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The Value of SAT[®] Scores in Evaluating International Student Readiness for University Coursework Delivered in English

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Abstract

This study examines relationships between SAT Evidence-Based Reading and Writing section scores (now referred to as the SAT Reading and Writing section), and performance in first-year English and Writing university coursework, and more generally all university coursework outside of Math, for international students studying in U.S. four-year institutions. Results showed that the reading and writing section score can be a powerful measure to assist institutions with understanding how an international student is likely to perform in university, with stronger reading and writing section scores associated with stronger performance in university coursework delivered in English. These results hold for the overall international student sample examined as well as subsamples of students whose first language was not English and whose best language is not English. The information from this study can help universities use reading and writing scores more thoughtfully in their admission considerations for international students as well as with placement decisions and other academic support or scaffolding needs that may be helpful to student success on campus.

Introduction

Research on the validity of the SAT® has consistently shown that students earning higher SAT scores are more likely to earn higher grades in postsecondary education; this is true when the outcome of interest is college/university GPA (e.g. Marini, Westrick, Young, Ng, Shmueli, & Shaw, 2019; Marini, Westrick, Shaw, 2021; Westrick, Marini, Young, Ng, & Shaw, 2023), as well as when examining domain-specific outcomes such as English or Math grades (e.g. Westrick, Marini, Shmueli, Young, Shaw, & Ng, 2020; Westrick, Marini, & Shaw, 2021). Research focused on international students attending U.S. higher education institutions has also found that SAT scores are strongly predictive of first-year GPA and that, on average, SAT scores added 44% more predictive power above HSGPA alone in understanding how an international student will perform in the first year of college/university (Marini, Westrick, Young, & Shaw, 2020). However, there is little research available on the relationships between SAT Evidence-Based Reading and Writing (ERW) section scores, now referred to as the Reading and Writing section, and performance in first-year English coursework, specifically for international students studying in the U.S. This study examines just that and can illuminate the value of SAT scores in considering how well international applicants can be expected to perform at U.S. institutions of higher education.

International students are an asset to higher education in the U.S. They bring diverse perspectives and experiences that enhance the campus community and, in turn, the surrounding communities. Having international students on campus enables all students to foster a global perspective and achieve a richer college/university experience. The U.S. continues to be the leading destination for international students and the number of international students enrolling at U.S. institutions has seen significant growth in the past decade, though more recently, including due to the covid pandemic, that growth has stalled. In the 2023 academic school year, the enrollment of new international students at U.S. institutions grew by 2 percent (Boundless, 2024; Chen, Howell, & Smith, 2023; Institute of International Education, 2023; Institute of International Education, 2024; OECD, 2023). However, it is expected that by 2030, the number of internationally mobile students will grow by over 4 million students, from 6 million to 10 million in 2030, with as much as a fifth of those students coming to study in the U.S. (Institute of International Education, 2024). The U.S. Department of State actively promotes the United States as the leading destination for international students and has made maintaining that position a strategic priority (EducationUSA, 2024). Since attracting international students is a top priority, keeping those students enrolled and ensuring they make sound progress toward degree completion is important by association.

Understanding how an international student will perform in the first year of college is very important for the recruitment, admission, and enrollment process. In particular, it is important to evaluate that an international student can learn and thrive at an institution where the coursework and instruction are conducted in English. Setting students up for success is of the utmost importance for admissions and enrollment professionals. While research that has focused on international students attending U.S. higher education institutions has shown how much more predictive SAT scores can be in understanding first-year performance than their high school record, accurately understanding how an international student will perform in their coursework taught in English is extremely important. While there are tests that demonstrate English proficiency, this research aims to explore the relationship between a student's reading and writing section score and performance in first semester and first-year coursework taught in English. The SAT is one useful piece of information, often involved in the admission process, with many students either taking or submitting test scores for admission consideration (Goyer, Howell, Hurwitz,

Imlay, & Ma, 2023). Therefore, this study could provide useful insights for admissions officers interested in streamlining measures for their enrollment-related decisions pertaining to international students.

Methodology

Sample

The sample for this study was from the fall 2018 entering college cohort and was collected as part of an ongoing research recruitment effort by College Board. Inclusion in the study sample required international students to have SAT scores, valid first year university coursework, and have self-reported attending a high school or residing outside of the U.S.¹ based on their College Board high school code, home address, or test center location. This resulted in a sample size of 6,324 international students. However, because some study analyses are completed at the institution level, only institutions having 15 or more students were included in the final sample. This resulted in 5,984 international students from 68 U.S. four-year colleges and universities being included in the final sample.

There were slightly more males (54%) than females (46%) in the study sample. In terms of first language, much of the sample said that Another Language (45%) or English and Another Language (36%) was their first language. In terms of best language, the breakdown shifts a little bit with 41% saying that English and Another Language was their best language and 32% saying that Another Language was their best language. The majority of the sample has a parent with a Graduate Degree (48%) or a Bachelor's Degree (32%). Also, the majority of the sample identifies as Asian (63%). You can see Table 1 for more information on student characteristics of the sample.

Table 2 includes information about the institutions in the sample. The institutions are spread across the country with slightly more institutions in the Midwestern (28%) and Western (24%) regions of the U.S. There were more private (56%) institutions than public (44%). Thirty-two percent of the institutions in the sample admitted 51%-75% of their applicants, followed by 29% of the institutions admitting 25%-50% of their applicants. In terms of size, most institutions in the sample were very large (47%).

¹ Students attending DoDEA schools were not considered international students and were not included in the sample for this study.

