

The background features several geometric shapes. In the top left, a thin grey line extends horizontally and then diagonally down to a small grey dot. On the right side, there are large, overlapping diamond shapes in dark teal and yellow, with white borders. At the bottom, there are thin grey lines forming a series of connected hexagonal shapes, and a dashed grey arc on the left side.

A DEEPER DIVE: **DROPOUT RATES**

By: Samira Chatrathi

About Me



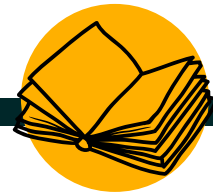
Samira Chatrathi

Data Science Student
Linkedin | Github

Agenda



Business Understanding



Stakeholder



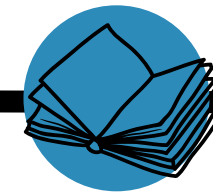
Data Understanding



Modeling

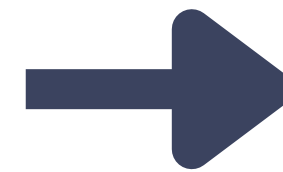
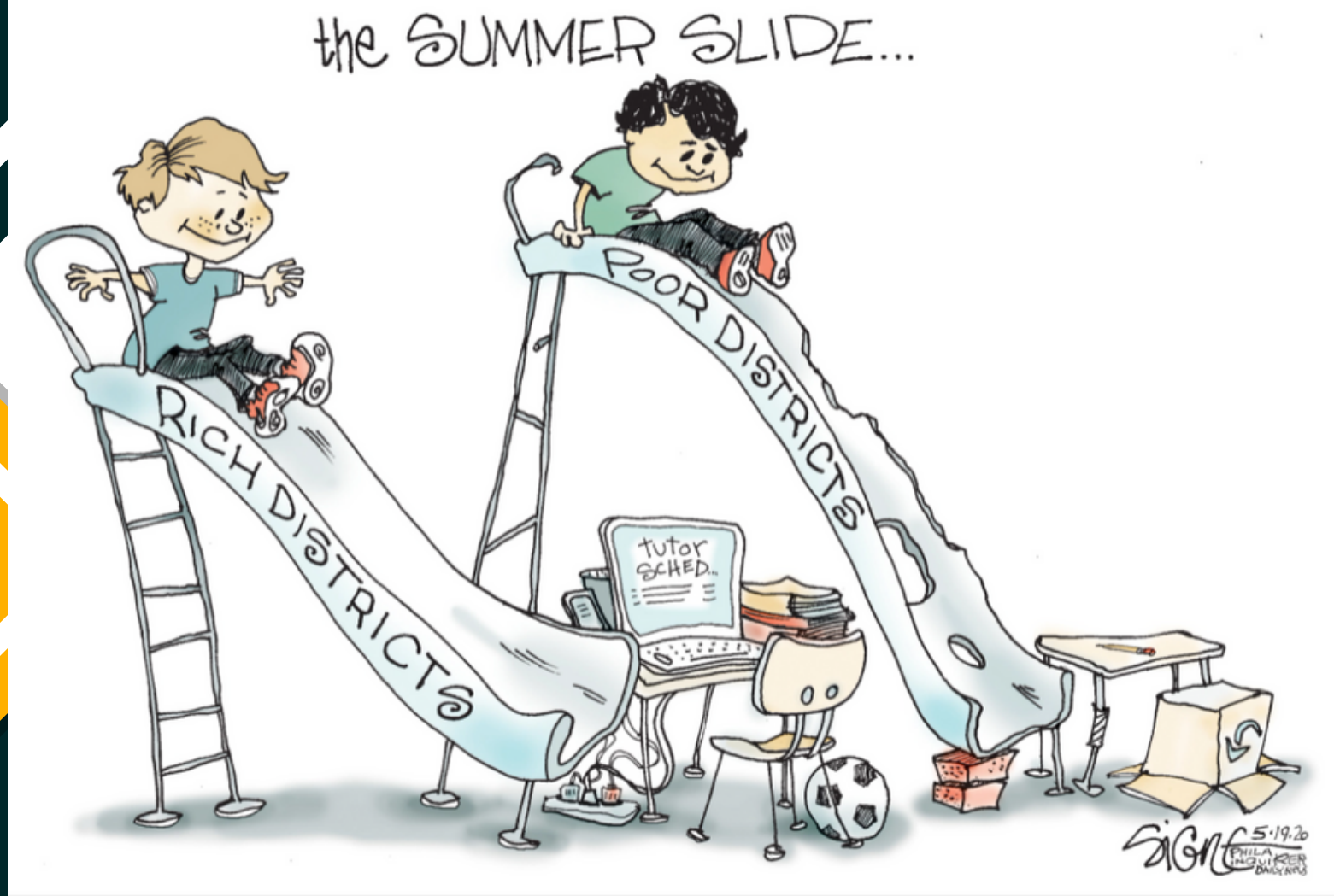


