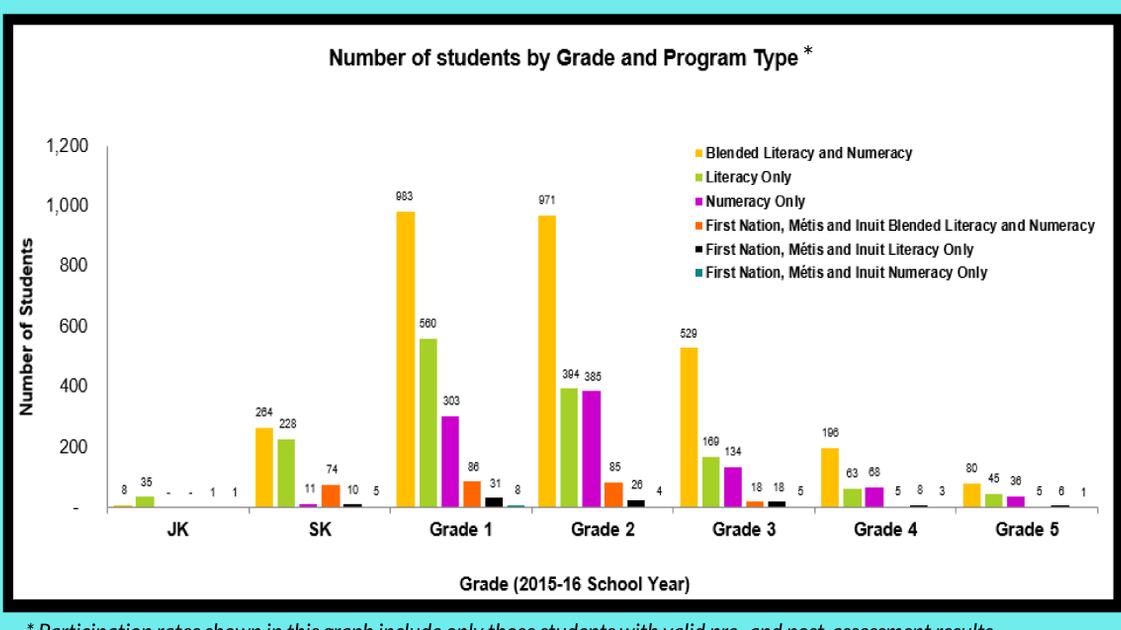
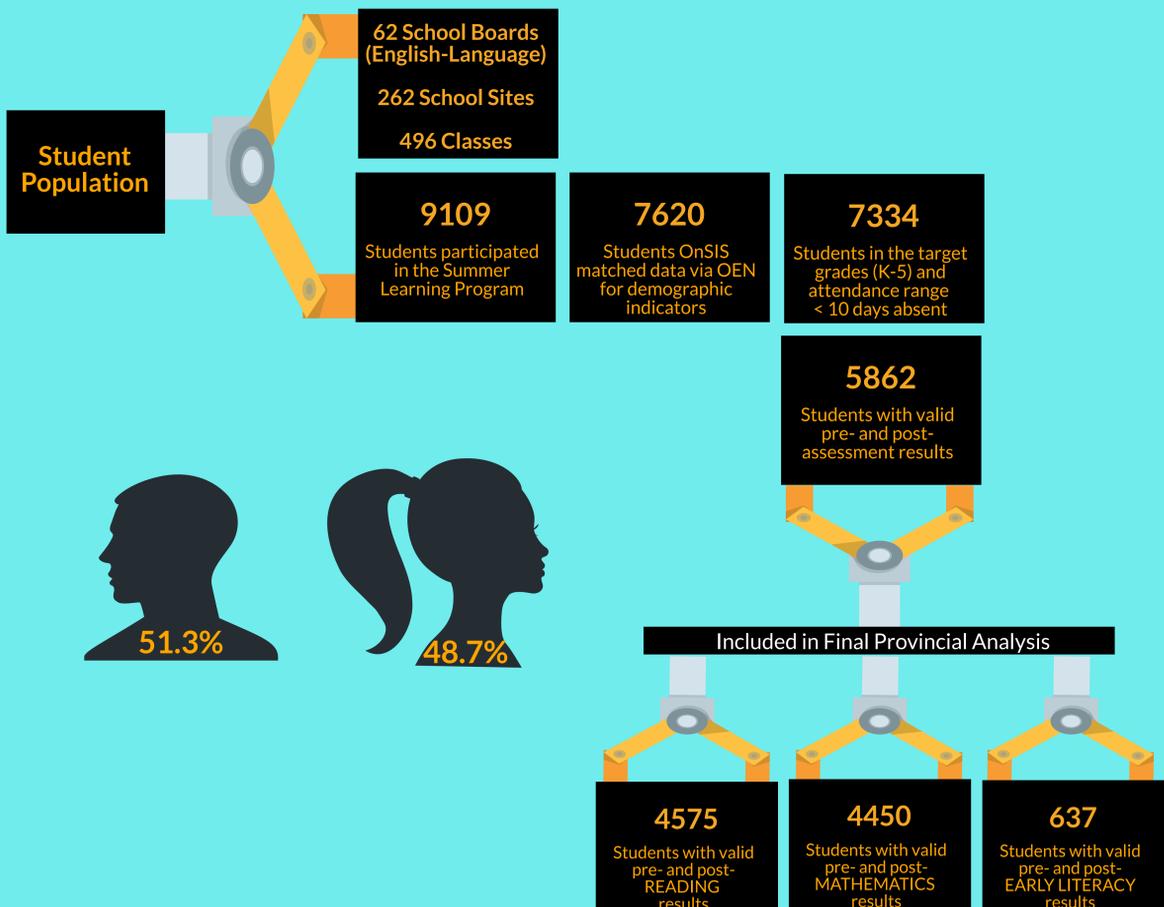


SUMMER LEARNING PROGRAM 2016



The Summer Learning Program is a three week intervention program targeted towards ensuring equitable opportunities and outcomes for students in primary and junior grades (K-5). The program is intended to reduce summer learning loss and improve literacy and numeracy skills through a mix of high quality instruction and recreational programming for vulnerable students who may face academic and/or socio-economic challenges in learning.