Table 1: Distribution of Student Characteristics

	Category	International Students at U.S. Institutions (n=5,984)
Gender	Male	3,212 (54%)
	Female	2,772 (46%)
Ethnicity	American Indian/Alaska Native	11 (<1%)
	Asian	3,789 (63%)
	Black/African American	173 (3%)
	Hispanic/Latino	580 (10%)
	Native Hawaiian/Other Pacific Islander	10 (<1%)
	White	889 (15%)
	Two or More Races	113 (2%)
	No Response	419 (7%)
First Language	English Only	760 (13%)
	English and Another Language	2,156 (36%)
	Another Language	2,714 (45%)
	Not Stated	354 (6%)
Best Language	English Only	1,397 (23%)
	English and Another Language	2,475 (41%)
	Another Language	1,892 (32%)
	Not Stated	220 (4%)
Highest Parental Education	No High School	102 (2%)
	High School Diploma	572 (10%)
	Associate Degree	71 (1%)
	Bachelor's Degree	1,885 (32%)
	Graduate Degree	2,852 (48%)
	No Response	502 (8%)

Table 2: Distribution of Institution Characteristics

	Category	Total Sample (k=68)
Region	Midwest	28%
	Mid-Atlantic	21%
	New England	4%
	South	10%
	Southwest	13%
	West	24%
Control	Public	44%
	Private	56%
Admittance Rate	Under 25% Admitted	22%
	25% to 50% Admitted	29%
	51% to 75% Admitted	32%
	Over 75% Admitted	16%
Undergraduate Enrollment	Small ($n < 5,000$)	28%
	Medium ($5,000 \leq n < 9,999$)	4%
	Large ($10,000 \leq n < 19,999$)	21%
	Very Large ($n \geq 20,000$)	47%

Measures

SAT Scores. SAT scores were obtained from College Board’s database and matched to each student provided in the institution files. Note that this study references an SAT reading and writing section to highlight the SAT ERW connection on the paper and pencil SAT to the SAT Reading and Writing section on the digital SAT. Because the digital SAT maintains strong congruity and continuity to the paper and pencil SAT in terms of the knowledge, skills, and content domains assessed (College Board, 2023a), and because scores on the SAT ERW section and digital SAT Reading and Writing Section are strongly related (Marini, Westrick, Young, & Shaw, 2022) and hold the same meaning (College Board, 2023b), this study will refer to the SAT ERW section as the reading and writing section. The same congruity and continuity is true for SAT math scores from the paper and pencil exam and the digital exam. The SAT scores included in this study are:

SAT total score (400 to 1600 scale)—increments of 10, sample mean of 1351 (SD=141).

SAT reading and writing section score (200 to 800 scale) —increments of 10, sample mean of 640 (SD=75).

SAT math section score (200 to 800 scale) —increments of 10, sample mean of 712 (SD=85).

First-Year GPA (FYGPA). Each higher education institution provided FYGPA values for their 2018 first-time, first-year students. The FYGPAs, representing the first year of college/university, across the 58 institutions in this sample ranged from 0.00 to 4.28. FYGPA had a sample mean of 3.32 (SD=0.66).

Domain-specific GPAs. All college courses were coded for content area so that analyses could be conducted on domain-specific grade point averages. The domain-specific college GPAs in the current

study were *first-semester* English or Writing GPA (n=2,926, Mean=3.41, SD=0.78), *first-year* English or Writing GPA (n=4,381, Mean=3.41, SD=0.74), *first-semester* All-but-Math GPA (n=5,964, Mean=3.36, SD=0.70) and *first-year* All-but-Math GPA (n=5,983, Mean=3.33, SD=0.65) as a criterion for analyses with the reading and writing section (as most courses in college/university involve reading and writing).

Domain-specific grade point averages were calculated within student, across all relevant course grades received in a particular area during the first year of college/university (excluding remedial course work). For example, if a student took only one English or writing course in the first year, then their average course grade in English or writing is based on the grade earned in that one course. If a student took three English or writing courses, the average course grade is based on the average of the three course grades earned (taking into account the grades earned in each course and the number of credits associated with each course).

SAT Questionnaire Responses. Self-reported gender, race/ethnicity, language they knew first, and language they know best were obtained from the SAT Questionnaire that each student completed during registration for the SAT.

High School GPA (HSGPA). Students' self-reported HSGPA was obtained from the SAT Questionnaire when they registered for the SAT and is reported on a 12-point interval scale, ranging from 0.00 (F) to 4.33 (A+). The HSGPA measure in this study had a sample mean of 3.74 (SD=0.50).

Descriptive Statistics

Table 3 shows descriptive statistics for all study variables for the students in the sample. The international students in this sample are high achieving with high SAT scores and high GPAs compared to the full cohort of college-bound seniors from the class of 2018. International students studying in U.S. institutions in 2018 have a mean SAT total score of 1351 (SD=141), mean SAT reading and writing section score of 640 (SD=75), and mean SAT math section score of 712 (SD=85) compared to the means of the 2018 sample of high school graduates who took the SAT, SAT total score of 1068 (SD=204), SAT reading and writing section score of 536 (SD=102), and SAT math section score of 531 (SD=114) (College Board, 2018).

Table 3: Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
HSGPA	4,801	3.74	0.50	0.00	4.33
SAT total score	5,984	1351	141	690	1600
SAT reading and writing section score	5,984	640	75	340	800
SAT math section score	5,984	712	85	310	800
First-Year GPA	5,984	3.32	0.66	0.00	4.28
First-Semester English or Writing GPA	2,926	3.41	0.78	0.00	4.33
First-Year English or Writing GPA	4,381	3.41	0.74	0.00	4.33
First-Semester All-but-Math GPA	5,964	3.36	0.70	0.00	4.33
First-Year All-but-Math GPA	5,983	3.33	0.65	0.00	4.33

Methods

An initial examination of mean GPAs by SAT score bands was conducted to observe whether basic validity analyses and arguments hold for the study sample – to understand whether GPAs rise as SAT reading and writing section score bands rise for international students.

We also calculated the increase in predictive utility of the SAT reading and writing section above HSGPA alone for predicting performance in first-semester and first-year coursework in English. This is done by calculating correlation coefficients for all predictors and outcomes studied, and for example, subtracting the HSGPA-First-Semester English or Writing correlation from the multiple correlations of HSGPA and SAT reading and writing section score with First-Semester English or Writing to arrive at the SAT incremental validity coefficient. This coefficient is then divided by the HSGPA First-Semester English or Writing correlation and multiplied by 100 to arrive at the increment in predictive utility value. This increment in predictive utility value provides a metric to help understand the added information contributed by SAT reading and writing section scores above HSGPA information, when considering how a student will perform in college.

For other analyses, students were grouped by meeting different SAT reading and writing section score thresholds and examining whether the groups differed in terms of student outcomes. Differences in means between the two groups for each GPA were tested for statistical significance using independent sample t-tests. This analysis can serve to validate different levels of student reading and writing readiness based on SAT reading and writing section score, that institutions could theoretically consider as scores for program placement or acceptance.

