

05

Section



# Education

 **STATE OF THE NATION**



# Education

**Introduction.** The state of the nation can be no stronger than the state of its young people, including the knowledge, skills, and dispositions that are instilled by parents, schools, and community organizations. Education prepares young people for their roles as workers and citizens.

**Summary of Results.** We chose to measure the state of education on three dimensions: eighth-grade test scores, years of education, and percentage of young adults who are either in school or employed. We are improving or remaining stable on all three education measures compared with other countries, and we rank near the top on years of education among adults. However, on two of the three measures—test scores (averaged across three main subjects) and percentage working or in school—we are in the top half of countries. Also, the trend in our test scores displays an inverted-U pattern, improving up to the mid-2010s, then stagnating or declining in more recent years (depending on the subject).



## Academic Test Scores

**Specific measure:** Average scale scores of eighth graders taking the National Assessment of Education Progress (NAEP) in math, reading, science, civics, and US history. Funded and managed by the federal government, the NAEP is a low-stakes test administered every few years to a representative sample of the nation's schools. (Source: National Center for Education Statistics).

National Trend  
↕

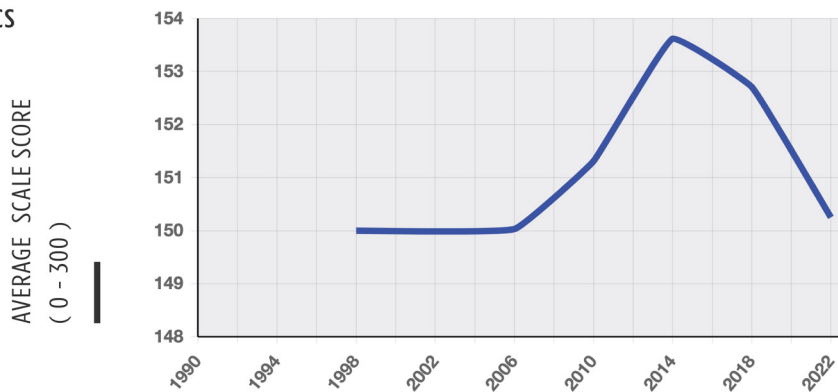
% of countries the US outperforms  
**62%**

Intl. Rank Trend  
↑

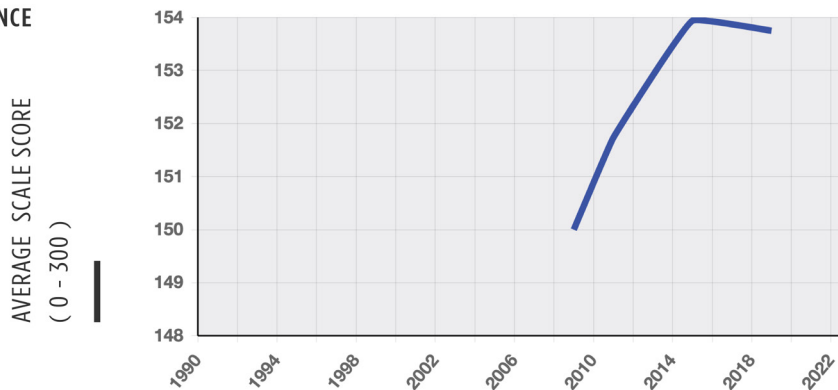
**Why did we include this measure?** It is widely agreed that these academic subjects are important. Increases in test scores, especially math and reading, cause increases in a wide variety of other long-term life outcomes, including earnings and employment. We focus specifically on eighth-grade NAEP scores because this is a pivotal grade/age for children's education and it is feasible to include essentially all students, even if they eventually drop out of school. Eighth-grade scores also reflect the accumulation of knowledge from earlier ages and grades. (We note that test score levels cannot be compared across subjects. For example, we cannot say that our math levels are higher than our reading levels.)

Figure 11: Test Scores (National Trend)

### CIVICS



### SCIENCE



### How does the US rank globally?

• **Specific Measure:** Average scaled scores of 15-year-olds on the Program for International Student Assessment (PISA). (Source: Authors' analysis of Organization for Economic Co-Operation and Development data).

