

KPI and Stakeholder Statement

Shannon Jay McElhenney, Raymond Tana, Prabhat Devkota, Jung-Tsung Li

Summary of Project

AP Outcomes are often correlated to measures of socioeconomic factors. There is a somewhat reduced relationship between universities in a state and the income of that state. We are identifying relationships between Carnegie classifications of universities in a state and College Board AP Exam metrics.

Description of Dataset

1. Carnegie University Classifications
 - Carnegie is the organization maintaining the classification of universities.
 - Data includes many basic and specialized university categories (ex. R1/R2, historically black universities, hispanic serving institutions).
 - Includes university state/city
2. AP Metric Data from the College Board
 - Must be obtained from College Board
 - Metrics include outcome, availability, and amount of students taking exams aggregated to most likely the state level

KPIs

Predictive verification

1. Universities are classified only about every 4 years. Does the classification predict well year over year as measured in the last year before reclassification?

Trends to identify for potential predictions

1. Depending on the distribution of types of universities what distributions have seemingly beneficial outcome for AP results?
2. Corrected for population (or geographic area), does having more of X university type improve AP outcome?
3. Corrected for region of the united states are there trends?
4. Relationship between minority schools and minority performance for example historically black institutions or hispanic serving?

Stakeholders

1. University decision makers
2. High schools
3. Parents looking to decide places to live
4. Education departments at the state or district level