Logistic regression analyses were also employed for predicting student's probabilities of earning a 3.0 or higher All-but-Math GPA in college. Such analyses can allow for an understanding of differences in international student probabilities of success across the full SAT reading and writing section score scale.

Results were also examined by two separate subgroups: 1) international students identifying "Another Language" as their first language, and 2) international students identifying "Another Language" as their best language. These subgroups results were compared to the overall international student sample.

Results

Figures 1-4 show the relationship for international students between the four outcomes of interest—first-semester English or Writing GPA, first-year English or Writing GPA, first-semester All-but-Math GPA, and first-year All-but-Math GPA and the SAT reading and writing section score bands. Score bands are shown where there are at least 15 students in the band. The trend across all the GPAs of interest is the same—mean college GPAs increase as SAT reading and writing section scores increase. This trend is true for the overall sample of international students (gray bars), the subgroup of international students identifying their first language as a language other than English (orange bars), and the subgroup of international students identifying their best language as a language other than English (blue bars).

Figure 1: Mean First-Semester English or Writing GPA by SAT Reading and Writing Section Score Bands for International Students

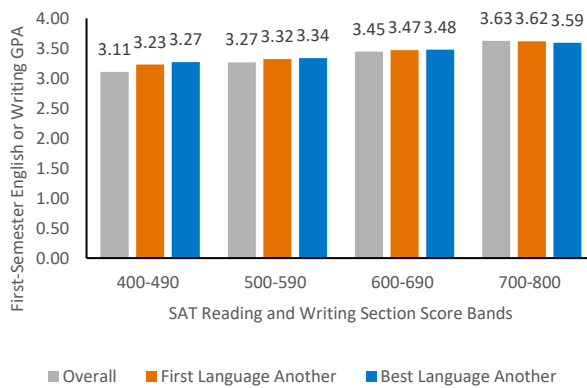


Figure 2: Mean First-Year English or Writing GPA by SAT Reading and Writing Section Score Bands for International Students

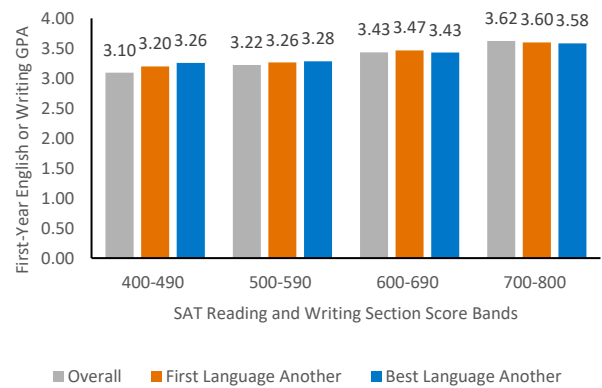


Figure 3: Mean First-Semester All-but-Math GPA by SAT Reading and Writing Section Score Bands for International Students

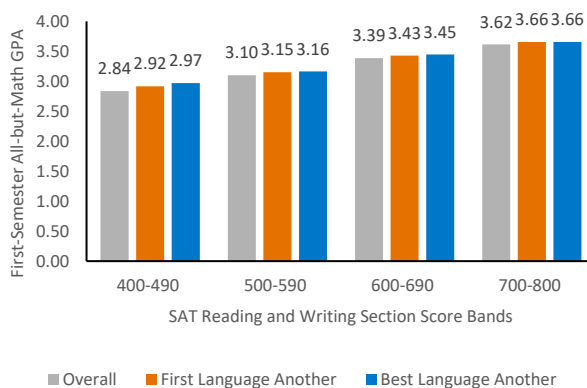
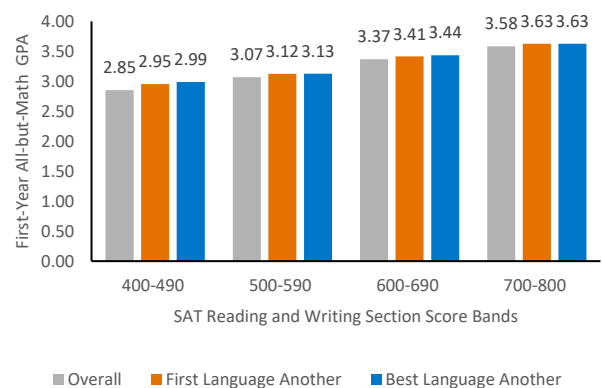


Figure 4: Mean First-Year All-but-Math GPA by SAT Reading and Writing Section Score Bands for International Students



We also calculated the increase in predictive utility gained by including the SAT reading and writing section scores above the use of HSGPA alone for predicting performance in first-semester and first-year coursework. For international students' first-semester All-but-Math GPA, there was a 36%² increase in predictive utility over HSGPA when SAT reading and writing section score was used along with HSGPA. For first-semester English or Writing GPA, this increase in predictive utility over HSGPA alone was 59%³. For first-year All-but-Math GPA, the increase in predictive utility was 37%⁴ and for first-year English or Writing GPA, the increase in predictive utility was 44%⁵. These all represent very large values with regard to the predictive information added by SAT reading and writing section scores, beyond information known by HSGPA, to understand how an international student will perform in college. Appendix Table A1 includes these calculated values for the two language subgroups in the study. Similar to the overall results, students reporting another language (other than English) as their first or best language also saw large improvements in the prediction of their college performance when SAT reading and writing section scores were used in addition to HSGPA.

Next, to gain a deeper understanding of the role SAT reading and writing section scores play in understanding performance in first year coursework taught in English, different levels of SAT reading and writing section scores were used to create two groups—international students who achieved the score or higher and those who did not. Then, mean college GPAs were calculated and examined to see if there were differences in performance for those who achieved or exceeded that score and those who did not. The scores examined in this sample are 550, 600, and 650. Figures 5 & 6 show results by these different SAT reading and writing scores (550, 600, 650). In each case, international students who met or exceeded the SAT reading and writing score had higher mean GPAs across all the GPAs examined. These differences in mean GPA performance were also statistically significant. For details on statistical significance, refer to Table A2 in the Appendix. Similar analyses with similar findings for the two language subgroups of interest can be found in Appendix Figures A1- A4 and Tables A3 & A4.

