



Frequently Asked Questions

What are the top 10 highest performing countries on PISA?

According to the combined scores in math, reading, and science, the 2012 PISA study ranks these countries as the top 10:

- Hong Kong
- Singapore
- Taiwan
- South Korea
- Macao
- Japan
- Lichtenstein
- Switzerland
- Netherlands
- Estonia

The Study group looked at most of these countries as well as Finland (#11), Canada – especially Toronto and Alberta (#12) and Poland (#13).

What is PISA?

The Programme for International Student Assessment is a survey of the Organisation for Economic Cooperation and Development (OECD) which evaluates education systems worldwide by testing the skills and knowledge of 15 year old students in more than 70 economies. The assessment is administered once every three years and rotates emphasis between the core subjects of reading, math and science. PISA aims to measure students' abilities to apply their knowledge to real-life situations. The students and their school principal's also complete questionnaires to provide context that can help analysts interpret the results. Since the test is triennial, it is also possible to compare student performance over time. While PISA cannot measure the quality of an education system or identify causal relationships between the various factors and results of education, it does provide a platform to compare successes in educational systems and achievement across nations. By analyzing the educational policies of top-performing countries, the United States can identify ways to improve its own education system.

In the first study in 2000, the US placed 15th in reading, 19th in mathematics and 14th in science. In the most recent survey in 2012 which also included less developed countries for comparison because of advances they are making in education, American students ranked 24th in reading, 36th in mathematics and 28th in science.

The 2015 PISA results will be released in early December 2016.

Arguments against PISA and Other International Assessments

- *Argument:* When you adjust for socioeconomic status or measures of academic ability, the United States performs relatively well on PISA (e.g., Carnoy & Rothstein¹; Berliner²)
 - *Rebuttal:* A lower proportion of U.S. student scores at the top quintile of PISA performance, and many more U.S. students score at the bottom quintile. In other words, our problem is not just our most disadvantaged students. We have a problem at every level of the performance ladder.
 - *Rebuttal:* The United States is one of the lowest scoring countries in the world on the measure of “PISA resilience” which measures what proportion of students from disadvantaged backgrounds (using a range of measures to capture socioeconomic status, language spoken in the home, books in the home, and parental background) score on the highest levels of PISA. We do a poorer job of using schooling to improve the prospects of disadvantaged children than most other advanced industrial countries.
- *Argument:* PISA is only one measure of student performance. The U.S. performs much better on TIMSS than on PISA; therefore, we are doing fine. PISA is an outlier (e.g., Carnoy & Rothstein) or a measure solely of whether countries are teaching curricula that are aligned to PISA (Loveless).³
 - *Rebuttal:* PISA has been administered every three years since 2000 and the U.S.’s relative standing has declined every time. No one administration of PISA is an outlier.
 - *Rebuttal:* TIMSS tested far fewer Asian and developed countries than PISA. The U.S.’s relative standing on TIMSS is not a good measure of our competitiveness.
 - *Rebuttal:* TIMSS measures performance on a consensus curriculum. PISA tests both what you know in the tested subjects and how well you can apply what you know to real-world problems. It is therefore a much better test of the contribution schools make to the development of skills that students will need to perform well in a 21st century economy. This is something the U.S. should aspire to.
- *Argument:* NAEP scores are increasing, and they are what matter, since they are American and aligned with our approach to teaching and learning (e.g., Rothstein).⁴
 - *Rebuttal:* Long-term NAEP scores for 12th graders have been flat. Gains in earlier years disappear before students leave high school. The gap between black and white students has remained wide and has narrowed only slightly.
 - To say that we should only pay attention to NAEP, because NAEP aligns to the curriculum used in American schools gets it backwards. The question is not whether the assessments are aligned with the American curriculum but whether the American curriculum is producing the results we want. The NAEP data tell us that it is not. So does PISA. Either way, if we want to catch up to the world leaders, we will have to change the curriculum.
- *Argument:* PISA has contributed to an escalation of standardized testing and an increased reliance on quantitative measures. This cycle of testing harms our children and impoverishes our classrooms, as it involves more multiple choice testing, more scripted lessons from vendors, and less autonomy for teachers. (e.g., Heinz-Deiter Meyer)⁵
 - *Rebuttal:* This is tantamount to saying that measuring how well our students are doing contributes to poor student performance. It is hard to imagine how one would know whether students are doing well or badly without measuring their performance. The number of students who are directly affected by PISA testing is miniscule, because the results are based on testing a small sample of students. Furthermore, no student takes the whole test, just a part of it. So the actual testing burden is inconsequential. There is nothing about PISA that requires or even incentivizes schools to script lessons, nor is there anything about PISA that leads to less professional autonomy for teachers.

¹ See <http://www.epi.org/publication/us-student-performance-testing/>

² See <http://www.schoolsmatter.info/2012/10/david-berliner-on-inequality-poverty.html>

³ See <http://www.brookings.edu/research/papers/2013/01/09-timss-pisa-loveless>

⁴ See <http://www.epi.org/publication/unfinished-march-public-school-segregation/>

⁵ See <http://www.tcrecord.org/Content.asp?ContentId=17543>

How is it fair to compare the United States with other much smaller countries?