• **Percentage of countries the US outperforms:**

- Math: 27% (out of 33 countries)
- Reading: 86% (out of 37 countries)
- Science: 74% (out of 47 countries)

• **International Rank Trend:**

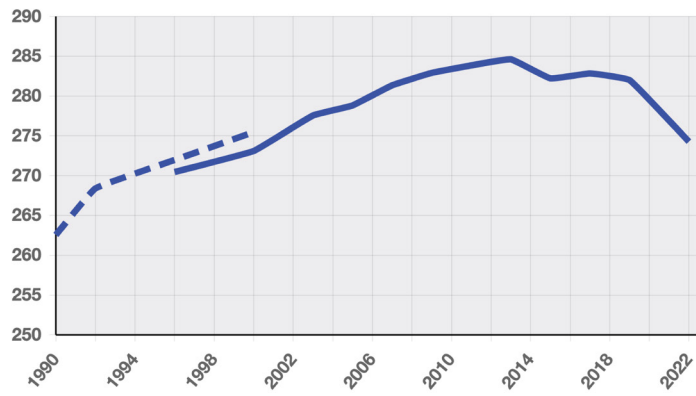
- Math: ↔
- Reading: ↑
- Science: ↑



### MATH

AVERAGE SCALE SCORE  
( 0 - 500 )

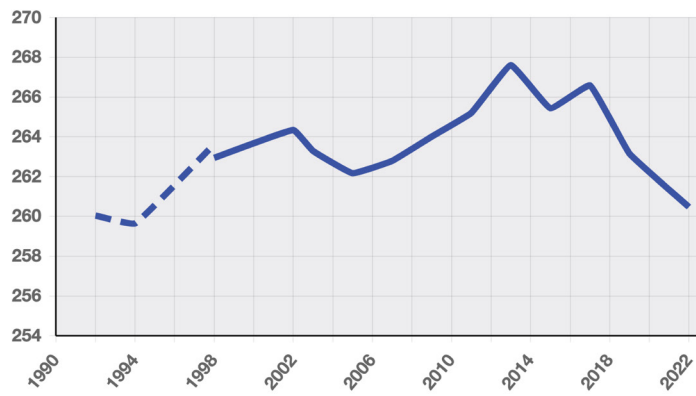
Test without accommodations  
Test with accommodations



### READING

AVERAGE SCALE SCORE  
( 0 - 500 )

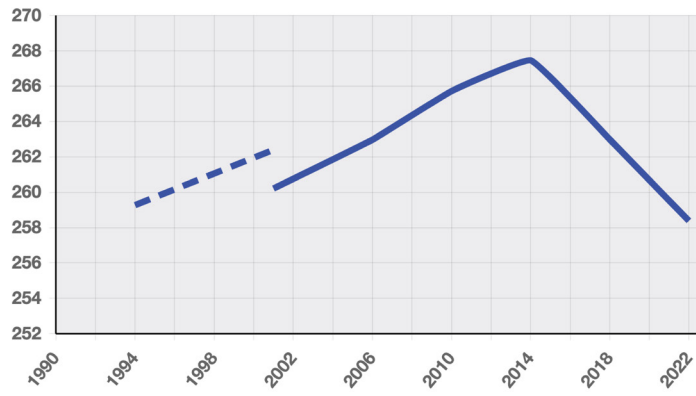
Test without accommodations  
Test with accommodations



### US HISTORY

AVERAGE SCALE SCORE  
( 0 - 500 )

Test without accommodations  
Test with accommodations





**What do the data show?** The national trends in test scores were generally increasing until about 2013 and then began to decline after that. The most recent scores are generally at the level of the early 1990s.

Our math scores are below similar countries, and our international standing has not improved over the period we analyzed. The results are noticeably more positive in reading and science and are also improving over time. (In the Executive Summary, we report the simple average of these three percentages, or 62%.)

