

GreatSchools Ratings: Methodology Report

The GreatSchools Rating is a simple tool for parents to compare schools based on test scores and other available data, including student academic growth and college readiness. It is designed to be a starting point to help parents make baseline comparisons. We always advise parents to visit the school and consider other information on school performance and programs, as well as consider their child's and family's needs as part of the school selection process. The following report outlines how ratings are calculated and what metrics ratings are based on.

What goes into a GreatSchools Rating?

The GreatSchools Rating is an index of how well schools do on several measures of student success compared to all other students in the state. Historically, the GreatSchools rating has been based solely on how well students do on standardized tests compared to other students in the state. In a growing number of states where data are available, the GreatSchools rating incorporates information on multiple measures to give parents a more detailed picture of school performance. In these states, the GreatSchools Rating is comprised of three main components:

- **Test Scores**: The test score sub-rating examines how students at a school performed on standardized tests compared with other schools in the state. Specifically, this rating compares student proficiency rates for each grade and subject with all schools in the state.
- **Student Growth**: The student growth sub-rating measures whether students at this school are making academic progress over time. Specifically, the sub-rating looks at how much progress individual students have made on reading and math assessments during the past year or more. This sub-rating is based on student growth models, which can vary from state to state.
- **College Readiness**: The college readiness sub-rating combines this high school's graduation rate with data about college entrance exams, both of which are indicators of how well schools are preparing students for success in college and beyond.

How is a GreatSchools Rating Calculated?

Each GreatSchools rating is on a 1-10 scale and is categorized as follows: 1-3 = "below average," 4-7 = "average," 8-10 = "above average." The overall rating for a school is a weighted combination of multiple sub-ratings. Sub-ratings are weighted equally, though actual weights depend on the amount of data available per school and what grades that school serves. For instance, the overall rating for a school serving grades K-5 would be 50% based on student achievement and 50% based on student growth. The rating for a high school with data for all three measures would be 33% based on student achievement, 33% student growth, and 33% college readiness. More details on the rating weights are provided below in Section IV.

Each sub-rating represents how a school compares to other schools in the state on each given measure. For each sub-rating, the bottom 10% of schools get a 1, the next 10% get a 2, on up to 10, which indicates the school's result is in the top 10%. More details on the calculation of each sub-rating are provided below.

The overall GreatSchools Rating is not a decile rating, however, because it is an average of multiple sub-ratings. For example, in order to get a rating of 1, a school would have to receive a 1 on all sub-ratings. As such, the distribution of the GreatSchools Rating in a given state looks more like a bell curve, with

higher numbers of schools getting ratings in the “average” category, and fewer schools getting ratings in the “above average” or “below average” categories.

Section I: Student Achievement Sub-Rating

Calculating the Student Achievement Sub-Rating

First, we calculate a standardized proficiency rate for each school in a state. To do this, we convert the proficiency rate for each grade and subject tested with available data into standard units (mean = 0, standard deviation = 1). Then, we average all data available for a school, yielding an average standardized proficiency rate. We do this in order to prevent bias based on the grades a school serves. For instance, statewide proficiency rates can often be much lower for certain tested grades when compared with others, and schools serving these grades would be unfairly ranked lower than schools serving grades with higher statewide proficiency rates using a simple average without standardization.

We then sort standardized proficiency rates in a given state from low to high and converted into percentiles. The bottom decile (1st-9th percentiles) of schools receive a sub-rating of “1”, the second decile (10-19th percentile) receive a sub-rating of “2”, and so on, with the top decile (90-99th percentile) receiving a sub-rating of “10”.

Test score sub-ratings are not calculated using data points (e.g., 3rd grade math proficiency rates) with fewer than 10 students tested or the minimum reporting standard for that state, whichever is higher.

