# PREDICTORs of AMBITIOUS TEACHING in CHICAGO



### Two schools, different cultures of instruction





#### 'Ambitious Instruction':

How often do you have to...

- solve a problem with multiple steps that takes more than 20 minutes
- discuss how cultural context affects an author's writing

#### 'Ambitious Instruction':

How strongly do you agree..

- The teacher expects me to do my best at all times.
- The teachers want us to become better thinkers, not just memorize.

#### 5Essentials

#### Survey Data Teachers, Parents, Students



**School Metrics and Classifications** 

**Demographic Data** 



Other Metrics (e.g. principal turnover)

#### 5Essentials

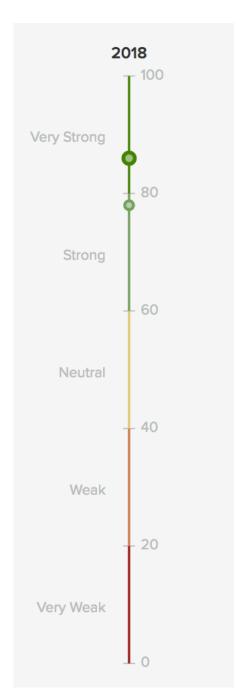






Ridge Regression

#### RMSE 7.3 points



Range from 0-99 20 points per level

#### NOT PREDICTORS

- Size of school
- Elementary vs. high school
- % students in special education
- SQRP points
- Charter vs. non-charter

#### **PREDICTORS**

- Supportive Environment (8x)
  - → Safety, Student-Teacher Trust

- % Students on Free/Reduced Lunch (3.5x)

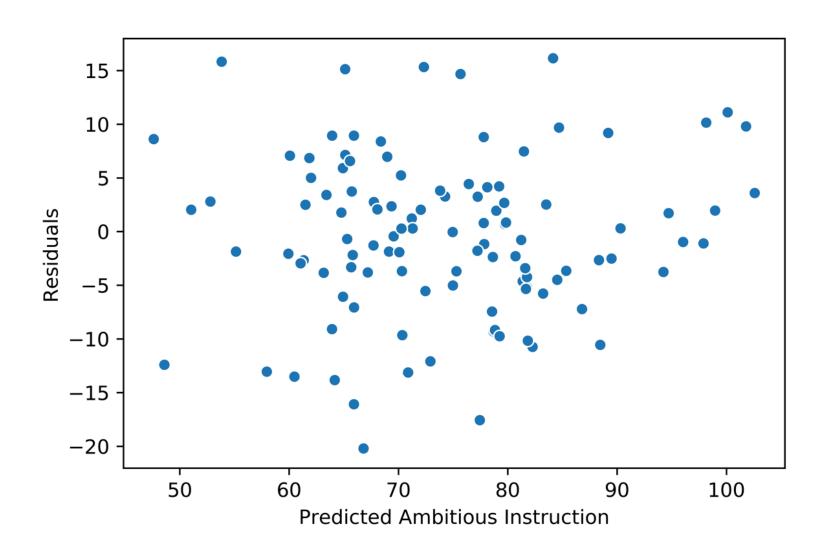
NOTE: positive correlation

- % Bilingual ( -3.3x )

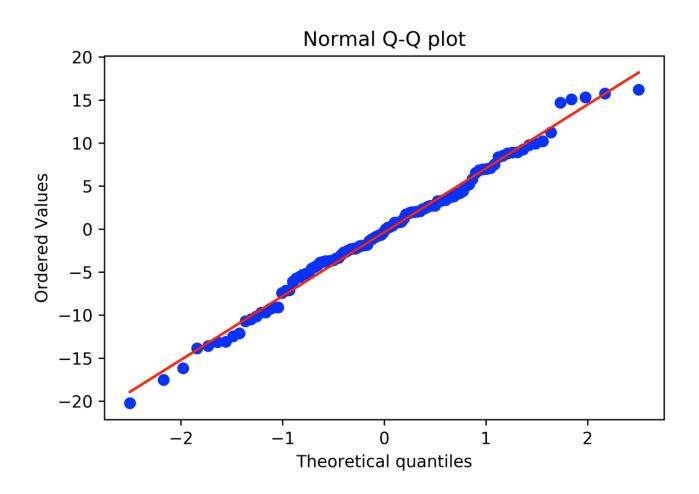
## THANK YOU



#### Residuals



#### Residuals Q-Q Plot



#### **Feature Correlation**

