

# Afterschool Programs' Effect on Poverty-Adjusted Performance

*April 12th, 2016*

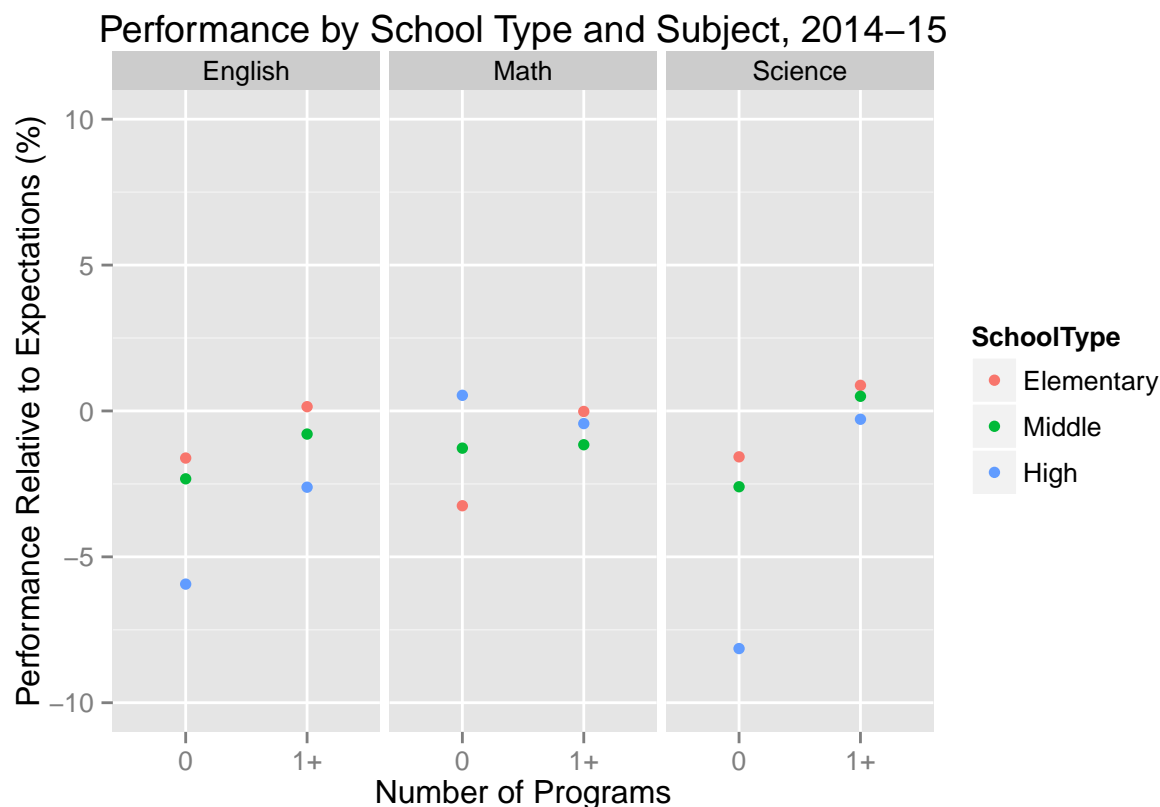
## Abstract

Afterschool programs can serve low income kids, working to lower the achievement gap and level the playing field. These programs are chronically under-funded in Oregon; low-income programs are often publicly funded and are unable to sustain themselves without this stream of funding.

We look at the effect of summer and afterschool programs on the performance of Oregon schools after controlling for the effects of poverty. Our conclusion is that programming has a strongly positive correlation with performance, but with some caveats about the data we have available.

## Summary

We looked at how well 993 schools did in each subject as compared to schools of a similar poverty level and grade level, and computed averages. The results are summarized below.