**What might explain these patterns?** Student achievement is closely related to home and family situations. However, one such factor, child poverty has been on the decline, which suggests that other factors are pushing scores down. Education policy and practice also affect student achievement. The recent declining emphasis on test-based accountability may be one factor that may partially explain the pre-COVID decline in scores. Other possible factors include increased distractions from social media and gaming and changing alignment between the content taught in schools and what is covered on the above tests. However, research has not uncovered a definitive explanation about the reasons behind the recent decline in NAEP scores.

COVID led to school closures and altered learning environments that further reduced achievement throughout the world over the past few years. This was true in the United States as well, although we experienced less learning loss than most other countries, which is one reason why our international standing has remained stable or improved.



## Average Years of Education

**Specific measure:** Average years of educational attainment for people aged 25–54. (Source: Authors' analysis of Census Bureau data).

National  
Trend



% of  
countries  
the US  
outperforms

86%

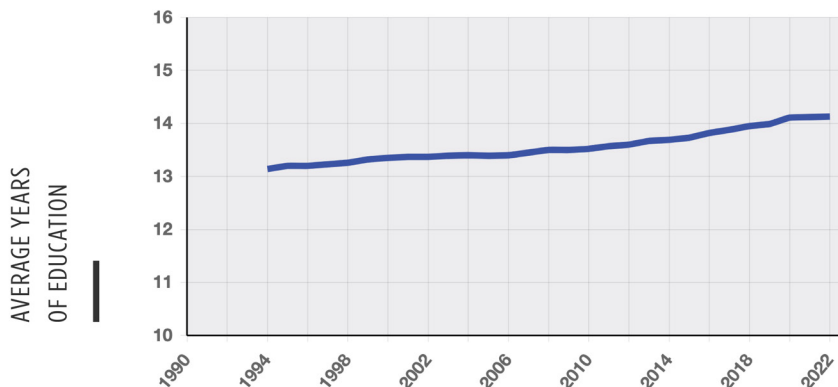
Intl.  
Rank  
Trend



**Why did we include this measure?** Test scores only capture some of the knowledge and skills we expect of young people. But students' motivation to learn and work hard, the ability to collaborate with and get along with others, and the wherewithal to persist through difficulties (sometimes now called "grit") are also important. Years of education is a useful signal of these "soft skills." By staying in school longer, students also engage in activities that help them improve on these dimensions. This is apparently why, when researchers look at the life outcomes of people who have the same test scores, the ones with more years of education have better outcomes on a wide range of measures, including earnings, employment, happiness, civic participation, life expectancy, and other measures of health. However, concern has arisen in recent years that the same level of education no longer reflects the same level of skill and knowledge, due to grade inflation and reduced standards. While the research on this is unsettled, it is still clear that students are learning useful skills and knowledge as they pass through the education system.

Formal education usually focuses on general skills, but our measure of years of education also includes more job- and career-oriented skills that are taught in community colleges and involve certificates in addition to academic degrees. There is increasing interest in alternative credentials, such as competency-based programs and digital badges, which place less focus on classroom time and let students progress and receive credentials based on whether they have demonstrated knowledge or experience in a particular area. These credentials are not yet very common or well-measured so while we are forced to omit them, we intend to include them in future reports when the data become available.

**Figure 12: Average Years of Education (National Trend)**



### How does the US rank globally?

- **Specific Measure:** (Same as above.) (Source: Authors' analysis of International Labor Organization data).
- **Percentage of countries the US outperforms:** 86% (out of 28 countries)
- **International Rank Trend:** ↔



**What do the data show?** This has been a US strength for much of the last few decades (as well as the last century) and continues today. Average years of education has increased steadily from about 13.1 years in 1994 to a plateau of 14.1 since 2020. In other words, 25- to 54-year-olds in the United States used to attain the equivalent of “some college” (13 years of education), on average, and they now attain the equivalent of an associate’s degree (14 years of education). We also rank above the vast majority of comparison countries.

