



SAT Subscores vs. ACT Subscores

What They Are and How to Compare Them

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INTRO

SAT Subscores vs. ACT Subscores



Both the SAT and ACT subscores provide students with detailed information about their weaknesses and strengths in categories more specific than Reading, Writing, Math, and Essay-writing (SAT) or English, Reading, Math, Science, and Writing (ACT). Understanding the implications of that detailed information, however, can be difficult, due to the sheer number of scores.

In this ebook, we'll discuss how subscores can be useful to students and whether or not subscores on one test can indicate how a student would do on the other.

1: What Are SAT/ACT Subscores?

- > **Key Point:** Subscores on the SAT and ACT give students more information about their strengths and weaknesses in specific areas.



In addition to total scores out of 36 and 1600 and section scores out of 36 and 800 (or out of 40 for individual "test scores" on SAT Reading, Writing, and Math), the ACT and SAT both provide students with **subscores**.

The stated goals of these subscores are to "provide more detail about student achievement" ([SAT](#)) and give students a "better understanding [of] strengths and areas for

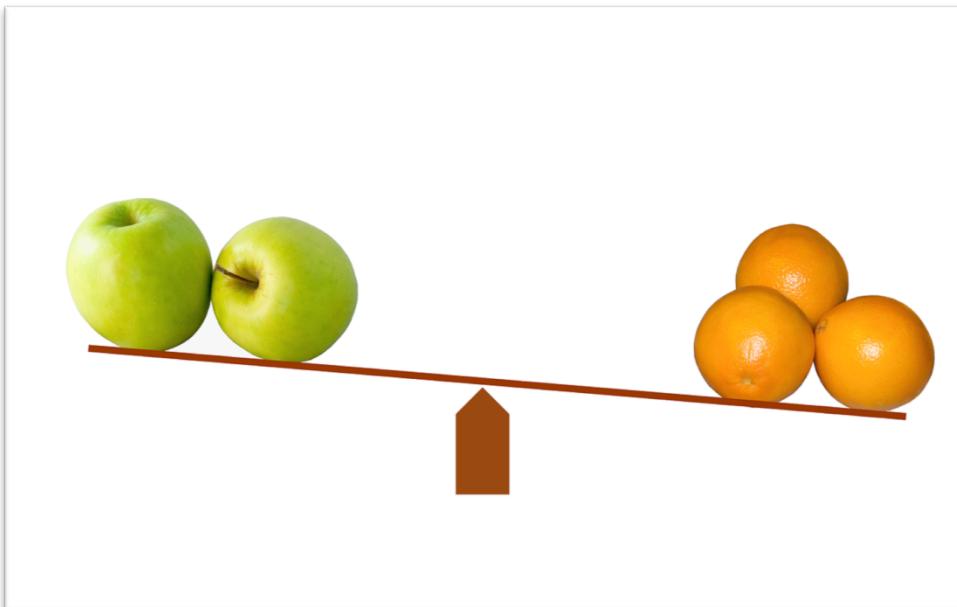
improvement in each subject" ([ACT](#)).

The subscores calculated on each test fall under one of two different categories:

- 1. Section-level subscores:** These “reporting categories” subscores give information about the different types of question within a specific section (e.g. types of Math questions).
- 2. Cross-test scores:** These subscores give information about how student is doing on a specific topic, computed by combining information from multiple sections (e.g. Math and Science on the ACT to get the STEM subscore).

2: Can You Compare Subscores?

- > **Key Point:** Some section-level subscores are comparable between the SAT and ACT; cross-test and other subscores are less clearly linked.



The short answer: **yes, some subscores can be compared.**

The closest relationships are between the SAT and ACT essay subscores, followed by the SAT Writing and ACT English subscores. In practical terms, this means, for example, that **students who score highly on all the ACT essay subscores can expect to do fairly well on the SAT**

essay subscores, while students who don't do well on ACT English subscores can anticipate similarly poor results on SAT Writing subscores.

By contrast, it's **unlikely that students would see any relationship between their subscores on SAT Evidence-Based Reading and Writing and ACT Reading**, because the subscores measure such different things. If you get high ACT Reading subscores, that's great, but it doesn't tell you anything about how you'd do on Evidence-Based Reading and Writing subscores. This is **even more true for ACT Science**, since the only science-related subscore on the SAT measures something completely different from what the ACT Science subscores are trying to capture.

