

NYC Pre-Kindergarten School Quality Report 2017- 2018

August 2020

Summary

The 2017-2018 School Quality Report - Pre-K Programs was published on July 21, 2020 and includes data on over 1,600 Pre-K programs. The data was sourced from an API provided by the NYCDOE.

Identified “top schools” based on parent and collaborative teacher responses that were greater than 90 and determine if parent survey scores can be projected based on enrollment, cluster the schools for comparison, map the “top schools” to determine their location.

Sample selection

- Selected schools where the parents and teachers each gave the school a rating of greater than 90.
- This resulted in 100 schools.
- One school was considered an outlier and was dropped from the sample.

Models used

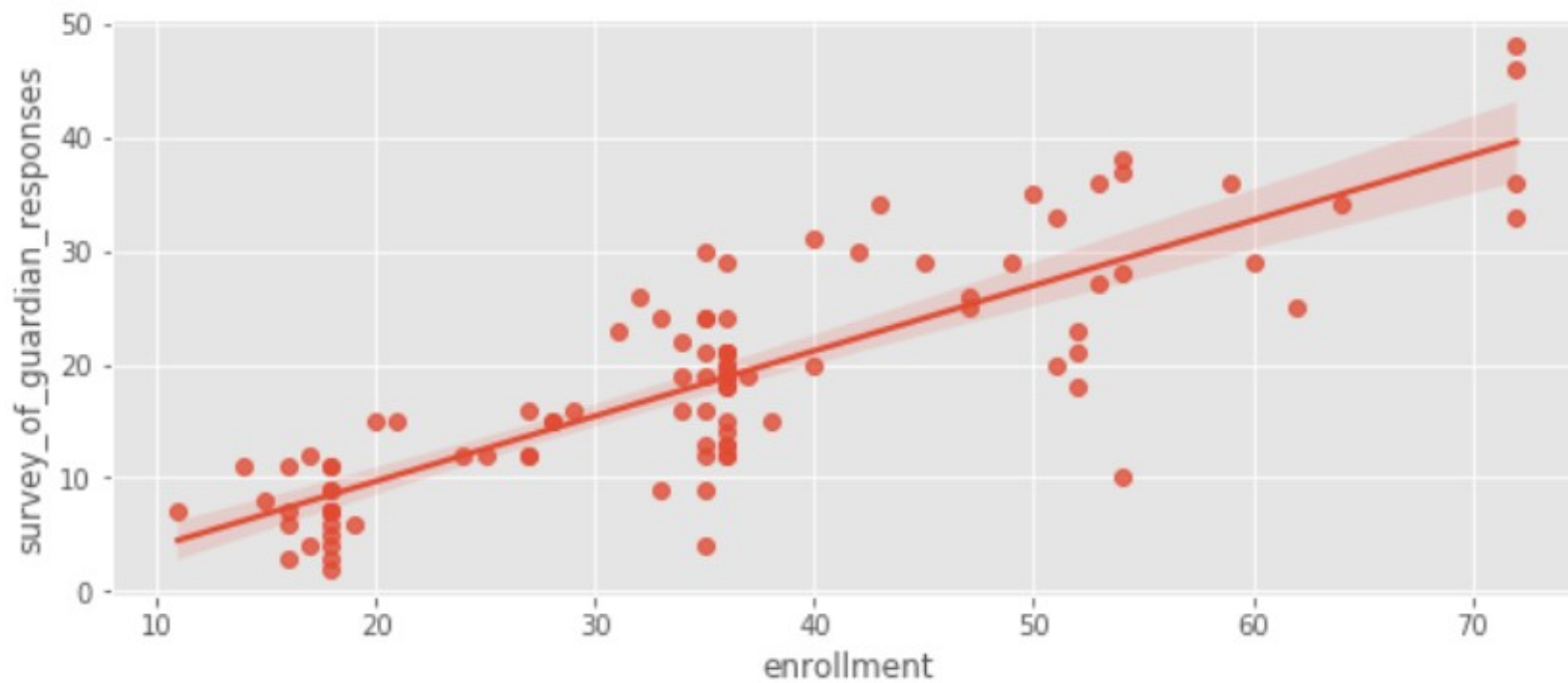
- Scitkit Learn Linear model
- Kmeans clustering
- Geopy
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Descriptive statistics for enrollment parent survey and teacher survey