² This value was calculated by subtracting the HSGPA-First-Semester All-but-Math correlation (.39) from the multiple correlation of HSGPA and SAT reading and writing section score with First-Semester All-but-Math (.53) to arrive at the SAT incremental validity coefficient (.14). This coefficient is then divided by the HSGPA- First-Semester All-but-Math correlation (.39) and multiplied by 100 to arrive at the increment in predictive utility value of 36%. All correlations employed in these calculations were corrected for restriction of range (for more information on this see Westrick et al., 2019).

³ This value was calculated by subtracting the HSGPA-First-Semester English or Writing GPA correlation (.27) from the multiple correlation of HSGPA and SAT reading and writing section score with First-Semester English or Writing GPA (.43) to arrive at the SAT incremental validity coefficient (.16). This coefficient is then divided by the HSGPA- First-Semester English or Writing correlation (.27) and multiplied by 100 to arrive at the increment in predictive utility value of 59%.

⁴ This value was calculated by subtracting the HSGPA-First-Year All-but-Math GPA correlation (.41) from the multiple correlation of HSGPA and SAT reading and writing section score with First-Year All-but-Math GPA (.56) to arrive at the SAT incremental validity coefficient (.15). This coefficient is then divided by the HSGPA- First-Year All-but-Math GPA correlation (.41) and multiplied by 100 to arrive at the increment in predictive utility value of 37%.

⁵ This value was calculated by subtracting the HSGPA-First-Year English or Writing GPA correlation (.27) from the multiple correlation of HSGPA and SAT reading and writing section score with First-Year English or Writing GPA (.39) to arrive at the SAT incremental validity coefficient (.12). This coefficient is then divided by the HSGPA- First-Year English or Writing GPA correlation (.27) and multiplied by 100 to arrive at the increment in predictive utility value of 44%.

Figure 5: Mean English and Writing GPAs for the Overall Sample of International Students at Different SAT Score Thresholds

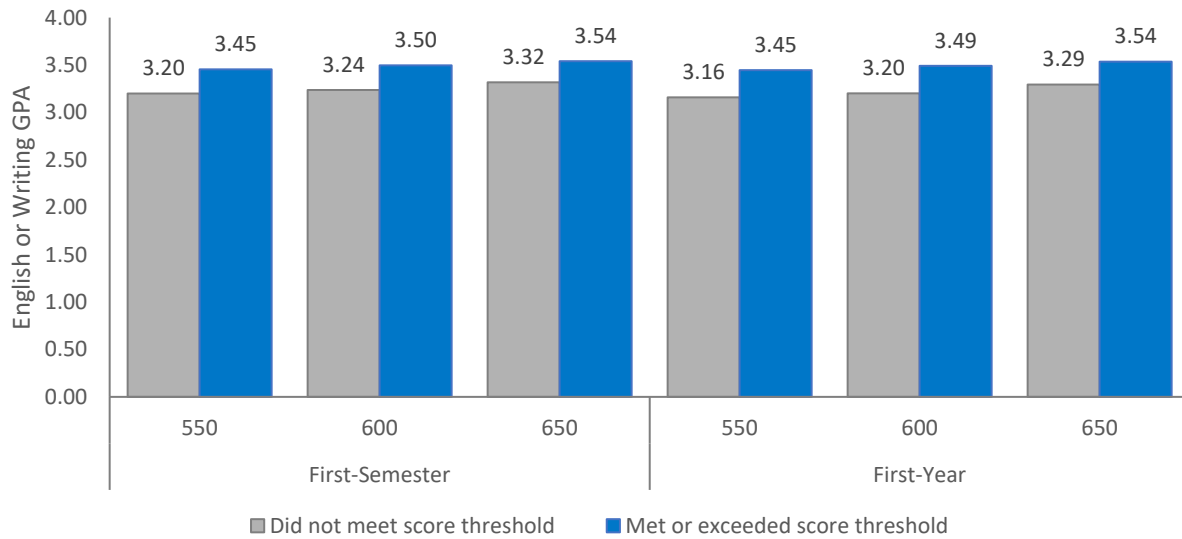
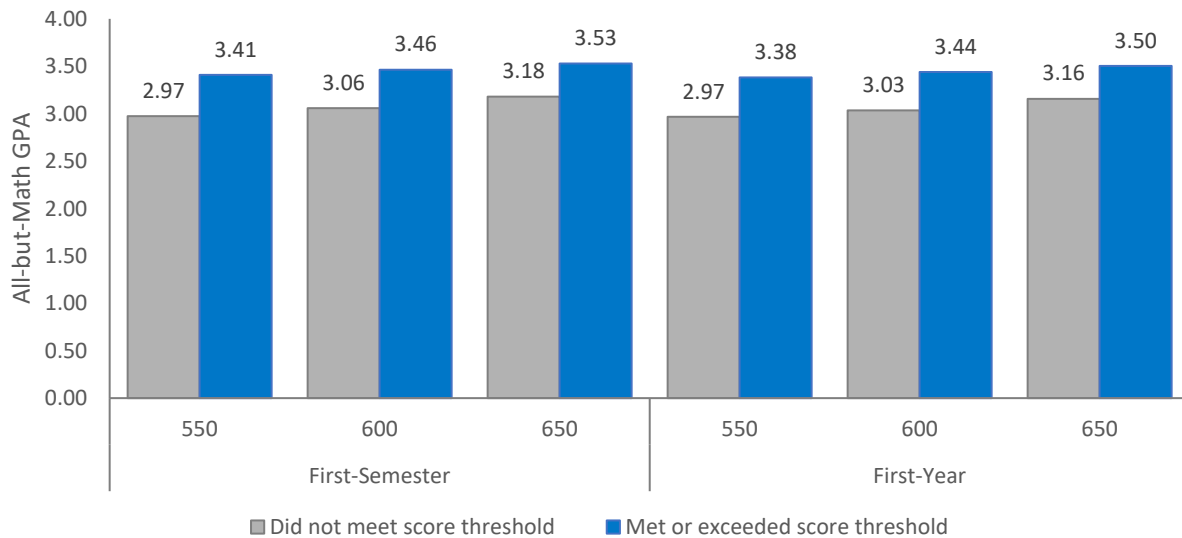


Figure 6: Mean All-but-Math GPAs for the Overall Sample of International Students at Different SAT Score Thresholds



Finally, we were interested in how SAT reading and writing section scores could be used to predict international student success in English and Writing coursework as well all coursework involving reading and writing (in English language). We did this for the overall sample as well as the two first and best language subgroups studied. Success was defined as earning a 3.0 or higher⁶ in each respective GPA.