Subscores for SAT/ACT Math fall into the middle between the highly comparable SAT/ACT essay and Writing/English subscores and the divergent SAT/ACT Reading subscores. There is **some overlap between**

what the Math subscores measure across the two tests, but the correspondence is a little fuzzier. A high subscore on ACT's Algebra subscore could mean you'd get a high score on SAT's Heart of Algebra subscore, but you could just as easily get a medium score because there's a considerable difference in what the Algebra questions on each test are meant to measure.



Why compare subscores across the SAT and ACT?

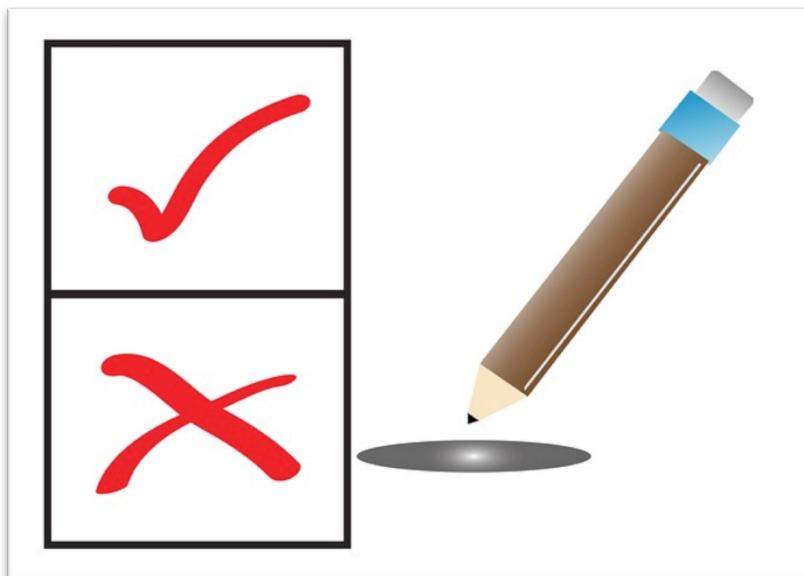
The biggest reason is that doing so can give you **more information about whether or not it's worth taking both the SAT and the ACT.**

- If you take the ACT and **score poorly** on certain subscores in ACT English, you can expect to **not do any better** on the SAT Writing versions of those subscores (and thus on SAT Writing).
- Conversely, **even if you did poorly** on some of the ACT Math subscores, there's a much better chance that you could do **better** on the related SAT Math subscores and get a relatively higher overall SAT Math score because the subscore categories are more loosely related.

So what are the different subscores, and which ones are comparable? We'll start off by comparing different reporting categories for the SAT and ACT, section by section.

3: Section-Level Subscores

- > **Key Point:** Subscores on the Writing/English and the essay sections can be compared between the two tests; less clear relationships between other subscores.



Reporting categories function similarly on the SAT and ACT in that they both attempt to break down entire sections like English or Math into more specific skills that students can then focus on.

There is a slight difference in how questions are sorted into different subscores, however: on the **ACT**, a question is always grouped into at **least one** subscore category, while on the **SAT** there are some questions on the Math and

Reading sections that **don't fall into any** specific reporting category.

There is one other major difference between the way section-level subscores are used on the SAT and ACT. On the **SAT**, subscores are scaled to a range of **1-15**, while on the **ACT**, subscores are measured on a scale of **0-100%**.

As you'll see in the following more detailed analyses, the number of questions that go into each subscore varies a little bit more on the ACT than on the SAT, so a percentage reporting system makes more sense for the ACT.



Important Caveat

Our descriptions of correspondence between the different subscores on the SAT and ACT are based purely on **content** (what the subscores say they're measuring), rather than empirical data on **correlations** between different subscores (since that data was not available at the time of this book's publication).