There are several caveats that must be acknowledged along with this analysis:

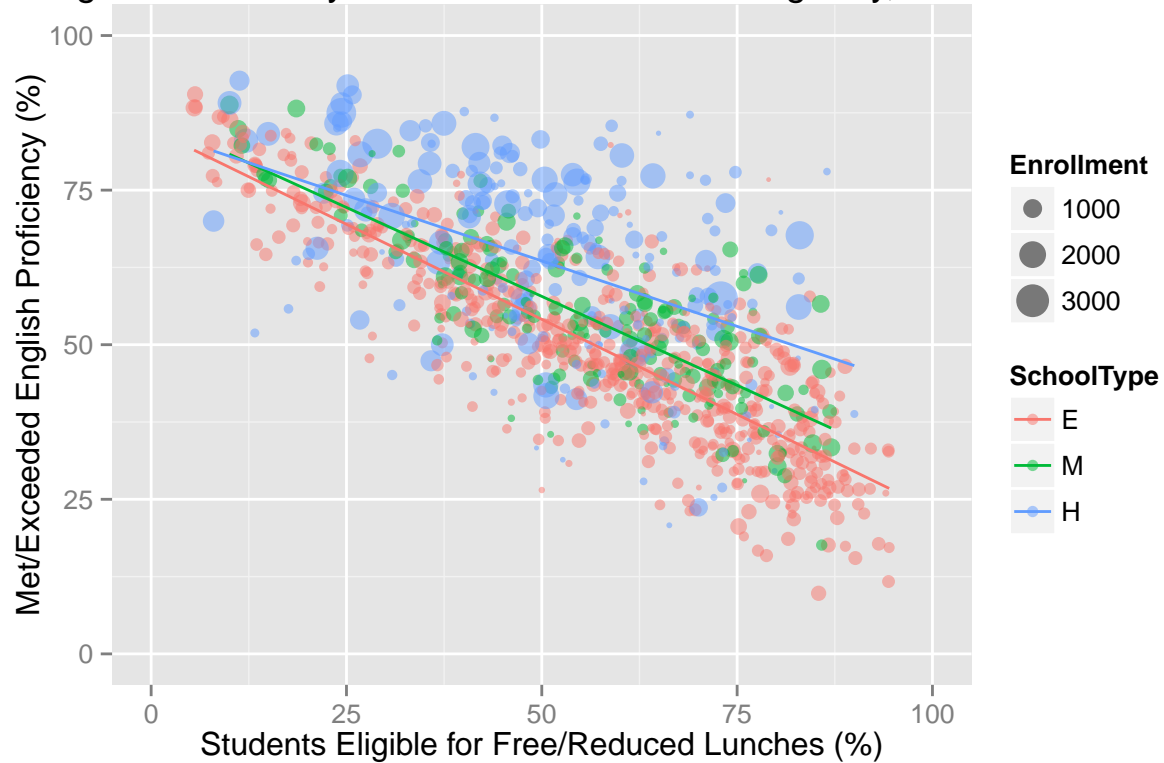
- We do not have complete data on the majority of the over 5000 schools in Oregon
- We have much more data on elementary schools than on middle or high schools
- Most of the schools with complete data also host programs