⁶ Using the threshold of 3.0 or higher is a level of success that is often needed for admission to graduate school, to maintain a scholarship or enrollment in an honors level program, or a level considered for corporate recruiters for various jobs after graduation (Westrick, Marini, Young, Ng, & Shaw, 2023).

Figure 7 shows the probability that an international student earns a 3.0 or higher first-semester English or Writing GPA based on SAT reading and writing section score and Figure 8 shows the probability of earning a 3.0 or higher first-year English or Writing GPA based on SAT reading and writing section score. As an example from these figures, a student earning an SAT reading and writing section score of 650 has a 90% chance of earning a 3.0 or higher English or Writing GPA in the first semester, while a student with a score of 500 has an 80% chance, a 10 percentage point difference. For all language subgroups and outcomes examined we see that as scores increase, there is an increased probability of earning a 3.0 or higher.

Figure 7: Chance of Earning a First-Semester English or Writing GPA of 3.0 or Higher given SAT Reading and Writing Section Score

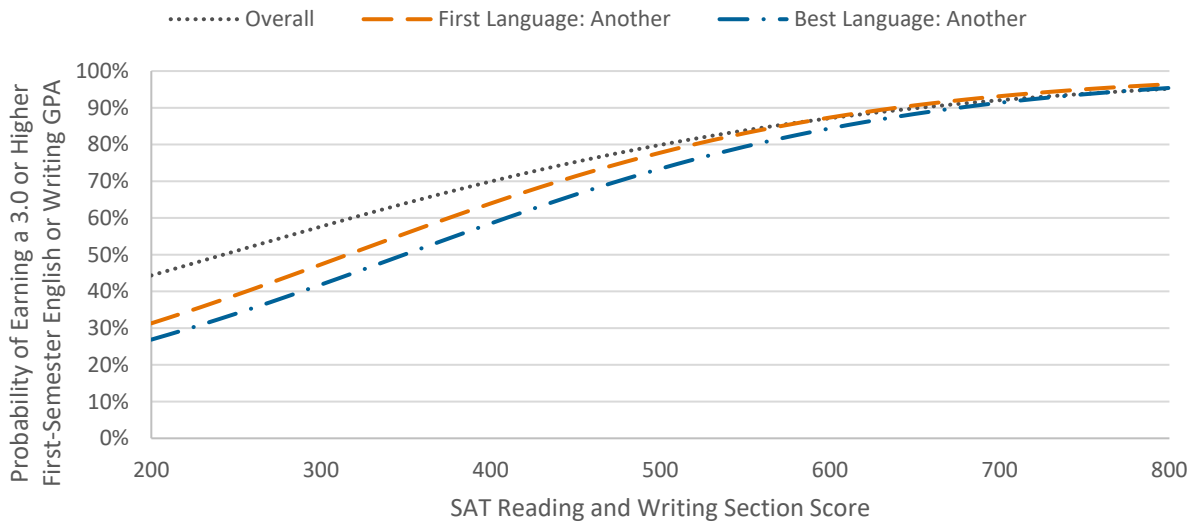


Figure 8: Chance of Earning a First-Year English or Writing GPA of 3.0 or Higher given SAT Reading and Writing Section Score

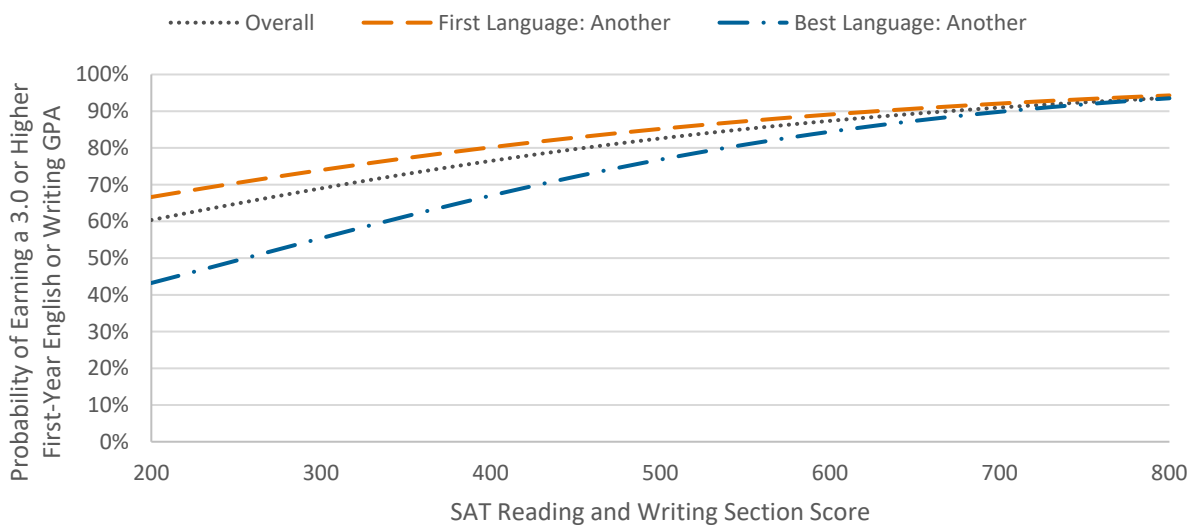


Figure 9 shows the probability that an international student earns a 3.0 or higher first-semester All-but-Math GPA based on SAT reading and writing section score and Figure 10 second shows the probability of earning a 3.0 or higher first-year All-but-Math GPA based on SAT reading and writing section score. As an example from these figures, an international student earning an SAT reading and writing section score of 650 has an 84% chance of earning a 3.0 or higher All-but-Math GPA in the first semester while a student with a score of 500 has a 61% chance, a 23 percentage point difference. For all language subgroups and outcomes examined we see that as scores increase, there is an increased probability of earning a 3.0 or higher.