Math (SAT and ACT)

Out of the 58 questions that appear on the Math section of the SAT, there are three no-calculator and three calculator questions that don't apply towards any subscore, leaving 52 questions to fall into one of three non-overlapping categories: **Heart of Algebra, Problem Solving and Data Analysis, and Passport to Advanced Math.**

Name	# of questions	Score Range
Heart of Algebra	19 (8 no calculator, 11 with calculator)	1-15
Problem Solving and Data Analysis	17 (all with calculator)	1-15
Passport to Advanced Math	16 (9 no calculator, 8 with calculator)	1-15

In contrast to the relatively straightforward division of questions on SAT Math, ACT Math reports eight different subscores to students. Two of these subscores (**Preparing for Higher Math** and **Integrating Essential Skills**)

cover all 60 ACT Math questions; of the remaining categories, five are further divisions of Preparing for Higher Math, while one (Modeling) measures questions from both the Preparing for Higher Math and Integrating Essential Skills subscore categories.

Name	# of questions	Score Range
Preparing for Higher Math	35	0-100%
Number & Quantity	~5*	0-100%
Algebra	~8	0-100%
Functions	~8	0-100%
Geometry	~8	0-100%
Statistics & Probability	~6	0-100%
Integrating Essential Skills	25	0-100%
Modeling	~22	0-100%

*Number of questions with a "~" next to it indicates variation from test to test.



SAT Math vs ACT Math Subscores

Based on the SAT and ACT's descriptions of what each subscore covers, there is a lot of overlap between subscores on the two tests. The biggest links are as follows:

- SAT Heart of Algebra and ACT Algebra
- SAT Problem Solving and Data Analysis and ACT Statistics & Probability and/or ACT Integrating Essential Skills and/or ACT Modeling
- SAT Passport to Advanced Mathematics and ACT Functions

The overlap between the subscores is not complete (for instance, Heart of Algebra on the SAT does not cover exactly the same things as Algebra on the ACT), but there still should be some correspondence between the above subscores on the SAT and ACT. We have a much more detailed look at the ways SAT and ACT Math compare to one another [in this blog article](#).

Writing and Language (SAT) and English (ACT)

On SAT Writing and Language, all 44 questions fall into one of two section-level subscores: **Expression of Ideas** or **Standard English Conventions**.

Name	# of questions	Score Range
Expression of Ideas	24	1-15
Standard English Conventions	20	1-15

Similarly, ACT English divides up its 75 questions into three different subscores: **Production of Writing**, **Knowledge of Language**, and **Conventions of Standard English**.

Name	# of questions	Score Range
Production of Writing	23-24	0-100%
Knowledge of Language	10-11	0-100%
Conventions of Standard English	40	0-100%

SAT Writing vs. ACT English Subscores

Based on the descriptions of the two tests' subscores, students can expect their SAT **Standard English Conventions** subscore to be similar, percentage-wise, to their ACT **Conventions of Standard English** subscore.



SAT Writing vs. ACT English Subscores Example

A student who gets 14/15 (93.3%) on Standard English Conventions (SAT) should expect to get a similar score on Conventions of Standard English (ACT).

SAT's "Expression of Ideas" subscore appears to cover items that both "Production of Writing" and "Knowledge of Language" subscores cover on the ACT, so it's possible that those scores would also be correlated. However, because you'd be going from one subscore to two subscores (or two to one), the equivalency is likely to be less clear.

For more about the connection between SAT Writing and ACT English, read [our comparison of the two sections](#).

Reading (SAT and ACT)

SAT Reading is unusual among SAT sections in that there are no subscores that only reflect performance on the SAT Reading section.

Instead, the SAT has two reporting categories that combine questions from Writing and Language and from Reading: **Words in Context** and **Command of Evidence**. The breakdown of how many questions from each section are included in each subscore is shown in the table below.

Name	# of questions	Score Range
Words in Context	18 (10 Reading, 8 Writing)	1-15
Command of Evidence	18 (10 Reading, 8 Writing)	1-15

The ACT is much more straightforward with its Reading subscores. The **Understanding Complex Texts** subscore

measures how well students understand the central meaning of college-level texts (although which subset of items this subscore refers to is not told to the student).

In addition, all 40 ACT Reading questions are further divided into one of three subscore categories: **Key Ideas and Details**, **Craft and Structure**, and **Integration of Knowledge and Ideas**.

Name	# of questions	Score Range
Key Ideas and Details	23-24	0-100%
Craft and Structure	11-14	0-100%
Integration of Knowledge and Ideas	3-5	0-100%
Understanding Complex Texts	40	Below, Proficient, or Above

SAT Reading vs. ACT Reading Subscores

Because the SAT "Reading" subscores draw on items from both SAT Reading and Writing and Language, while the ACT

Reading subscores only apply to ACT Reading items, it's harder to compare the categories.

