A DEEPER DIVE:
DROPOUT RATES

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About Me

Samira Chatrathi

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Agenda

Business Understanding

Stakeholder

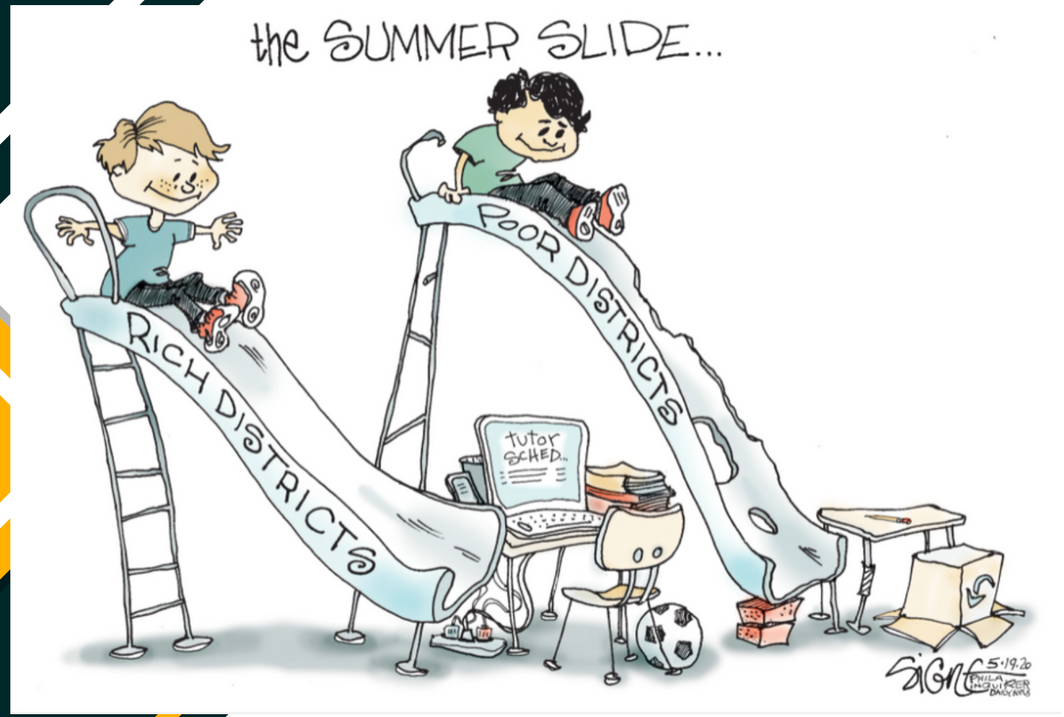
Data Understanding

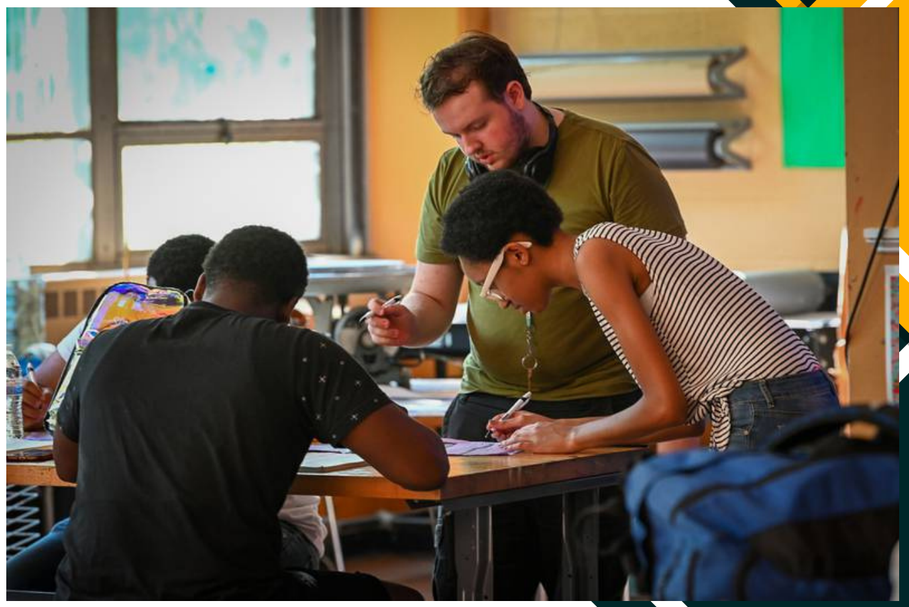
Modeling

Recommendations

Future Implementation

Business Understanding





SmartyScholars Program

Stakeholder

CULTURALLY

RESPONSIVE-

SUSTAINING

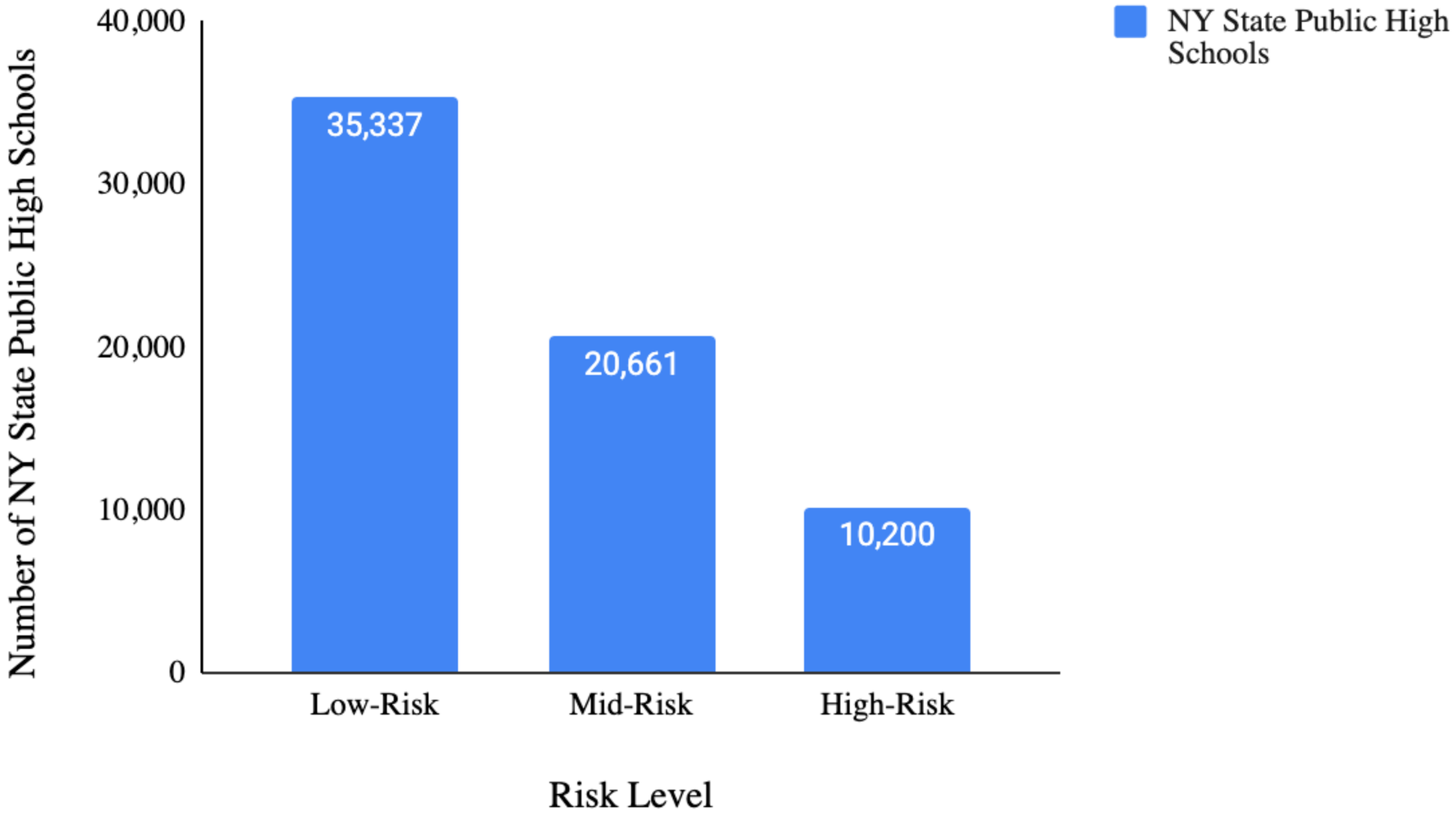
EDUCATION

NYS ED .gov

New York State
EDUCATION DEPARTMENT

Knowledge › Skill › Opportunity

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



Risk Features to Support

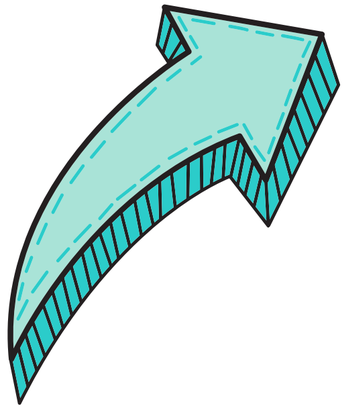
Percentage of English Proficient Students

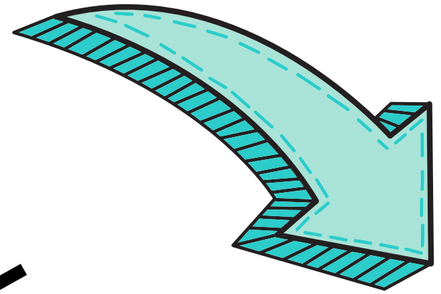
- Provide multi-lingual educators and resources

Percentage of Students Eligible for Free Lunch

- Invest in Free After School Activities

Model Prediction





Feature Importance

K-NEAREST NEIGHBORS

75%

MODEL PRECISON

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!

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

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