Figure 9: Chance of Earning a First-Semester All-but-Math GPA of 3.0 or Higher given SAT Reading and Writing Section Score

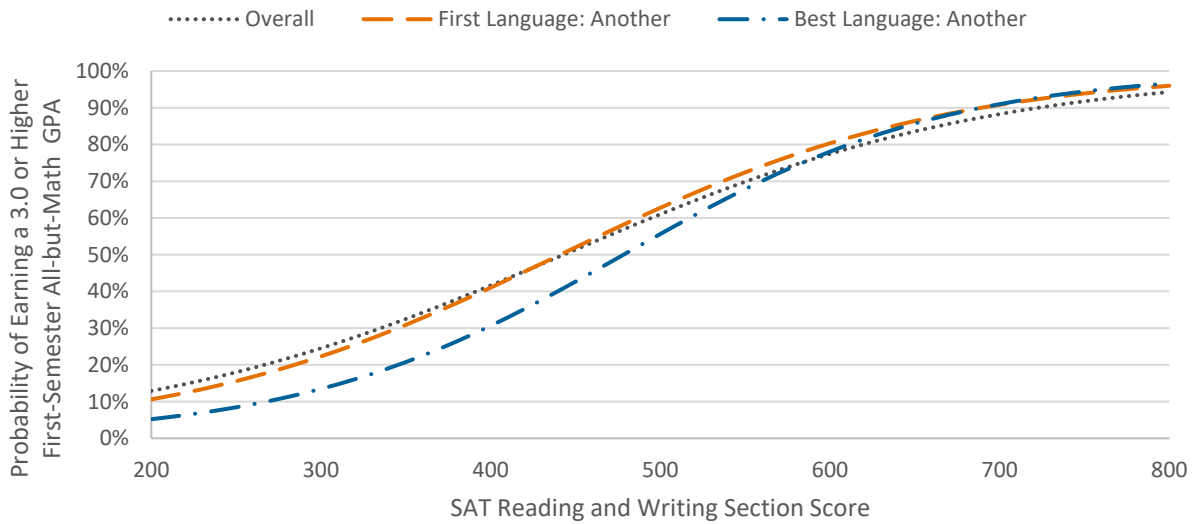
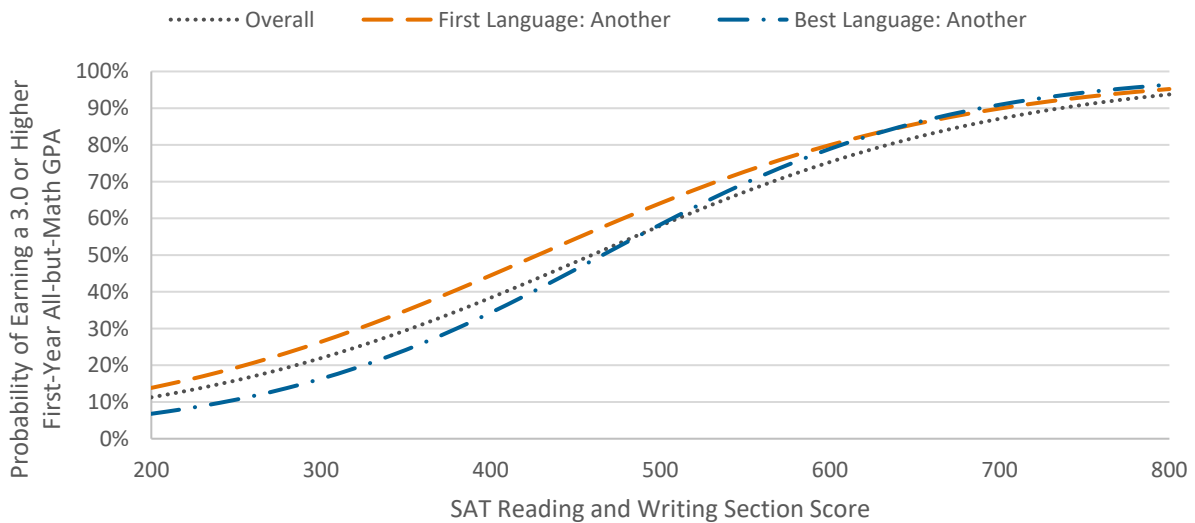


Figure 10: Chance of Earning a First-Year All-but-Math GPA of 3.0 or Higher given SAT Reading and Writing Section Score



Discussion

The results of this study show that the SAT reading and writing section score is a powerful measure to assist institutions with understanding how an international student is likely to perform in coursework taught in English during the first semester and first year of college in the U.S. Student performance by SAT reading and writing section score bands showed clear positive relationships for all outcomes analyzed, indicating that stronger SAT reading and writing section scores are also associated with stronger college performance. Results also showed that the SAT reading and writing section provides value in understanding international student performance beyond the high school record alone. The increment in predictive utility provided by SAT reading and writing section scores above HSGPA to predict either the first-semester or first-year All-but-Math GPAs and English or Writing GPAs was 36%, 37%, 59%, and 44%, respectively. These all represent very large values beyond the predictive information contributed by HSGPA, to understand how a student will perform in college. These larger values are also consistent with previous research on international students at U.S. institutions, where SAT scores added 44% more predictive power above HSGPA alone in understanding how an international student will generally perform in the first year of college (Marini et al., 2020). It is important to note that the added SAT value for international students is about three times larger than that of typical U.S. samples (Westrick, Marini, Shmueli, Young, Shaw, & Ng, 2020) and this is likely because HSGPA is less consistent and informative for international students than it is for the typical U.S. student sample.

Further, this study shows that institutions may find value in calculating their own predictive models, similar to the logistic regression models examining the probability of earning a 3.0 or higher GPA, based on different SAT reading and writing section scores. Models like these can help an institution determine what SAT reading and writing section score would be most appropriate for understanding student readiness on their own campus. Also, in terms of validating different score points for use in campus decision making, our analyses examining SAT reading and writing section scores of 550, 600, and 650 offered examples of how to determine whether there are meaningful differences in student performance in college, after parsing students into different readiness groups.

All analyses for international students whose first language or best language was not English follow the same findings and patterns as the overall sample of international students examined. This indicates that SAT reading and writing scores are just as predictive for students who are not native English speakers as they are predictive for all international students.

In sum, the analyses in this study show that SAT reading and writing section scores can be valuable in evaluating international student readiness for U.S. higher education instruction in English. Because the digital SAT is available in at least 183 countries and so many institutions in the U.S. accept SAT scores for admission, the consideration of SAT reading and writing section scores to more deeply understand international student readiness and possible academic support needed is both warranted based on these study findings, and also efficient in terms of student time, cost, and preparation of application materials.