Based on the descriptions of the subscores, the SAT Words in Context subscore likely will show some kind of correlation with ACT Craft and Structure subscore, while the SAT Command of Evidence and ACT Integration of Knowledge and Ideas subscores are also likely linked; however, the relationship is much weaker than with ACT English/SAT Writing and Language items.

Learn more about the differences between SAT and ACT Reading in [this blog article!](#)

Science (ACT Only)

The ACT Science Test provides three subscores: Interpretation of Data, Scientific Investigation, and Evaluation of Models, Inferences, and Experimental Results.

Name	# of questions	Score Range
Interpretation of Data	16	0-100%
Scientific Investigation	10-11	0-100%
Evaluation of Models, Inferences, and Experimental Results	13-14	0-100%

SAT Science vs. ACT Subscores

Since the SAT has no science section, there is **no direct comparison possible** from section-to-section. While the descriptions of the skills measured with ACT Science subscores may have some relationship to the items captured by SAT Reading and Math, the tasks that the ACT asks students to complete are specific enough to ACT Science that it's unlikely there'd be a strong correlation between subscores on ACT Science and those on SAT Reading or SAT Math.

Essay (SAT) and Writing (ACT)

With the changes to the SAT in March 2016, there is no longer one total SAT Essay score reported. Instead, students who opt to take the essay will receive three different subscores: **Reading, Analysis, and Writing**.

Name	Score Range
Reading	2-8 (two graders scoring on a scale of 1-4)
Analysis	2-8 (two graders scoring on a scale of 1-4)
Writing	2-8 (two graders scoring on a scale of 1-4)

The ACT still provides students who opt to take ACT Plus Writing with an overall Writing score on a scale of 2-12, but since September 2015 has also reported four different subscores to students: **Ideas & Analysis, Development & Support, Organization, and Language Use**.

As of September 2016, the total ACT Writing score is just an average of the four domain scores each student receives on the essay, so it's debatable whether or not the

domain scores count as "subscores." I've included them below anyway, though, for completeness's sake (and to make it easier to compare ACT Writing with the SAT essay).

Name	Score Range
Ideas & Analysis	2-12 (two graders scoring on a scale of 1-6)
Development & Support	2-12 (two graders scoring on a scale of 1-6)
Organization	2-12 (two graders scoring on a scale of 1-6)
Language Use	2-12 (two graders scoring on a scale of 1-6)

SAT Essay vs ACT Essay Subscores

As with ACT English vs. SAT Writing, **a very strong case** can be made for the **correlation** between subscores on the SAT and ACT essays.



SAT Essay vs. ACT Writing Subscores Details

While the SAT Essay Reading score is its own beast, there's a fairly straightforward relationship between the remaining two SAT essay subscores and the four ACT essay subscores:

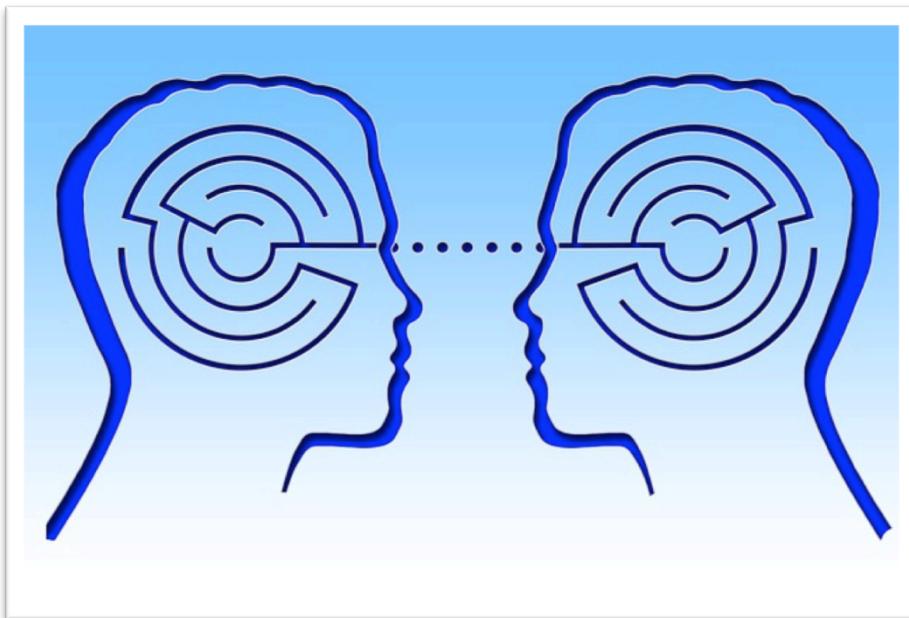
- SAT Essay Analysis = ACT Essay Ideas & Analysis and ACT Essay Development & Support
- SAT Essay Writing = ACT Essay Organization and ACT Essay Language Use