Breakdown of Testing Data used in Ratings by State

<u>State</u>	<u>Included in Rating</u>	<u>Name of Test</u>	<u>Grades Tested</u>	<u>Subjects Tested</u>
Alabama	Y	AHSGE, ARMT, ASA	2-11	Biology, ELA/Reading, Social Studies
Alaska	Y	ACTAAP	3-8, 11	ELA/Reading, Math, Science
Arizona	Y	AIMS	3-8, 10	ELA/Reading, Math, Science
Arkansas	Y	ACTAAP	3-8, 11	ELA/Reading, Math, Science
California	Y	CST	2-11	ELA/Reading, Math, Science, Social Science
Colorado	Y	TCAP	3-10	ELA/Reading, Math, Science
Connecticut	Y	CMT	3-8, 10	ELA/Reading, Math, Science
Delaware	Y	DCAS	3-10	ELA/Reading, Math, Science, Social Science
District of Columbia	Y	DC-CAS	3-8, 10	ELA/Reading, Math, Science
Florida	Y	FCAT2	3-10	ELA/Reading, Math, Science
Georgia	Y	CRCT	3-8, 11	ELA/Reading, Math, Science, Social Science, Writing
Hawaii	Y	HAS	3-8, 10	ELA/Reading, Math
Idaho	Y	ISAT	3-10	ELA/Reading, Math, Science
Illinois	Y	PSAE	3-8	ELA/Reading, Math, Science
Indiana	Y	ISAT-Dell	3-8, 11	ELA/Reading, Math, Science, Social Science
Iowa	Y	IA Assessment	3-8, 11	ELA/Reading, Math
Kansas	Y	KSA	3-8, 11-12	ELA/Reading, Math, Science, Social Science

Breakdown of Testing Data used in Ratings by State

<u>State</u>	<u>Included in Rating</u>	<u>Name of Test</u>	<u>Grades Tested</u>	<u>Subjects Tested</u>
Kentucky	Y	KCCT	3-8, 10-11	ELA/Reading, Math, Science, Social Science
Louisiana	Y	EOC, iLEAP	3-8, HS	ELA/Reading, Math, Science, Social Science
Maine	Y	MEA, MHSA, NECAP	3-8, 11	ELA/Reading, Math, Science
Maryland	Y	MSA	3-8, 10	ELA/Reading, Math, Science
Massachusetts	Y	MCAS, MCAS STE	3-8, 10	ELA/Reading, Math, Science
Michigan	Y	MEAP	3-9, 11	ELA/Reading, Math, Science, Social Science
Minnesota	Y	MCA III, MCA/GRAD MWAP, MCT 2, MST,	3-11	ELA/Reading, Math, Science, Writing
Mississippi	Y	SATP	3-8, 10	ELA/Reading, Math, Science, Social Science
Missouri	Y	MAP, MAP EOC	3-8, HS	ELA/Reading, Math, Science, Social Science
Montana	Y	MontCAS CRT	3-8, 10	ELA/Reading, Math, Science
Nebraska	Y	NESA	3-8, 11	ELA/Reading, Math, Science, Social Science, Writing
Nevada	Y	CRT, HSPE	3-8, 11	ELA/Reading, Math, Science
New Hampshire	Y	NECAP	3-8, 11	ELA/Reading, Math, Writing
New Jersey	Y	NJ ASK, NJBCT	3-8, HS	ELA/Reading, Math, Science
New Mexico	Y	NMSBA	3-8, 10-11	ELA/Reading, Math
New York	Y	NYTESTS, Regents	3-8, HS	ELA/Reading, Math, Science, Social Science
North Carolina	Y	EOC, EOG	3-8, 11	ELA/Reading, Math, Science
North Dakota	Y	NDSA	3-8, 11	ELA/Reading, Math, Science
Ohio	Y	OAT, OGT	3-8, HS	ELA/Reading, Math, Science, Social Science, Writing
Oklahoma	Y	OCCT EOI	3-8, HS	ELA/Reading, Math, Science, Social Science, Writing
Oregon	Y	OAKS	3-8, 11	ELA/Reading, Math, Science
Pennsylvania	Y	PSSA	3-8, 11	ELA/Reading, Math, Science
Rhode Island	Y	NECAP	3-8, 11	ELA/Reading, Math, Science, Writing
South Carolina	Y	PASS, HSAP, SC EOCEP	3-8, 10, HS	ELA/Reading, Math, Science, Social Science
South Dakota	Y	STEP	3-8, 11	ELA/Reading, Math
Tennessee	Y	GATEWAY, TCAP	3-11	ELA/Reading, Math, Science, Writing
Texas	Y	STAAR	3-8, HS	ELA/Reading, Math, Science, Social Science, Writing
Utah	Y	CRT	3-11	ELA/Reading, Math, Science
Vermont	Y	NECAP	3-8, 11	ELA/Reading, Math, Science
Virginia	Y	VAEOC, SOL	3-8, HS	ELA/Reading, Math, Science, Social Science, Writing
Washington	Y	MSP, WA EOC	3-12	ELA/Reading, Math, Science, Writing
West Virginia	Y	WESTEST	3-12	ELA/Reading, Math, Science, Social Science
Wisconsin	Y	WSAS	3-8, 10	ELA/Reading, Math, Science, Social Science
Wyoming	Y	PAWS	3-8, 11	ELA/Reading, Math, Science