## Methodology

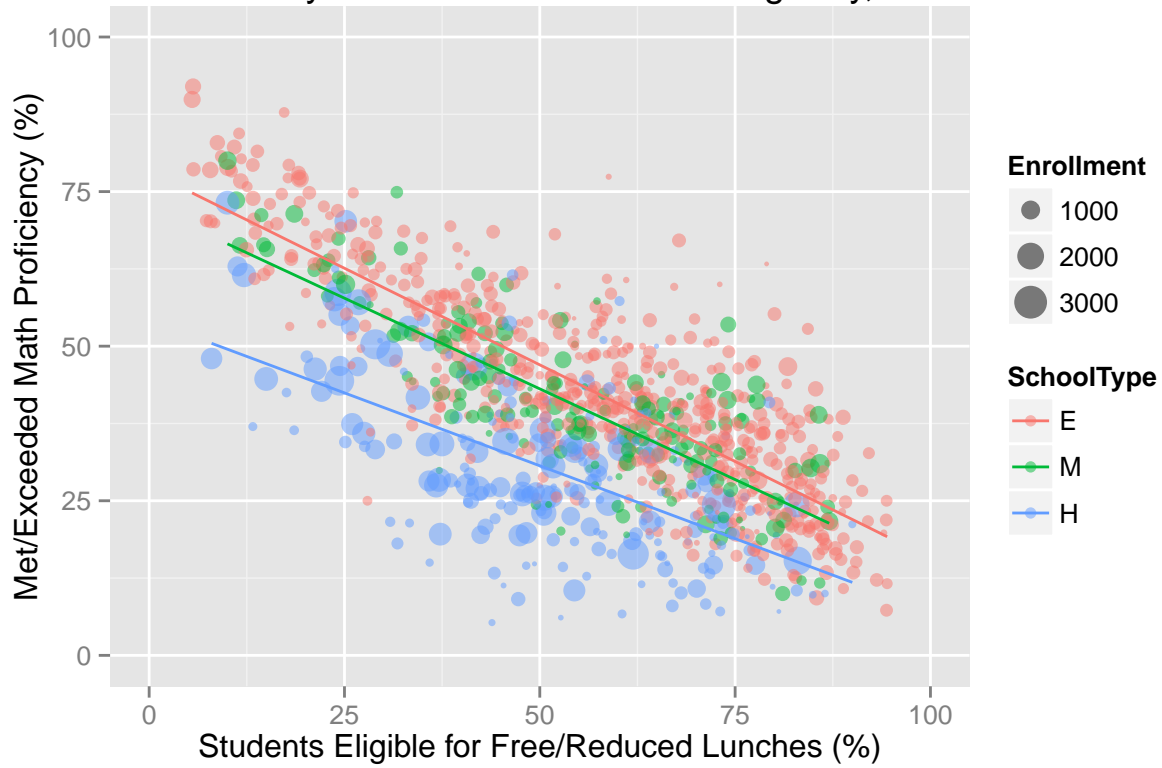
First, we describe the data analyzed in this report. We start by combining enrollment, free or reduced lunch eligibility (FRLE), and standardized test performance on the schools for which complete data exists. Using FRLE rates as a metric of poverty, we first model the effect of poverty on school performance so that we may focus instead on the effect of afterschool programs.

In the following charts, we show the percent of students that met or exceeded the standard in a subject (English, Math, Science) as a function of the FRLE rate. The size of each dot reflects the school's enrollment, and the color reflects its grade level. We have also added lines of best fit.

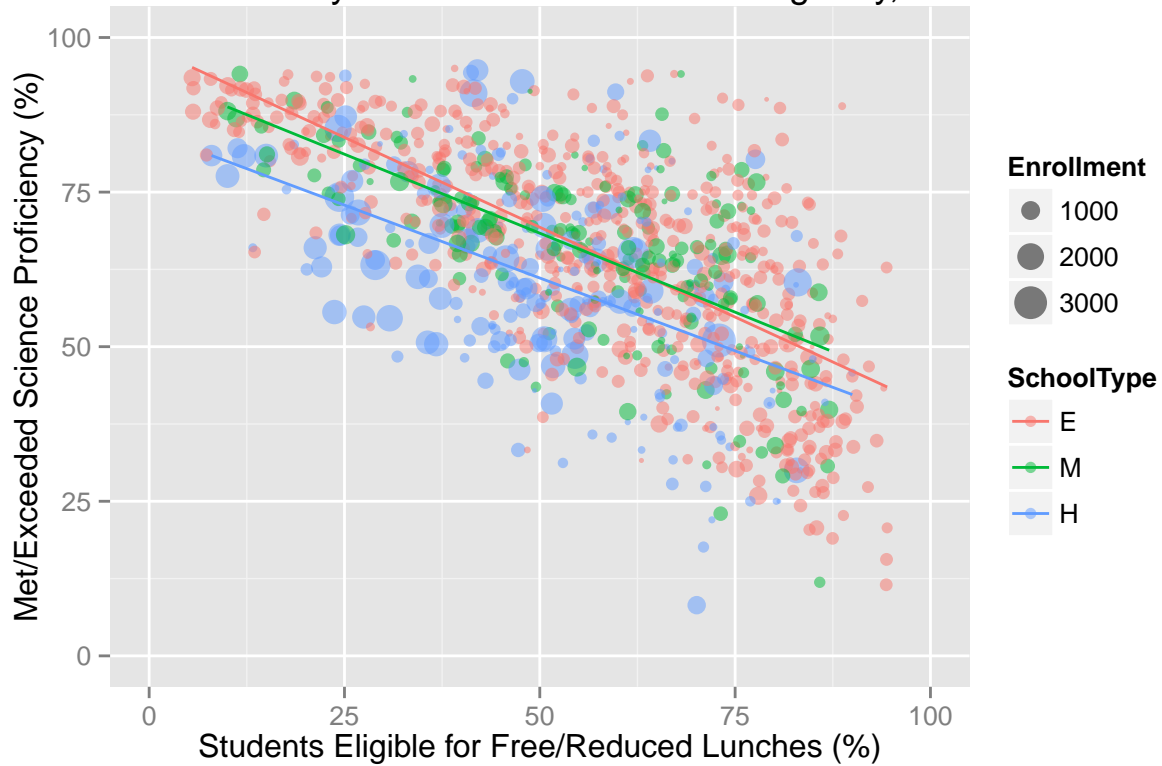
### English Proficiency v Free/Reduced Lunch Eligibility, 2014–15



