SAT and ACT Test Use in Admissions

March 23, 2020
Test Optional Policies

Different types of testing policies

• **Test Required** – Purdue’s current policy

• **Test Flexible** – must submit something academic in place of a test

• **Test Optional** – multiple types of formats but generally allow students to choose whether to submit a score or not

• **Test Blind** – most common to open admission institutions and those who are not meeting enrollment goals
Test Optional Arguments

PROS & CONS

Proponents behind test optional argue

• Tests have inherent socio-economic bias
• Eliminating the test requirement will encourage more students to apply
• Eliminating the test will create equity
• Test optional will increase the institution’s diversity

Additional benefits

• The Law of Artificial Score Inflation: Students not submitting lower test scores will raise the school’s U.S. News ranking
PROS & CONS

Proponents for the use of tests

- Testing agencies continue to conduct validity studies with Universities demonstrating the correlation between the predictive nature of academic performance with HS GPA and test scores
- When combined with other criteria, the test provide important predictive value
- Both standardized tests have recently undergone a full test overhaul and College Board has made test preparation resources free through Khan Academy

Other items for which the tests are utilized

- Placement specifically in math courses has been consistently recognized as accurate
Predictive strength of admissions measures across all applicants and all majors

- SAT Tests, HSGPA, Add. Predictors, SAT Subj. Tests (N=1,182)
- SAT Tests, HSGPA, Add. Predictors (N=5,692)
- SAT Tests and HSGPA (N=6,784)
- High School GPA (N=6,784)
- Average of AP Exam Scores (N=5,742)
- SAT Tests (N=6,784)
- SAT Math Section (N=6,784)
- SAT ERW Section (N=6,784)
- Number of different AP exams (N=6,784)
- Highest Non-Language SAT Subject Test (N=1,341)
- Number of Honors or AP courses (N=6,705)
- Average of Two Highest SAT Subject Tests (N=1,354)
- Highest of All SAT Subject Tests (N=1,354)
- Number of activities during high school (N=6,784)

Predictive Strength:
- Strong
- Moderate
- Weak
Grade Inflation

• High school grades continue to rise, extending a trend documented throughout the 1990s by the US Department of Education (https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004455).

• With research showing more students are receiving higher HSGPAs, colleges need more information to make fair decisions. Test scores in combination with other factors, especially high school course performance, act as an essential check and balance on another.
Grade Inflation

• High schools with the largest increases in high school GPA over time also had the lowest percentage of students who were Black or Hispanic and students who were eligible for free or reduced price lunch.

• Students whose parents had the lowest levels of education experienced the least grade inflation.

• Students in private high schools (both independent and religiously-affiliated) were three times more likely to experience grade inflation than students in public or charter schools.
HS GPA Inflation

*HSGPA increases at higher rates in more affluent schools*

Note: Less affluent schools are defined as those with more than 50 percent of students eligible for free or reduced-priced lunch; more affluent schools have less than 50 percent.
Admissions Evaluation

• Purdue currently employs a holistic application review process.

• No single factor alone is what determines a student’s admissibility.

• The strength of admissions decisions lies in the use of context to understand a student’s individual performance relative to their home and learning context.
Measure of effort and achievement as a combination of HSGPA and Test Score

GPA (Measure of effort) --->

Overachiever | High Achiever
Low Achiever | Underachiever

SAT/ACT (Measure of achievement)--->
Relationship between SAT Math scores & first year mathematics grades
Three Categories of Information

**Basic High School Data**
- Locale (e.g., Rural)
- Senior class size
- Percent of students eligible for free and reduced-price lunch
- Average SAT* scores at colleges attended
- AP* participation and performance

**Test Score Comparison**
- Applicant's test score compared to others from the same high school
- 25th Percentile
- 50th Percentile
- 75th Percentile

**High School and Neighborhood Indicators**
- College attendance
- Household structure
- Median family income
- Housing stability
- Education levels
- Crime

Research shows these indicators are related to students' education outcomes. Two averages are created based on these six indicators. Values are shown on a scale from 1 to 100 relative to the U.S. average.
**Other Uses of Tests**

First year Purdue West Lafayette retention rates for students from 2014 through 2018 by SAT and concorded ACT score bands

**All Cohorts Combined 1st Year Retention**

- **<= 1100**: 86.1%
- **1101 to 1200**: 89.4%
- **1201 to 1300**: 91.3%
- **1301 to 1400**: 93.7%
- **1401 to 1500**: 94.2%
- **> 1500**: 95.5%
Other Uses of Tests

*Four year Purdue West Lafayette graduation rates for students from 2011 through 2015 by SAT and concorded ACT score bands.*

All Cohorts Combined 4 Year Graduation

- <= 1100: 52.8%
- 1101 to 1200: 57.5%
- 1201 to 1300: 57.6%
- 1301 to 1400: 56.9%
- 1401 to 1500: 59.5%
- > 1500: 67.0%
Growth in Diversity

Source: Enrollment Management Analysis and Reporting
Growth in Diversity

Percent Annual Change

Source: Percent Change in Graduates: https://knocking.wiche.edu/percent-change-in-graduates
Conclusion

- Purdue is currently not struggling to meet its enrollment goals.

- It would not benefit Purdue to implement a different test policy for undergraduate admissions.

- Other options for increasing diversity:
  - PPI High Schools
  - Fast Start

- Test scores provide a reliable and valid data point from which to predict a student’s likelihood of college success.