The numerical relationships aren't exact between the essay subscores (you can't just multiple your ACT Essay Organization and Language Use summed scores by 2/3 to get your equivalent SAT Essay Writing score), **but the theoretical relationships between SAT/ACT essay subscores are strong.** If you do well on the Analysis and Writing portion of the SAT essay, chances are you will also do very well on the ACT essay; if you get extremely high ACT Organization and Language Use scores, you'll likely do well on at least the Writing area of the SAT essay.

For further reading, check out our articles analyzing the rubrics that determine your [SAT](#) and [ACT essay scores](#).

4: Cross-Test Scores

- > **Key Point:** Cross-test scores on the SAT and ACT give insight about skills in broader areas; are not comparable across tests.



Cross-test scores are meant to analyze performance on a broader level than the section subscores can.

Theoretically, these cross-test scores are capturing information about broader skills like “analysis in science” and “English/Language Arts” that students have to draw on for multiple sections.

As of March 2016, the SAT now provides students with two scores that incorporate items from all sections of the test: **Analysis in History/Social Sciences** and **Analysis in Science**.

SAT Cross-Test Scores

Name	Analysis in History/Social Sciences	Analysis in Science
Sections Included	Reading, Writing, Math	Reading, Writing, Math
Topics Covered	analytical thinking about texts and questions in history/social sciences	analytical thinking about texts and questions in science
# of questions	35 (21 Reading, 6 Writing, 8 Math)	35 (21 Reading, 6 Writing, 8 Math)
Score Range	10–40	10–40

By contrast, the ACT's cross-test scores are a little more limited in scope. The **English Language Arts** score averages together students' English, Reading, and Writing test scores, while the **STEM** score averages together students' Math and Science test scores.

ACT Cross-Test Scores

Name	ELA (English Language Arts)*	STEM (Science, Technology, Engineering, and Math)
Sections Included	English, Reading, Writing	Reading, Writing, Math
Topics Covered	overall performance on English, Reading, and Writing Tests	analytical thinking about texts and questions in science
# of questions	116 (75 English, 40 Reading, 1 Writing)	35 (21 Reading, 6 Writing, 8 Math)
Score Range	1–36**	10–40

*Only calculated for students who do the optional essay (ACT Writing)

**Calculated using the Writing Test scale score (1-36) rather than the normal ACT Writing score (2-12), although this scaled Writing score is no longer reported to students on score reports.

Unlike section-level subscores, the cross-test scores on the SAT and ACT are not really comparable, due to methodological differences (SAT cross-test scores use some items from Reading, Writing, and Math, while ACT cross-test scores use all items from selected sections). So if you get a high ACT STEM score, that's no guarantee you'd get an equally good "Analysis in Science" score on the SAT.

5: Other Subscores

- > **Key Point:** College and Career Readiness scores might help some students but have no impact on your college applications.



College and Career Readiness scores are only part of ACT score reports, so they're not comparable across SAT and ACT.

We'll briefly discuss them because the college benchmarks, at least, do show up on every student's score report (the career readiness information only shows up if students have previously completed ACT's Interest Inventory).

With college readiness benchmark and estimates of how well high school students are likely to do in introductory college courses like Freshman English or College Algebra, ACT, Inc. is trying to provide **more guidance for high school students**. This is admirable, but it's unclear whether or not the benchmarks twist the test into supporting interpretations that were never meant to be made and that the data do not support.

Because the methodology used to calculate benchmarks and college readiness is not public (for instance, students can't see which Reading questions go into their "[Arguments](#)" benchmark score, or what constitutes a college "[History](#)" class for the purpose of benchmarks), **it cannot be independently assessed for veracity and validity**. Similarly, there has been no public research released thus far that shows supplying students with these benchmarks has any benefit.