It isn't a perfect comparison. The Study Group has found that a better comparison with these countries is individual states. The PISA test includes a random sample of students throughout the entire U.S. It is helpful for understanding how U.S. students are doing overall over time. Comparison of states to these countries is a much more reasonable comparison. Individual states have a governance system (State department and local entities) that looks more like these countries; individual states look a lot like these countries in terms of size, population diversity, and education governance.

Don't high-performing countries education only their elite?

Graduation rates dispel this assertion. The OECD reports that the U.S. graduation rate is 80 percent, lower than most other high-performing countries. (Point to chart in publication)

Doesn't the U.S. face challenges with its diversity that other high-performing countries do not?

This may have been true in the past, but it is not the case today. Both Europe and Asia have experienced an upsurge in immigration over the past several decades. The same is true of Canada. A greater proportion of Canadian students was born outside Canada than the proportion of U.S. students born outside the U.S. Furthermore, Asian countries have significantly more cultural, linguistic, ethnic and religious diversity than many Americans often suppose. For example, Singapore has three main ethnic groups (Chinese, Malay and Indian), four national languages (Mandarin, Malay, Tamil and English) and a host of major religions, including Buddhism, Islam, Christianity, Hinduism, Sikhism, Taoism and Confucianism. (Point to chart in publication to prove this point)

Arguments against the Practice of International Benchmarking Generally

- *Argument:* International benchmarking makes claims about causality that are scientifically unsound. It is impossible to conduct a rigorous randomized control trial of countries' education policies; therefore, we can never be sure that one policy causes a positive outcome (Loveless).⁶
 - *Rebuttal:* We agree that international benchmarkers often make claims of causality that cannot be sustained by the evidence. It is virtually impossible to attribute a nation's strong education performance to any one or any combination of specific policies or practices with the same confidence that we could if we were able to use random assignment methodologies for that purpose. But it is possible to look across the whole group of high performing countries to draw some strong inferences about the likely combination of policies and practices that need to be in place to produce high student performance with high equity. Among the techniques used to do this is to look for policies and practices typically found in high performers but rarely found in low performers. It is even better if these findings are corroborated by finding that countries rise in the league tables when they adopt these policies and decline in their standings when they abandon them.
- *Argument:* International benchmarking "selects on the dependent variable"; that is, it assumes that practices that are present in the top-performing countries are only present in the top performing countries. Many of these practices are present in low achieving countries, too, so they don't tell us anything. (Loveless)⁷
 - *Rebuttal:* It is true that showing that top performers have adopted certain policies and practices cannot reasonably be used to argue that those policies and practices, if adopted, would lead to

⁶ See http://www.brookings.edu/~media/newsletters/0216_brown_education_loveless.pdf

⁷ See <http://educationnext.org/perils-edutourism/>

higher performance for a low-performing country if those policies and practices are also used by low-performing countries. That is not, however, what this Study Group has done. We have consistently looked for policies and practices that are widespread in top-performing countries, but not widely used in the United States, where performance is much lower.

Criticisms of Comparisons with Shanghai in Particular (e.g., Loveless,⁸ Zhao,⁹ Lan¹⁰)

- *Argument:* Shanghai is a very wealthy outlier and it is unfair to present their results as similar to the rest of China.
 - *Rebuttal:* No one is comparing the United States to China. It is not possible to do so, because there is no comparative data on China as a whole. It is very reasonable to compare Shanghai, for which we do have data, to the United States. Shanghai is not like Westchester County in the United States, a small enclave of the wealthy. It is vast province of 23 million people, it is larger by far than any city in the United States and larger than any state except California. No one complains about comparing the United States to Australia, a country with about the same population as Shanghai and richer than Shanghai
 - *Rebuttal:* This argument is about to be rendered obsolete anyway. OECD has worked hard to reach out to other Chinese provinces to engage them in PISA. In PISA 2016, six Chinese provinces will participate. We will see how they do then.
- *Argument:* Shanghai gets its great results by excluding its poor migrant population from its PISA scores by sending them out of Shanghai when they reach high school age, which they are allowed to do under their appallingly unfair residential registration policy called hukou. If it were not for this practice, Shanghai would not be anywhere near the top of the PISA league tables.
 - *Rebuttal:* It is true that the hukou policy is highly discriminatory and unfair. But it is not true that Shanghai would be poor performer if the hukou policy were to be abolished. If you exclude the bottom 30 percent of U.S. students, Shanghai still outperforms us and the data show that children from the students who are sent back from Shanghai by their families to their home provinces typically perform far better than children from their home provinces who were not educated as migrant workers in Shanghai.

⁸ <http://www.brookings.edu/research/reports/2014/03/18-pisa-shanghai-loveless>

⁹ See www.amazon.com/Whos-Afraid-Big-Bad-Dragon/dp/1118487133/ref=sr_1_6?ie=UTF8&qid=1394380992&sr=8-6&keywords=yong+zhao

¹⁰ See http://homepage.ntu.edu.tw/~pclan/documents/journals/14_China_Q.pdf