Research Questions:

- Was there an increase in student assessment scores following program completion?
- Were factors such as gender, grade level, program structure, and number of days absent related to changes in assessment scores?



The score selected for statistical analysis of STAR assessment results is the Normal Curve Equivalent (NCE). This score is defined as "a norm-referenced score that is similar to percentile rank, but is based on an equal interval scale. NCEs are useful in making comparisons i.e. determining an average score for a group of students. NCE scores range from 1 to 99" (Renaissance Learning, 2016).

Across All Program Types:

- Grade 1-5**
- Reading skills were assessed using the STAR Reading assessment.
 - Math skills were assessed using the STAR Math assessment.
- Kindergarten**
- Reading skills were assessed using the STAR Early Literacy assessment.
 - Math skills were assessed using the Early Numeracy sub-domain score within the STAR Early Literacy assessment.

Main Findings

Across all assessment types, there were statistically significant improvements between pre- and post-assessments following program completion for students who participated in a related program (i.e., students with a Literacy test receiving an education in Literacy, and students with a Numeracy test receiving an education in Numeracy).

Grades 1-5

Literacy Assessment - Students in Literacy focused (or blended) programs gained an average of 2.1 points in NCE scores. Numeracy Assessment - Students in Numeracy focused (or blended) programs gained an average of 1.9 points in NCE scores.

Kindergarten

Kindergarten students were assessed using the STAR Early Literacy test and results were provided within four reading classification levels (Early Emergent, Late Emergent, Transitional, and Probable). While most students did not move between levels (431 students, 69.52%), 121 students moved up at least 1 level (19.52%) and 68 students moved down at least 1 level (10.97%). This trend has remained consistent over the last three years.

Early Numeracy (EN score) Sub-Domain: Kindergarten students in Numeracy focused programs gained an average of 2.5 points in EN scores.

Program Focus

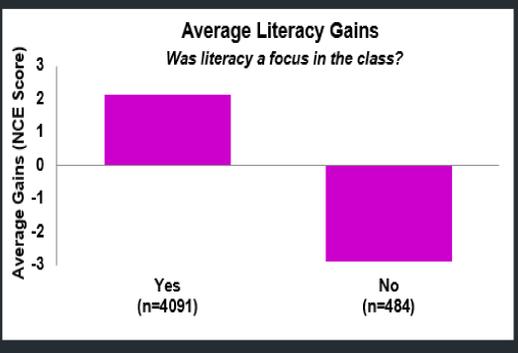
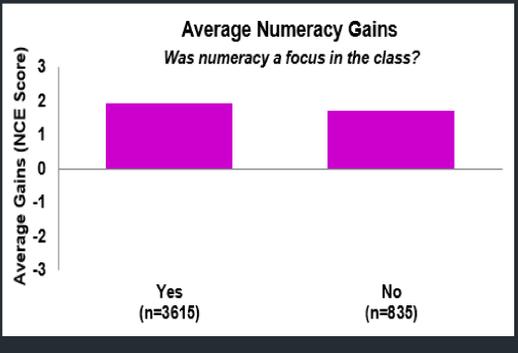
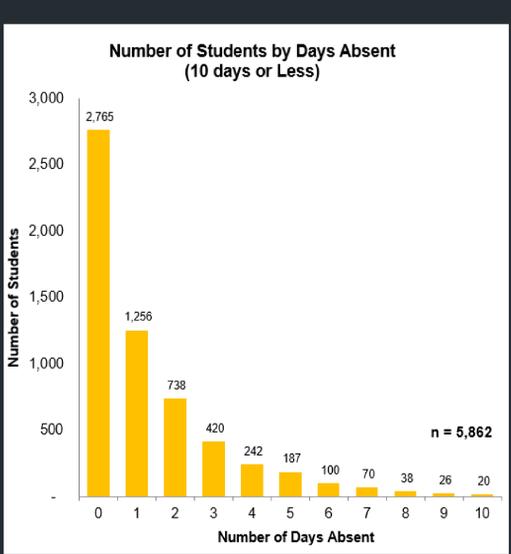
Comparing gains in the Literacy assessment between students whose education included Literacy (Blended and Literacy only programs) and those whose did not (Numeracy only programs), the gains of students whose education included Literacy was statistically significant higher than those whose did not ($p < 0.0001$).

Comparing gains in the Numeracy assessment between students whose education included Numeracy (Blended and Numeracy only programs) and those whose did not (Literacy only programs), there was no statistically significant difference.

Effect of Grade Level

Students in Grade 1 showed the greatest improvements compared to students in all other grade levels (Average gains in NCE scores: Literacy = 4.97, Numeracy = 4.13). This has been a consistent finding over the last three years.

The Summer Learning Program is intended to mitigate summer learning loss. Assessment results show not only mitigation of loss but evidence of gains as well. Gains were made in numeracy regardless of whether the program itself focused on numeracy. However, in classes with a sole focus on numeracy, students on average experienced statistically significant losses in literacy. Exploring this trend over time will continue be valuable, especially for considerations around program planning and implementation and determining which class types might best help mitigate learning loss in both areas rather than gains in one at the expense of the other.



After analyzing the potential relationship between student achievement and gender or the number of days absent it was determined that there was no discernible relationship between these factors and student achievement in 2016.