Section II: Student Academic Growth Sub-Rating

Student growth models vary considerably by state, but attempt to answer the same basic question: how much academic progress are students making at a particular school? Specifically, how much academic progress are students making relative to similar students in the state. Different student growth models adjust for different student characteristics in order to ensure that growth comparisons are fair and accurate, but at a minimum all student growth models included in the GreatSchools rating account for prior student academic performance at the student level.

While student growth models vary across states, the same methodology is used to rate all types of continuous growth metrics (e.g., student growth percentiles, value-added scores, net growth, etc.). First, all growth metrics for an individual school are standardized (if not already in that format) and averaged across subjects and grades (when disaggregated across grades). Additionally, in order to improve the year-to-year reliability of growth measures, growth metrics are averaged across two years when data for past years is available and growth metrics do not already represent a multi-year average.

Next, similar to proficiency rates, growth metrics in a given state are sorted from low to high and converted into percentiles. Sub-ratings (1-10) are assigned for each decile, where the first decile (1-9th percentiles) receiving a "1", the second decile (10-19th percentile) receiving a "2", and so on until the top decile (90-99th percentile) which receives a "10".

Test score sub-ratings are not calculated using data points with fewer than 10 students tested or the minimum reporting standard for that state, whichever is higher.

Growth Models Used by State

<u>State</u>	<u>Included in Rating</u>	<u>Growth Model Type</u>	<u># of Years Averaged</u>
Alabama			
Alaska			
Arizona			
Arkansas			
California			
Colorado	Y	Student Growth Percentile	2 years
Connecticut			
Delaware	Y	% Meeting Growth Targets	2 years
District of Columbia	Y	Student Growth Percentile	1 year
Florida	Y	Average Growth Score	1 year
Georgia			
Hawaii			
Idaho			
Illinois	Y	Average Growth Score	1 year
Indiana	Y	Student Growth Percentile	2 years

Growth Models Used by State

<u>State</u>	<u>Included in Rating</u>	<u>Growth Model Type</u>	<u># of Years Averaged</u>
Iowa			
Kansas			
Kentucky	Y	% Meeting Growth Targets	2 years
Louisiana			
Maine			
Maryland			
Massachusetts	Y	Student Growth Percentile	2 years
Michigan	Y	Value Table (net growth)	Up to 3 years ¹
Minnesota			
Mississippi			
Missouri			
Montana			
Nebraska			
Nevada			
New Hampshire			
New Jersey	Y	Student Growth Percentile	2 years
New Mexico			
New York			
North Carolina			
North Dakota			
Ohio	Y	Value-Added	
Oklahoma			
Oregon			
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota			
Tennessee			
Texas			
Utah			
Vermont			
Virginia			
Washington			
West Virginia			
Wisconsin	Y	Average Growth Score ²	
Wyoming			

1. Michigan value table measures are reported as multi-year averages.

2. Value-added scores for schools in Milwaukee, both public and private, are calculated by the [Value-Added Research Center \(VARC\)](#)

Section III: College Readiness Sub-Rating

The college readiness sub-rating is determined by three metrics: (1) 4-year high school graduation rates, (2) performance on the ACT and/or SAT, and (3) participation rate on the ACT and/or SAT. If a state mandates participation on a college entrance exam, only performance for that exam is used as the college entrance exam component of the college readiness sub-rating. The overall college readiness sub-rating is the average of these two components—50% graduation rates and 50% college entrance exam performance (25% ACT/SAT scores) and participation (25% ACT/SAT % of students tested). If a school does not have sufficient data for one of these components, that component is not used in calculating the college readiness sub-rating. For instance, the college readiness rating for a high school that has information on college entrance exams but not graduation rates would be based solely on college entrance exams.

