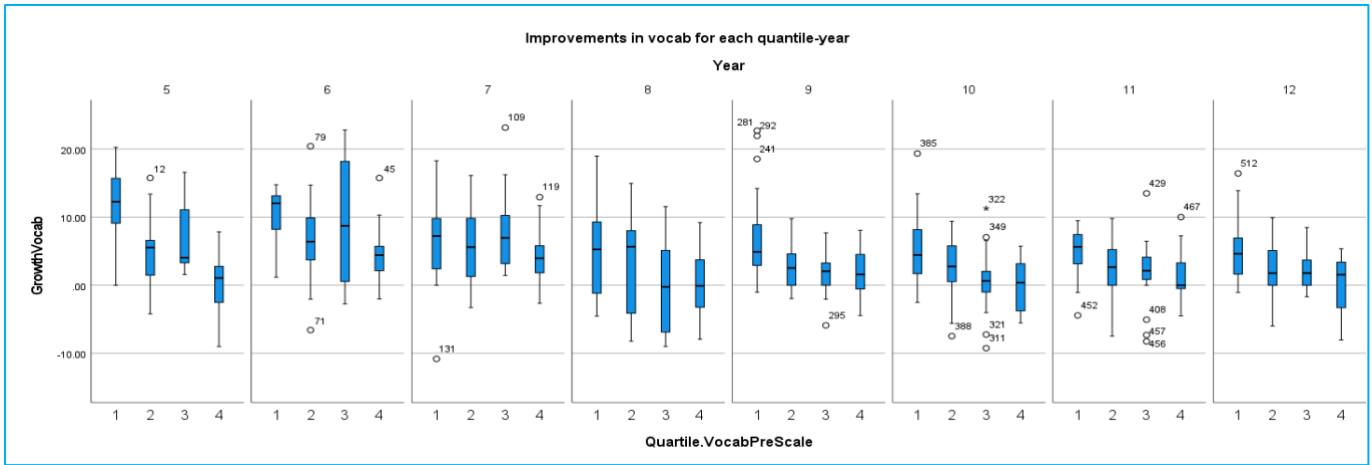


Figure 2: boxplot showing improvements in vocabulary across ability quartiles, for each age group, from Year 5 to Year 12, 2020.

The improvements in vocabulary were greatest in the younger years, with the smallest improvements occurring in the oldest students, as shown in Figure 2. This needs further investigation as while there could be greater improvements in the younger years, this difference could have related to the reduced intrinsic motivation shown by the older students for the testing.

PAT-Reading Comprehension

Based on a paired t-test, individual improvements in reading comprehension were as much as 22%, with average improvements occurring in Year 5, 7, 9, and 11 after the intervention. Of the 503 students tested, there was no evidence of differing improvements across the various quartiles, based on a Jonckhere-Terspra test. This is shown in Figure 3.

