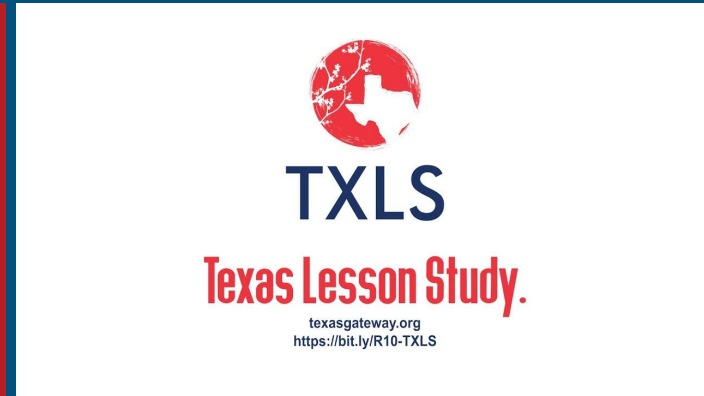# Improving District STAAR Results

Provided for Bay City ISD by Jonathan Armstrong
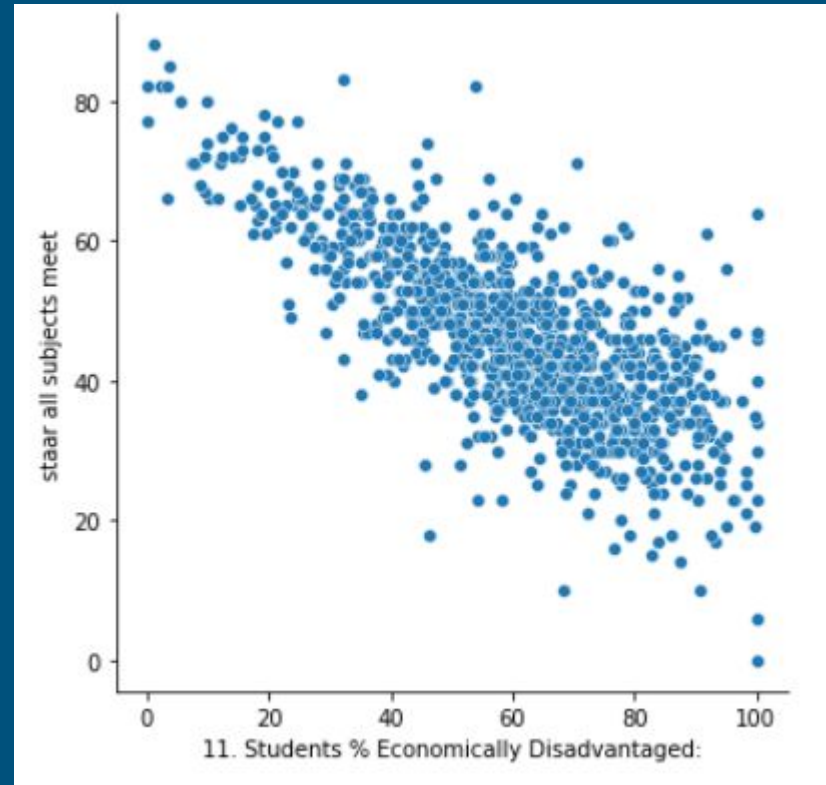
My Goal: Improve student outcomes without burdening districts with changing intervention or development strategies
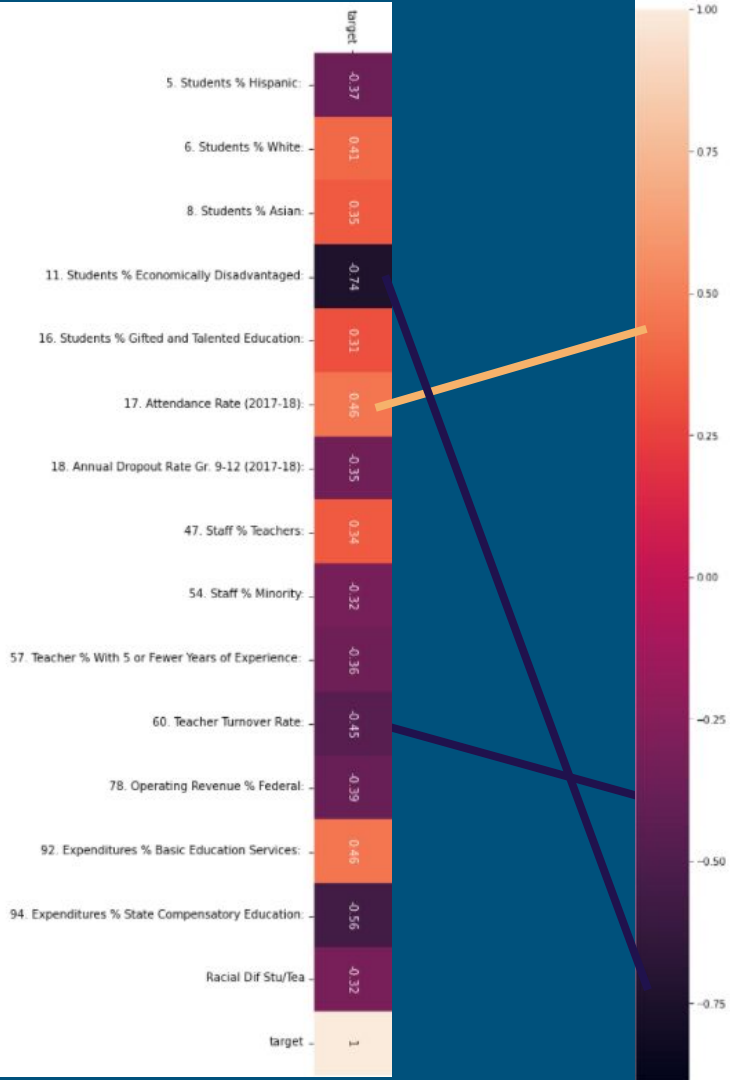
Wealthy communities all have high academic achievement, but economically challenged communities have choice.