**What might explain these patterns?** The steady rise through 2020 in years of education follows a longstanding US trend. It is also a longstanding international trend, which is why our international standing has remained stable even as our years of education have risen. Given the accompanying decline in test scores in recent years (see above), concern has arisen that students are not learning as much as in the past while they are in school, which might make rising years of education misleading. On the other hand, time in school may develop skills, knowledge, and dispositions other than what is measured on these tests.



## Young Adults Employed or in School

**Specific measure:** Population age 18–24 currently employed or in school.  
(Source: Authors' analysis of International Labor Organization data).

National  
Trend



% of  
countries  
the US  
outperforms

56%

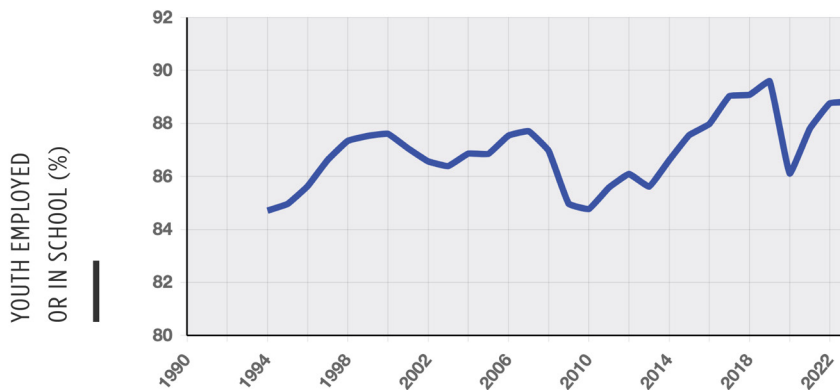
Intl.  
Rank  
Trend



**Why did we include this measure?** Formal education is not the only way to develop knowledge, skills, and dispositions. Workplace skills, for example, are learned on the job. Therefore, we also report the percentage of young adults who are either enrolled in a formal education program or working (or both). Those who are neither working nor in school are sometimes called “disconnected” from opportunity.

Another reason for focusing on this measure is that formal education is usually completed by the time people reach their mid-20s, and the prior measure (average years of education) focuses on the population aged 25 to 54. This measure of employed-or-in-school stops instead at age 24 and provides a better sense of the experiences of current young adults who will make up the majority of the workforce in the decades ahead.

**Figure 13: Young Adults Employed or in School (National Trend)**



### How does the US rank globally?

- **Specific Measure:** (Same as above.) (Source: Same as above).
- **Percentage of countries the US outperforms:** 56% (of 57 countries).
- **International Rank Trend:** ↑

**What do the data show?** The percentage of 18- to 24-year-olds who are employed or in school has generally been rising. The number has ranged from a low of about 85% to a high of almost 90% just before COVID.

Internationally, we do not fare as well on this measure as we do with years of education for ages 25 to 54. However, we note that most higher-income countries show very similar numbers on this metric. The countries just above us are generally in the 90–92% range, compared with our 89%.

**What might explain these patterns?** This upward trend is consistent with the rise in average years of education (see above). More students are graduating high school and attending college, which increases both measures. However, the number of young adults employed or in school is more unstable than years of education because employment among young people is more erratic. When recessions hit, young people are among the first to be laid off.



**Related Topics:** Education is a key factor in making people qualified for work (see the Work and Labor Force section) and improving worker productivity (see the Economy section). The Trust section provides evidence of declining trust in higher education.

\*For more information about data sources and treatments, see the Data Notes section.\*

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*Board and Public Support for this Topic and Measures*

	<i>Support from Board</i>	<i>Support from Public</i>
<i>Education (as topic)</i>	<i>100%</i>	<i>83%</i>
<i>8th Grade NAEP Scores</i>	<i>86%</i>	<i>57%</i>
<i>Average Years of Education, 25-54</i>	<i>86%</i>	<i>50%</i>
<i>Employed or in School, 18-24</i>	<i>79%</i>	<i>64%</i>

**Other Measures Considered:** The board also considered, but did not include, other measures, including parent ratings of school quality. The public also narrowly rejected that measure (68% support).