Math Proficiency v Free/Reduced Lunch Eligibility, 2014–15

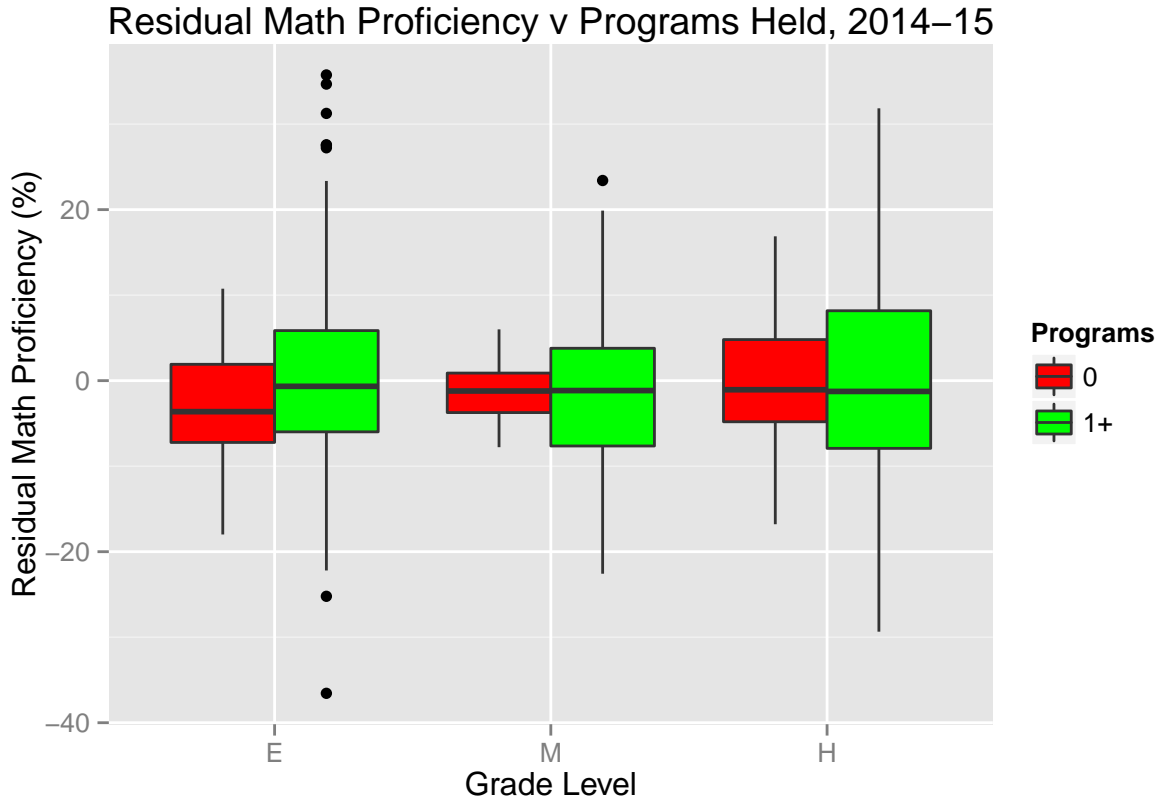
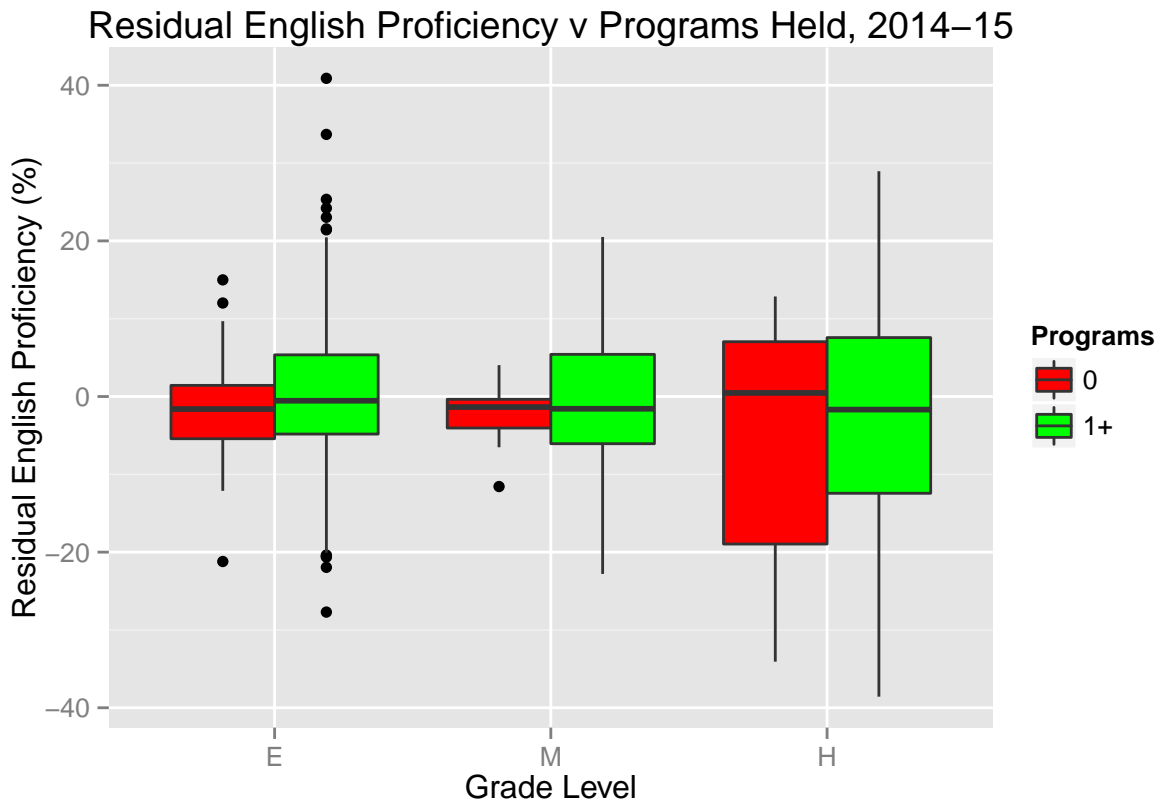


Science Proficiency v Free/Reduced Lunch Eligibility, 2014–15



To focus on the effect of afterschool programs, we compute the difference between a school's percentage of students that meet or exceed the standard in each subject and the expected percentage based on FRLE rate. The result is a residual performance rating for each school, where a rating of 3 would suggest that the school

exceeded its expected performance in a subject by 3 percentage points.



Residual Science Proficiency v Programs Held, 2014–15