The solution is educator retention

Lowering teacher turnover, among other factors, has the potential to raise the number of students meeting the STAAR by 10%
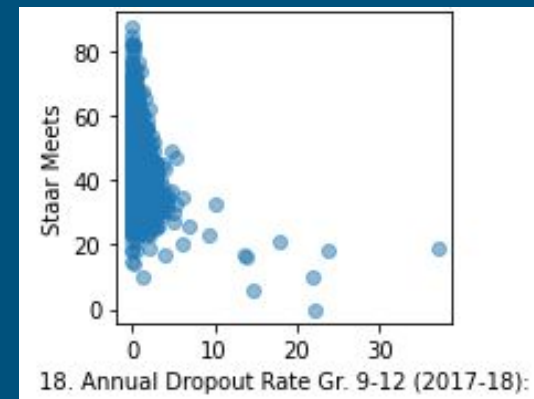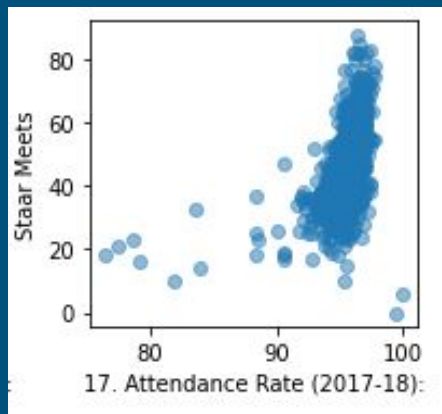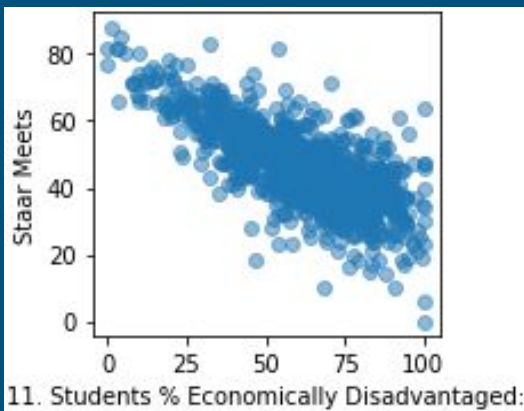
In the data collected from TEA there were a few standout features

Bay City outperformed predictions based on 2018 demographics

Small Changes, Big Results

	Attendance Rate	Drop-out Rate	Staff % teachers	Teachers with <5 years exp	Teacher turnover rate	Predicted STAAR meets
Optimum Changes	100% (+5%)	0% (-1.5%)	50% (+6.4%)	10% (-21.8%)	5% (-22.9%)	53.6%(+20.6%)
Moderate Changes	97% (+2%)	1% (-0.5%)	46% (+3.4%)	25%(-6.8%)	17%(-10.9%)	43%(+10%)

11. Students % Economically Disadvantaged:

17. Attendance Rate (2017-18):

18. Annual Dropout Rate Gr. 9-12 (2017-18):

See for yourself:
jonathan.alan.armstrong@gmail.com

Further work

-Determine important factors for teacher retention

-Use machine learning to predict longevity of potential new-hires