

# EPP Completer Impact Study P-12 Student Achievement Growth Data Analysis

# Spring 2021

#### Introduction

To help our EPP measure the effectiveness of our completers' teaching performance in P-12 settings, our EPP reached out to one of our partnership school districts and obtained the achievement test scores of the students who are taught by our completers.

### **Completer Characteristics**

A total of 37 completers who were hired within the past 5 years are studied in terms of their teaching effectiveness, among whom 17 are elementary school teachers and 20 are middle school teachers.

# Methodology

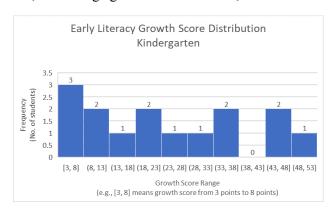
Four P-12 student achievement test scores, i.e., early literacy, early numeracy, reading and math, are provided by our partnership school district. Using the value-added approach, we calculated the difference of student achievement test scores between winter 19-20 and fall 19-20 as student growth score. These growth scores serve as an indicator of our completers' teaching effectiveness.

#### Results

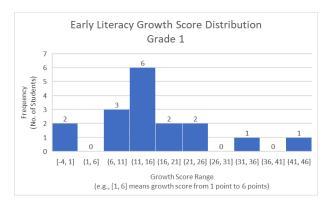
Early Literacy

We analyzed 1 completer who teaches kindergarten and 1 completer who teaches first grade with a total of 15 students and 17 students respectively.

For kindergarten students, the maximum growth score in early literacy is 51, the minimum growth score is 3, the average growth score is 24.67, and the standard deviation is 16.63.



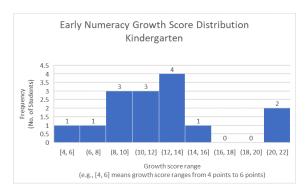
For first grade students, the maximum growth score in early literacy is 45, the minimum growth score is -4, the average growth score is 15.88, and the standard deviation is 12.10.



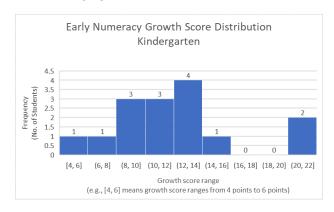
# Early Numeracy

We analyzed 1 completer who teaches kindergarten and one teacher teaches first grade with a total of 15 students and 17 students respectively.

For kindergarten students, the maximum growth score in early numeracy is 22, the minimum growth score is 4, the average growth score is 12.47, and the standard deviation is 4.69.



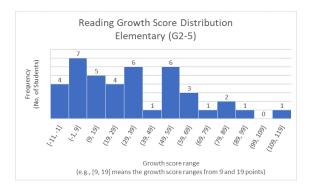
For first grade students, the maximum growth score in early numeracy is 25, the minimum growth score is 0, the average growth score is 11, and the standard deviation is 7.71.



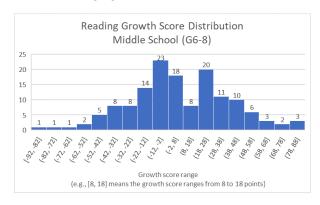
# Reading

We analyzed 3 completers who teaches at elementary school level and 5 completers who teach at middle school level with a total of 41 elementary students and 144 middle school students respectively.

For elementary students, the maximum growth score in reading is 113, the minimum growth score is -52, the average growth score is 33.12, and the standard deviation is 32.85.



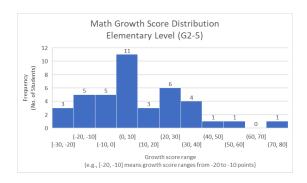
For middle school students, the maximum growth score in reading is 85, the minimum growth score is -92, the average growth score is 6.03, and the standard deviation is 33.01.



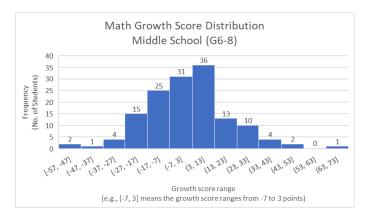
## Math

We analyzed 3 completers who teaches at elementary school level and 5 completers who teach at middle school level with a total of 40 elementary students and 144 middle school students respectively.

For elementary students, the maximum growth score in math is 72, the minimum growth score is -30, the average growth score is 9.45, and the standard deviation is 21.98.



For middle school students, the maximum growth score in math is 73, the minimum growth score is -57, the average growth score is 1.47, and the standard deviation is 18.72.



## Discussion

Overall, our completers demonstrate their teaching effectiveness by helping their students increase their achievement test scores. Comparatively, their effectiveness in teaching early literacy and reading is higher than early numeracy and math.

For kindergarten, P-12 students' average growth score in early literacy is 24.67 with a standard deviation of 16.63, while average growth score in early numeracy is 12.47 with a standard deviation of 4.69.

For first grade, P-12 students' average growth score in early literacy is 15.88 with a standard deviation of 12.10, while average growth score in early numeracy is 11 with a standard deviation of 7.71.

For elementary school level, P-12 students' average growth score in reading is 33.12 with a standard deviation of 32.85, while average growth score in math is 9.45 with a standard deviation of 21.98.

For middle school level, P-12 students' average growth score in reading is 6.03 with a standard deviation of 33.01, while average growth score in math is 1.47 with a standard deviation of 18.72.

Above data also shows that for literacy and reading, our completers' teaching effectiveness measured by achievement score maximizes at elementary level. Then it drops at middle school level.

As for math, our completers' teaching effectiveness measured by achievement score maximizes at kindergarten level and then taper off as the grade goes up.

We note that these are small sample and only offer us a limited insight of how our completers teach and impact on their students' growth.