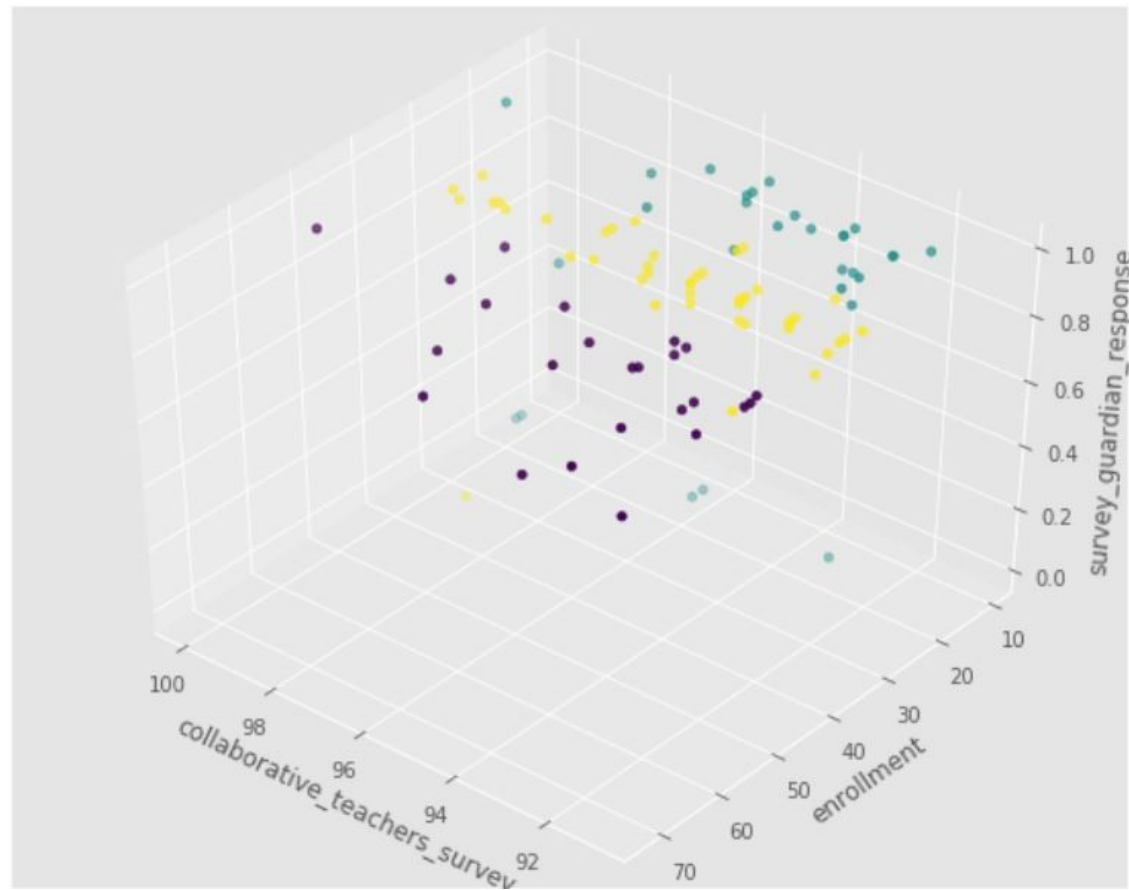
	enrollment	guardian responses	teachers survey
count	99.000000	99.000000	99.000000
mean	35.383838	18.525253	94.222222
std	14.719629	10.116004	2.439285
min	11.000000	2.000000	91.000000
25%	22.500000	11.000000	92.000000
50%	35.000000	18.000000	94.000000
75%	42.500000	24.500000	96.000000
Max	72.000000	48.000000	100.000000

The highest score for the parents survey was 48!

Can a linear model forecast the scores provided by parents?



Cluster of data





Model Results

Coefficients: 0.53197729

Intercept: -0.39606296

Mean absolute error: 4.28

Residual sum of squares (MSE): 30.46

R²-score: 0.58

It is not unusual for behavioral models to have R² of around .5

Map of the top schools