In my personal opinion, these college and career readiness

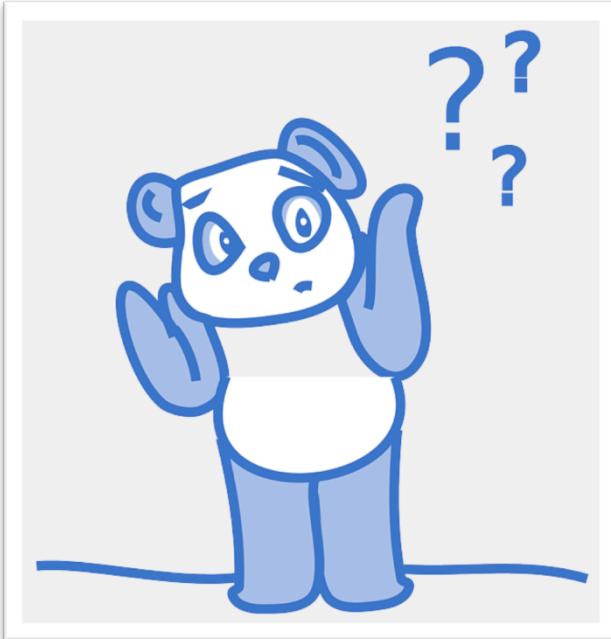
absent empirical proof, are more likely to have a neutral or harmful effect than to provide any benefit.

Harmful effects are particularly likely to come from scores that tell students they aren't REALLY interested in what they think they're interested in (as the Interest Inventory might). The same thing goes for scores that inform students they have no chance at succeeding in a field they are interested in (for instance, if they have <25% chance in getting above a C in Engineering but want to be an engineer).

- > **Conclusion:** Skip looking at the College and Career Readiness subscores and benchmarks. Until there's evidence that shows the ACT benchmarks are a more reliable predictor of college success than high school GPA, there's no point fretting over them.

6: Do Subscores Succeed?

- > **Key Point:** Subscores can provide helpful info for some students and may be able to predict performance on corresponding areas on the other test.



In a very limited sense, subscores do succeed in their goal of providing more information about student achievement.

In particular, subscores help students who can't afford or don't want to order Test Information Release (ACT) or Question and Answer Service/Student Answer Service (SAT).

Large discrepancies between subscores within a section are a sign that students have specific areas they can improve

on and see a large impact in their scores; for example, if you get 16% on statistics and probability and 100% on all other math subscores, then you can know with precision what's keeping your Math score down and what you have to work on to increase it.

For the most part, though, there's going to **be some correlation** among performance on subscores within a section (that's why they're in the same section – they're testing related skills), and blips on the subscore percentages won't tell you as much as **looking at the individual questions** you got wrong and determining why you got them wrong.

Cross-test subscores are more independent and so do provide unique information, but that information **isn't really useful to students** in terms of test preparation. For instance, if a student gets 38/40 in "Analysis in History/Social Science" and 40/40 in "Analysis in Science" on the SAT, that might show where the student's strengths lie, but

it's not an area that students can specifically target to improve on; **any improvement** on cross-test subscores has to come at a lower level, through students increasing their **question-level or section-level** knowledge.

College and career readiness subscores like the ones the ACT provides could potentially be helpful to students who have no idea what they want to study in college, but in all honesty there are better places to get guidance for that than your performance on a 4-hour standardized college entrance exam.

- > **Conclusion:** Section-level subscores and cross-test scores can give students more information about their weaknesses and strengths and where to focus their SAT/ACT studying; however, they shouldn't necessarily extrapolate beyond that to conclude, for instance, that if they got a low STEM score on the ACT, they'll never be an engineer.

AND NOW WHAT?

Through this guide, you've learned a lot about the different subscores on the SAT and ACT and what comparisons can be made. Use this information to learn more about your areas of strength and weakness and focus your prep accordingly.

We at PrepScholar believe we've built the best SAT and ACT prep program in the world. But even if you don't work with us at PrepScholar, we hope you found this guide useful.

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or **call us at 1(866) 811-5546**, where one of our Academic Advisers will walk you through the best options for you and your family.

We'd love to hear from you.

Finally, if you found this guide helpful, please share it with any other people who might benefit.

Good luck!

-The PrepScholar Team