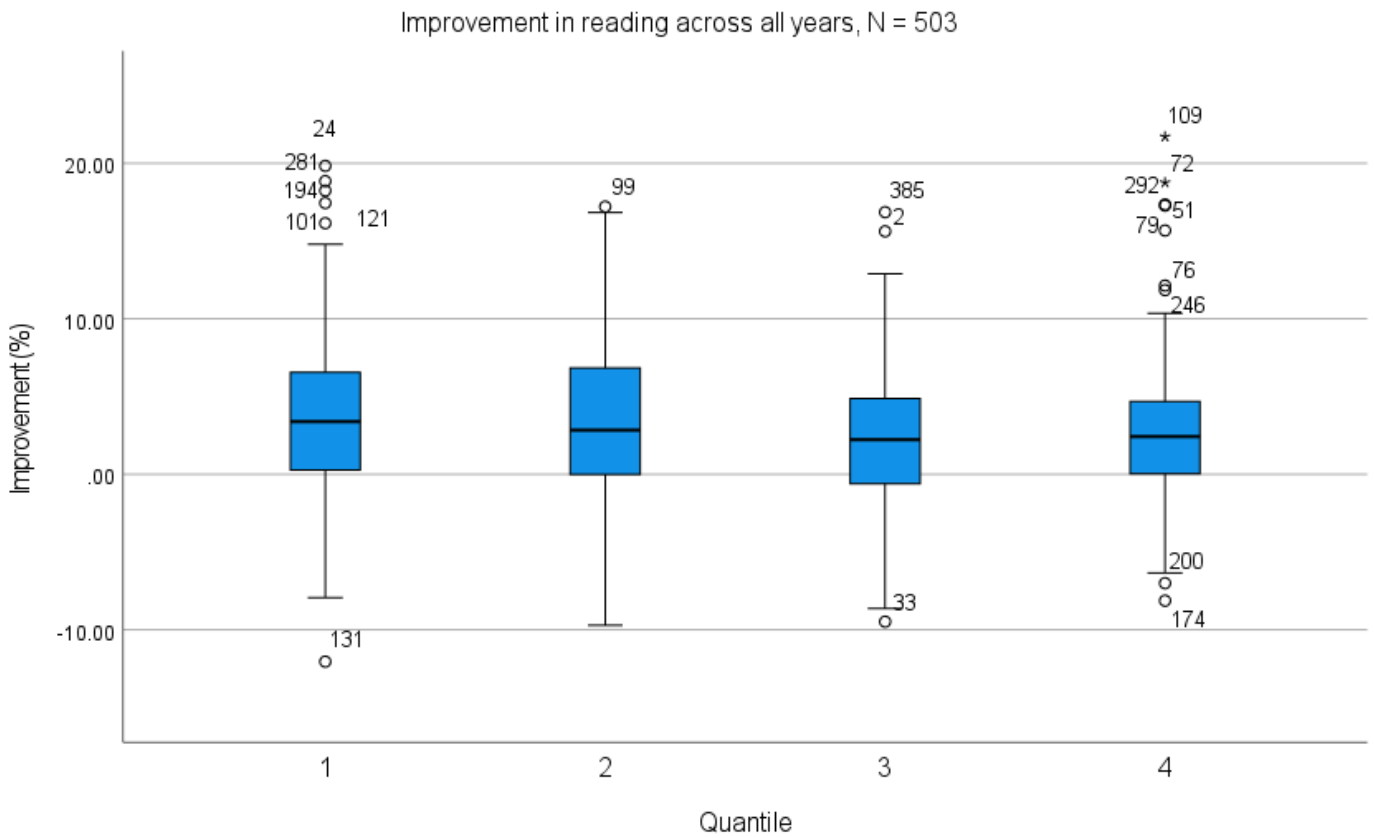


Figure 3. Boxplot diagram showing improvements in reading comprehension across all years.

As Figure 4 shows that there is a lot of noise in the PAT-Reading Comprehension data, with a number of outliers and some large error bars, making it difficult to determine whether there is a consistent pattern. A number of factors impact reading ability, and this explains the variation in the data.

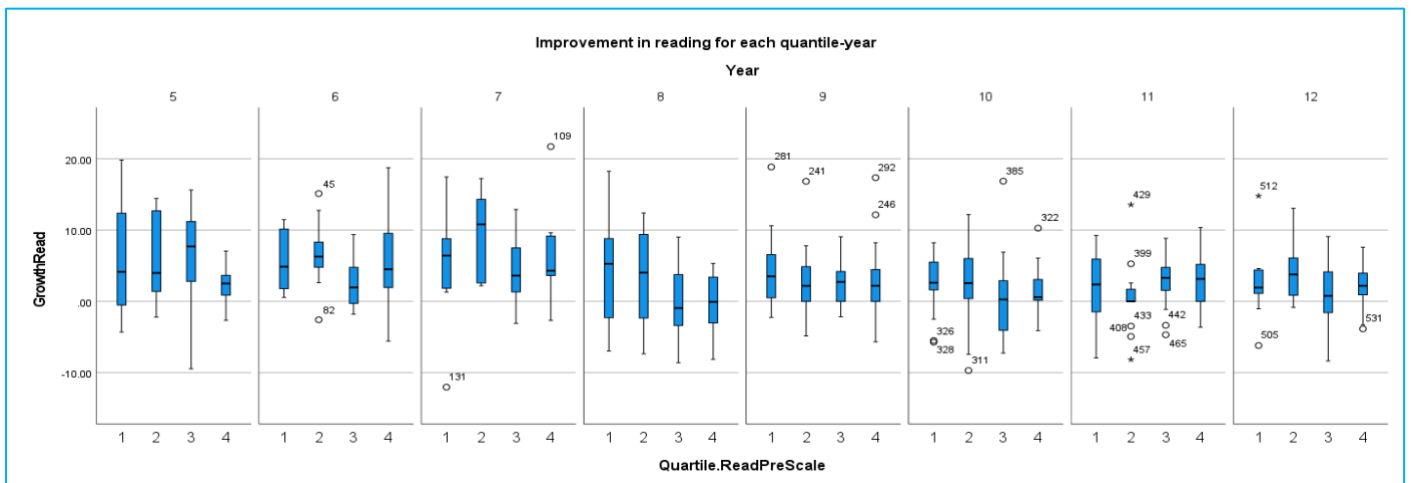


Figure 4. boxplot showing improvements in reading comprehension across ability quartiles, for each age group, from Year 5 to Year 12, 2020.

While these improvements are modest, they do show that the initial phase of the Just Read program has led to increases in literacy skills. We look forward to analysing data collected as part of our longitudinal study.