When calculating the college readiness sub-rating, each of the three metrics are sorted individually from low to high and converted into a percentile. These percentiles are weighted together, and the remaining percentile weighted average is assigned a rating where the first decile average (1-9th percentiles) receives a "1", the second decile (10-19th percentile) receives a "2", and so on until the top decile (90-99th percentile) which receives a "10".

College Readiness by State

State	Included in Rating	Graduation Rates Included	College Entrance Exams	
			Participation Included	Name of Exam
Alabama				
Alaska				
Arizona				
Arkansas				
California				
Colorado	Y	Y		ACT
Connecticut				
Delaware	Y	Y		SAT
District of Columbia ¹	Y	Y	Y	ACT/SAT
Florida	Y	Y	Y	SAT
Georgia				
Hawaii				
Idaho				
Illinois	Y	Y		ACT
Indiana	Y	Y	Y	ACT/SAT
Iowa				
Kansas				

College Readiness by State

State	Included in Rating	Graduation Rates Included	College Entrance Exams	
			Participation Included	Name of Exam
Kentucky	Y	Y		
Louisiana				
Maine				
Maryland				
Massachusetts	Y	Y	Y	SAT
Michigan	Y	Y		
Minnesota				
Mississippi				
Missouri				
Montana				
Nebraska				
Nevada				
New Hampshire				
New Jersey	Y	Y	Y	ACT/SAT ²
New Mexico				
New York				
North Carolina				
North Dakota				
Ohio	Y	Y	Y	ACT
Oklahoma				
Oregon				
Pennsylvania				
Rhode Island				
South Carolina				
South Dakota				
Tennessee				
Texas				
Utah				
Vermont				
Virginia				
Washington				
West Virginia				
Wisconsin ²				
Wyoming				

1. The methodology for the District of Columbia (a GreatSchools local site) differs from the methodology outlined in this report (for more information, see:

http://www.greatschools.org/catalog/pdf/New_Ratings_Methodology_DC.pdf)

2. SAT scores used for performance rating; ACT/SAT combined participation used for participation rating.

Section IV: Weighting for Overall Ratings

Overall ratings are calculated by averaging the raw percentiles of all available sub-ratings. Averaging raw percentiles instead of actual sub-ratings (1-10) reduces rounding error in the overall rating. The remaining percentile weighted average is assigned a rating where the first decile average (1-9th percentiles) receives a "1", the second decile (10-19th percentile) receives a "2", and so on until the top decile (90-99th percentile) which receives a "10". For high schools that also offer K-8 grades, two separate overall ratings are calculated—one for K-8 and one for 9-12—and the average of these two ratings serves as the overall rating. The figure below shows how the combining of sub-ratings into an overall rating vary based on what data is available and what grades a school serves:

Weighting Scheme I: no student growth for high schools ¹					
	<u>Elementary</u>	<u>Middle</u>	<u>High School</u>	<u>K-8</u>	<u>5-12/K12</u>
Test Scores	50%	50%	50%	50%	50%
Growth	50%	50%	N/A	50%	25%
College Readiness	N/A	N/A	50%	N/A	25%
Weighting Scheme II: student growth for high schools ¹					
	<u>Elementary</u>	<u>Middle</u>	<u>High School</u>	<u>K-8</u>	<u>5-12/K12</u>
Test Scores	50%	50%	33%	50%	42%
Growth	50%	50%	33%	50%	42%
College Readiness	N/A	N/A	33%	N/A	16%
1. Student proficiency rates are required for all ratings. If growth and/or college readiness data is unavailable, weighting percentages are reapportioned to equal 100%.					

Section V: Rating Exemptions

There are several special circumstances where it is not in the best interest of students and parents to assign a GreatSchools rating to certain schools. The following is a list of circumstances in which GreatSchools does not assign a rating to a school:

- In states with sub-ratings for student growth and college readiness, overall ratings are not assigned if a school does not have enough data to assign a rating for all relevant sub-ratings.
- Test score sub-ratings are not assigned to schools if they do not have data for at least one math test and one reading test.
- Ratings are not assigned to alternative schools in states where we have enhanced data. Alternative schools include but are not limited to dropout recovery schools, adult schools, continuing education schools, and schools exclusively serving at-risk populations (e.g. juvenile detention schools) or students with severe learning disabilities.