Conclusion

This study shows that U.S. colleges and universities can use the SAT reading and writing section score to help understand and predict an international student's performance during their first semester and first year in coursework delivered in English; and this is true for students whose first language was not English and for students who consider another language to be their best language. If colleges or universities would like to gain a better understanding of international student performance in similar coursework, they can use College Board's free online automated research service called the Admitted Class Evaluation Service™ (ACES) system, to design different SAT validity research studies tailored to their campus. To learn more about ACES, institutions can visit <https://aces.collegeboard.org>.

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Appendix

Table A1: Increase in Predictive Utility for Language Subgroups

Subgroup	GPA	Increase in Predictive Utility
First Language: Another	First-Semester All-but-Math GPA	53%
	First-Semester English or Writing GPA	88%
	First-Year All-but-Math GPA	47%
	First-Year English or Writing GPA	72%
Best Language: Another	First-Semester All-but-Math GPA	66%
	First-Semester English or Writing GPA	116%
	First-Year All-but-Math GPA	71%
	First-Year English or Writing GPA	113%

Table A2: T-test results of English and Writing GPAs and All-but-Math GPAs for the overall International Student Sample at different SAT Score Thresholds.

			Did Not Meet		Met or Exceeded		df	t	p
			Score Threshold		Score Threshold				
			M	SD	M	SD			
550	English or Writing GPA	First-Semester	3.20	0.87	3.45	0.75	2,924	-6.47	< .0001
		First-Year	3.16	0.82	3.45	0.72	4,379	-8.80	< .0001
	All-but-Math GPA	First-Semester	2.97	0.83	3.41	0.66	5,962	-15.71	< .0001
		First-Year	2.97	0.75	3.38	0.62	5,981	-16.14	< .0001
600	English or Writing GPA	First-Semester	3.24	0.85	3.50	0.72	2,924	-8.50	< .0001
		First-Year	3.20	0.81	3.49	0.69	4,379	-11.94	< .0001
	All-but-Math GPA	First-Semester	3.06	0.80	3.46	0.63	5,962	-20.32	< .0001
		First-Year	3.03	0.73	3.44	0.59	5,981	-21.93	< .0001
650	English or Writing GPA	First-Semester	3.32	0.82	3.54	0.69	2,924	-7.82	< .0001
		First-Year	3.29	0.78	3.54	0.67	4,379	-10.96	< .0001
	All-but-Math GPA	First-Semester	3.18	0.76	3.53	0.59	5,962	-19.93	< .0001
		First-Year	3.16	0.70	3.50	0.55	5,981	-21.42	< .0001

Table A3: T-test results of English and Writing GPAs and All-but-Math GPAs for International Students whose First Language was not English at Different SAT Score Thresholds.

			Did Not Meet Score Threshold		Met or Exceeded Score Threshold		df	t	p
			M	SD	M	SD			
550	English or Writing GPA	First-Semester	3.26	0.78	3.48	0.72	1,375	-4.10	< .0001
		First-Year	3.23	0.78	3.46	0.69	2,028	-5.20	< .0001
	All-but-Math GPA	First-Semester	3.01	0.80	3.45	0.63	2,700	-11.63	< .0001
		First-Year	3.02	0.72	3.43	0.60	2,712	-11.79	< .0001
600	English or Writing GPA	First-Semester	3.30	0.77	3.50	0.71	1,375	-4.82	< .0001
		First-Year	3.25	0.77	3.50	0.67	2,028	-7.30	< .0001
	All-but-Math GPA	First-Semester	3.11	0.79	3.50	0.59	2,700	-13.87	< .0001
		First-Year	3.09	0.72	3.48	0.56	2,712	-14.73	< .0001
650	English or Writing GPA	First-Semester	3.35	0.77	3.55	0.67	1,375	-4.95	< .0001
		First-Year	3.32	0.75	3.56	0.63	2,028	-7.57	< .0001
	All-but-Math GPA	First-Semester	3.22	0.75	3.57	0.53	2,700	-14.23	< .0001
		First-Year	3.20	0.69	3.56	0.50	2,712	-15.52	< .0001

Table A4: T-test results of English and Writing GPAs and All-but-Math GPAs for International Students whose Best Language was not English at Different SAT Score Thresholds.

		Did Not Meet Score Threshold		Met or Exceeded Score Threshold		df	t	p	
		M	SD	M	SD				
550	English or Writing GPA	First-Semester	3.30	0.79	3.47	0.71	974	-2.94	0.0034
		First-Year	3.26	0.78	3.43	0.68	1,455	-3.64	0.0003
	All-but-Math GPA	First-Semester	3.05	0.79	3.45	0.64	1,881	-9.26	< .0001
		First-Year	3.05	0.72	3.43	0.59	1,890	-9.79	< .0001
600	English or Writing GPA	First-Semester	3.32	0.77	3.50	0.70	974	-3.72	0.0002
		First-Year	3.28	0.75	3.47	0.67	1,455	-4.78	< .0001
	All-but-Math GPA	First-Semester	3.13	0.77	3.50	0.60	1,881	-11.46	< .0001
		First-Year	3.10	0.70	3.49	0.55	1,890	-12.77	< .0001
650	English or Writing GPA	First-Semester	3.39	0.74	3.51	0.71	974	-2.42	0.0159
		First-Year	3.34	0.72	3.50	0.66	1,455	-4.25	< .0001
	All-but-Math GPA	First-Semester	3.24	0.73	3.57	0.56	1,881	-10.95	< .0001
		First-Year	3.22	0.66	3.56	0.52	1,890	-12.33	< .0001

Figure A1: Mean English and Writing GPAs for International Students whose First Language was not English at Different SAT Score Thresholds.

