THE DEPARTMENT OF EDUCATION QUALITY SURVEY AND ITS EFFICACY

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Agenda

Abstract

TBS

Introduction

- **NYC School Survey** – collects data on NYC Public Schools and provides standardized ratings of various elements of "school quality"

- **The question** – does the NYC School Quality Review Survey accurately reflect educational outcomes or could these outcomes be better predicted by proxy variables related to the student body?

- **Primary measure of success** – 4-year college persistence rate (percentage of students from a specific public school who completed college)

- **Impact** – this analysis could provide insights to the DOE and NYC Public Schools which would enable them to tailor instructional approaches to specifically address college preparedness and it would allow for the strategic allocation of resources to address identified areas that impact college preparedness

LITERATURE REVIEW

- **National Center for Education Statistics (NCES):** students from low-income families are nearly four times more likely to drop out of high school than their wealthier counterparts

- Several other studies have attempted to use more sophisticated modeling techniques and different data sources to predict educational influence on student success

- **Bernacki, Chavez, and Uesbeck (2020):** predicted educational achievement based on student digital behavior with an accuracy of 75%

- **Musso, Cascallar, Bostani, and Crawford (2020):** trained an artificial network to identify relationships between variables and educational performance for Vietnamese students with an accuracy of 95-100%

- **Yağcı (2022):** predicted final grade exams for Turkish students through machine learning models

- **Roth, BeVier, Switzer, and Schippman (1966):** found correlation of up to 0.3 between academic grades and later job performance

METHODOLOGY

EXPERIMENTATION AND RESULTS