Recommendations



Future Implementation

Business Understanding



SmartyScholars Program

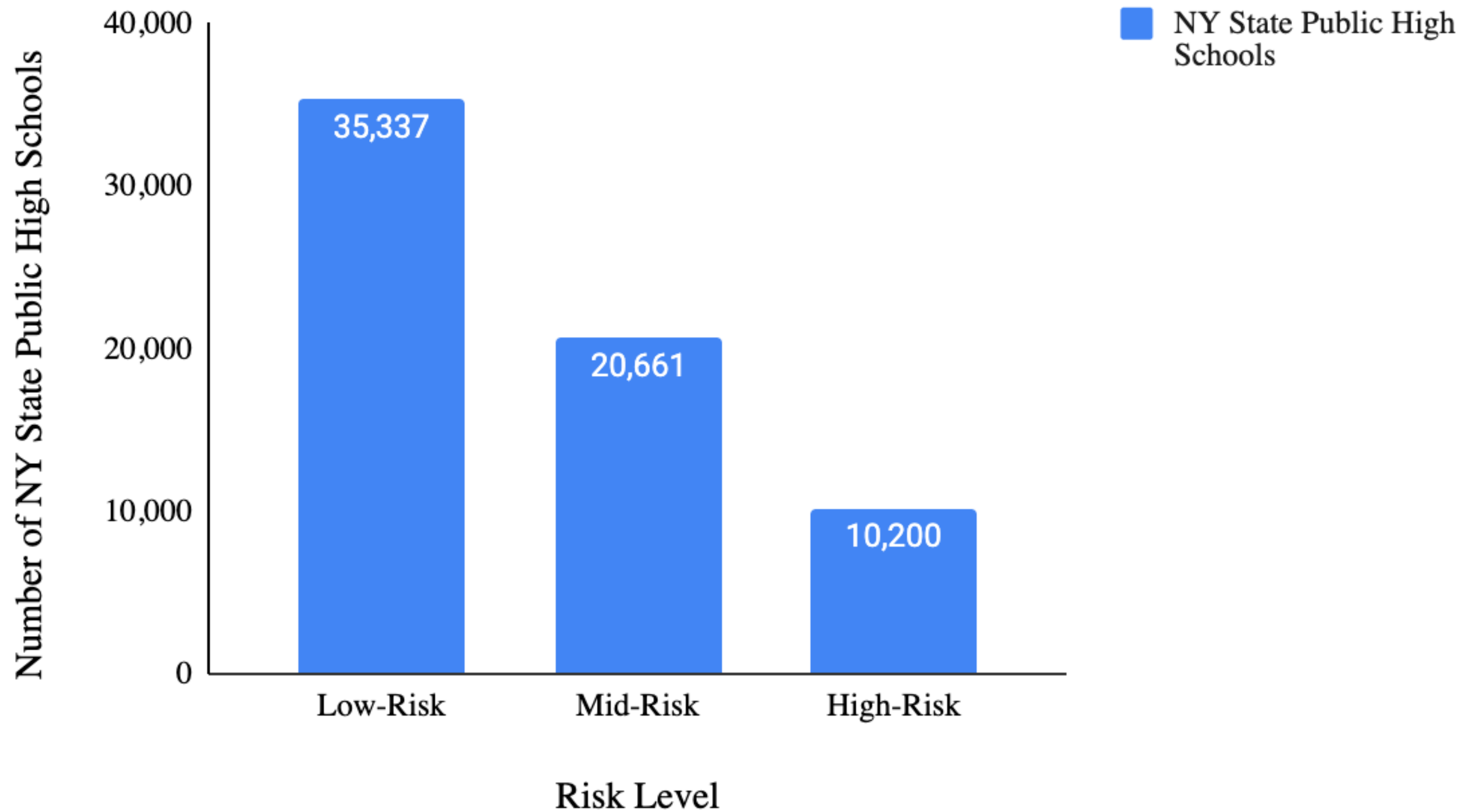
Stakeholder

**CULTURALLY
RESPONSIVE-
SUSTAINING
EDUCATION**



New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

Risk Levels for New York State Public High Schools ('12-'16)



Risk Features to Support



Percentage of English Proficient Students

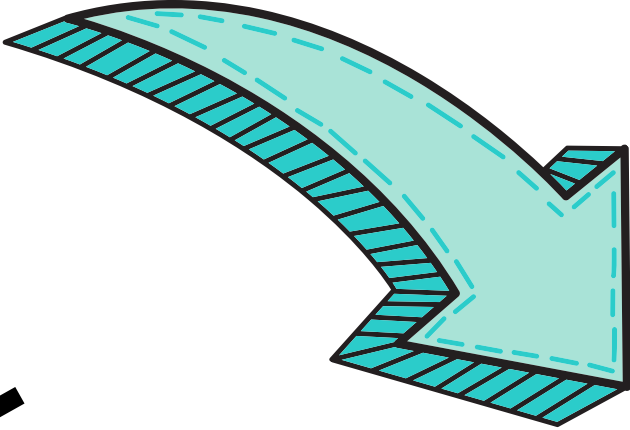
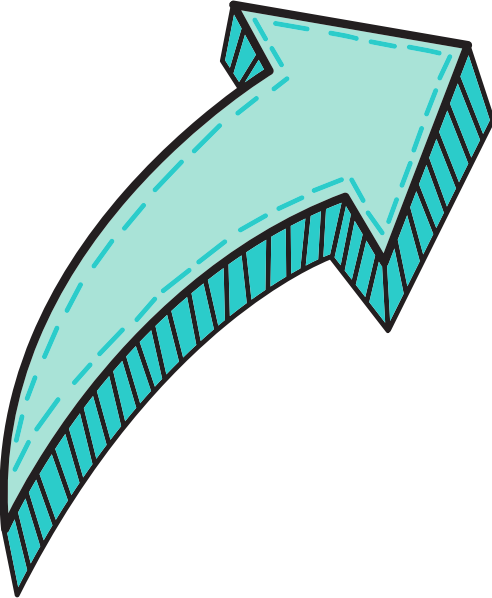
- Provide multi-lingual educators and resources



Percentage of Students Eligible for Free Lunch

- Invest in Free After School Activities

Model Prediction



K-NEAREST NEIGHBORS

75%

MODEL PRECISION

Feature Importance

Actionable Insights

Recommendations



Invest in Low-Risk Practices



Promote Language Diversity within Curriculum



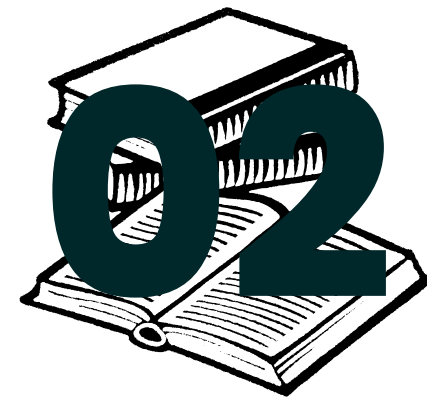
Monitor High-Risk Schools



Future Implementation



**Incorporate Mental Health
Feature**



Compare Online Learning



**Implement High School Risk
Survey**



Thank you!

Samira Chatrathi

Github: github.com/sgchatrathi/NYHSDropout-Rates-Analysis

Email Address : sgc78@cornell.edu

Linkedin : www.linkedin.com/in/sgc78/