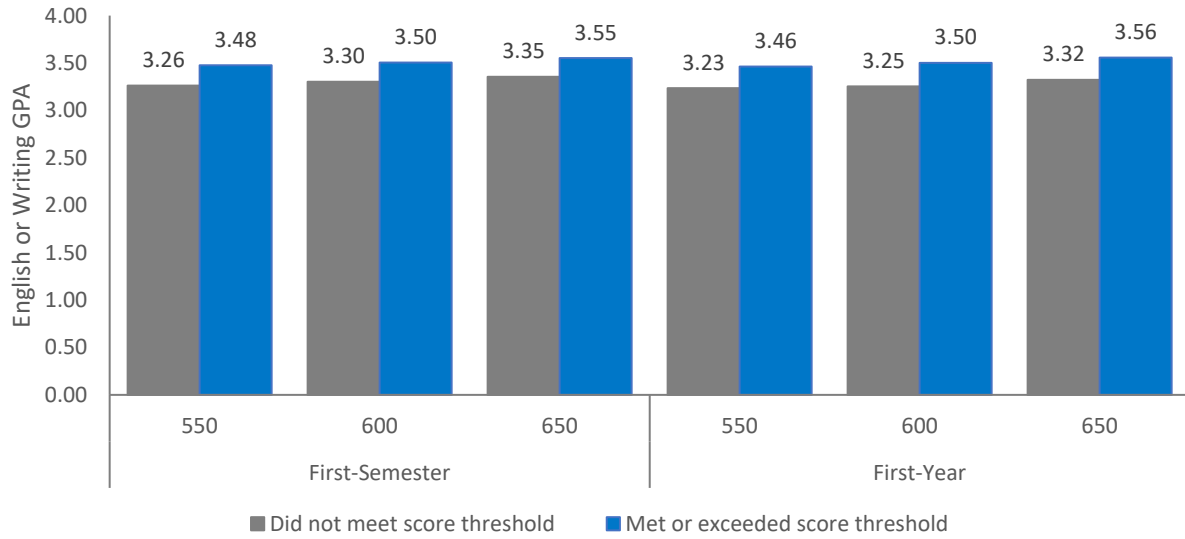


Figure A2: Mean All-but-Math GPAs for International Students whose First Language was not English at Different SAT Score Thresholds.

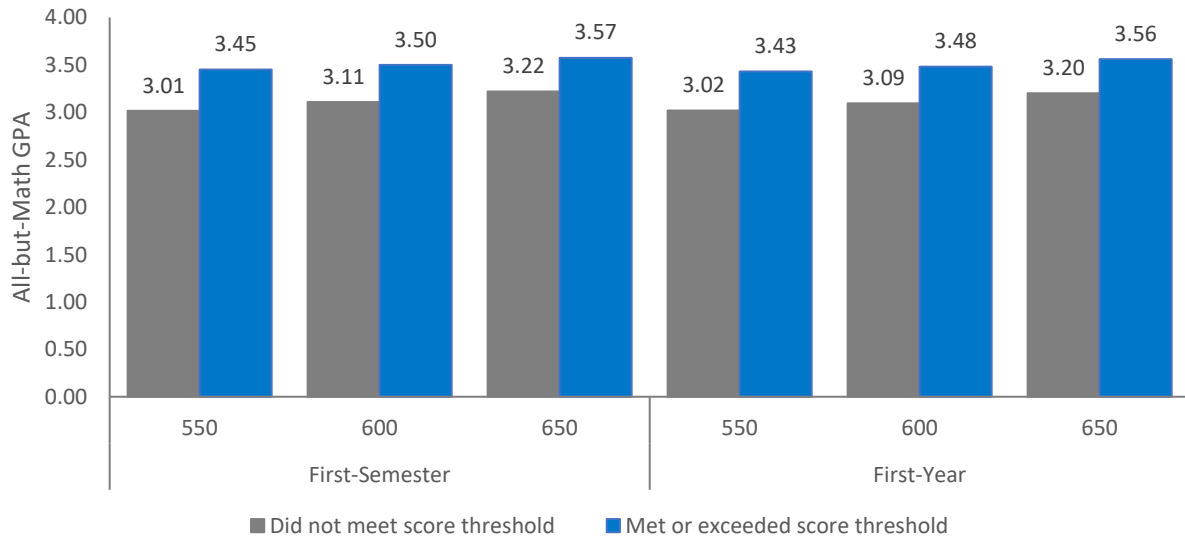


Figure A3: Mean English and Writing GPAs for International Students whose Best Language was not English at Different SAT Score Thresholds.

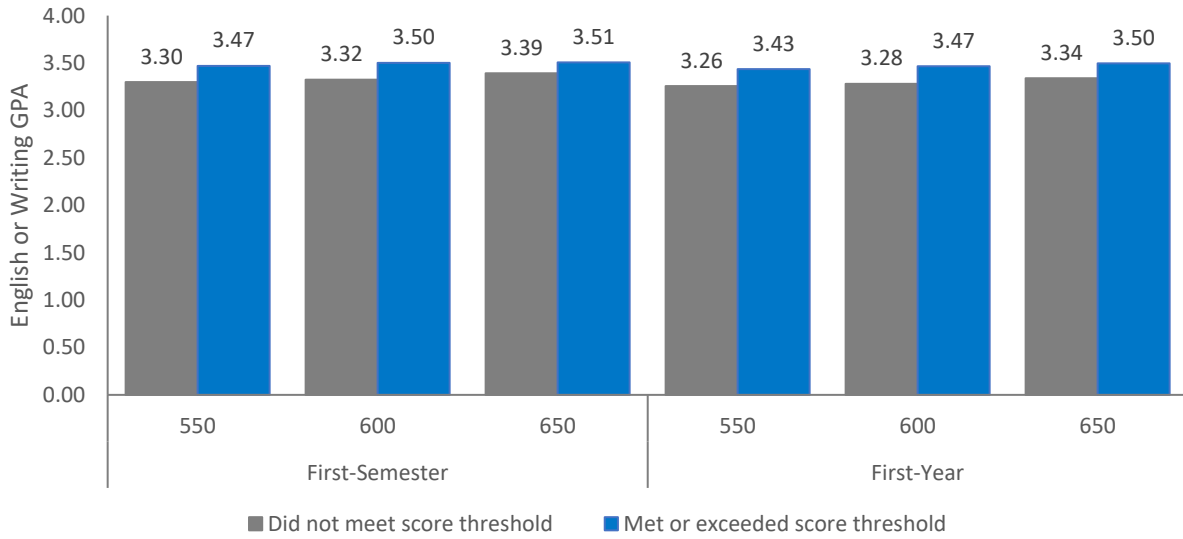


Figure A4: Mean All-but-Math GPAs for International Students whose Best Language was not English at Different SAT Score Thresholds.

