



## National Symposium

# Standing on the Shoulders of Giants

*What Would the American Education System Look Like If Its Design Was Based on the Principles That Guide the Education Systems of the Nations With the Highest Student Performance?*

---

## Ten Myths About Education in the U.S. and What It Will Take to Fix Our Schools

Many Americans believe that the comparisons made with student performance in other countries are unfair or irrelevant. Even those who concede that other countries might have something to teach us continue to embrace solutions for our education problems that have never been embraced by the countries that are surpassing our performance with increasing frequency. Indeed, many of the things we accept as truisms about education in the United States are simply not supported by the facts. Among those myths are the following:

1. *The experience of the countries that outperform the United States is irrelevant because those nations only educate an elite while we educate everyone.*
  - This was once true, but it has not been true for 20 years or more. Roughly 30 percent of our students, on average, drop out of high school. The number is much lower in most of the higher performing countries. In some of the highest performing countries, fewer than 10 percent of students drop out of high school. It is beginning to look as though the U.S. is the country that is only educating an elite, while it is our competitors who are educating everyone.
2. *The experience of these countries is irrelevant because they are homogeneous while we are uniquely diverse.*
  - It is not always clear what people mean when they say we are “diverse.” But the fact is that more people in Canada were born outside that country than were born outside the U.S., and the ethnic diversity of Australia is a close match for the U.S., but both nations substantially outperform us. It is certainly true that there is a wider distribution of income now in the U.S. than in any other industrialized country, and that is a real challenge for educators. Yet, at the same time, there are only a few industrialized nations in which socio-economic background predicts student performance to the degree that it does in the U.S. Put another way, educators in many other countries do a better job of helping students from low-income families perform at a higher level than in the U.S.
3. *The experience of these countries is irrelevant because their cultures are different from ours, and therefore little or nothing that works there will work here.*
  - Research shows that the principles used by the top-performing countries are remarkably similar, even though the details of their strategies differ. But they are not similar to the United States. If countries as culturally dissimilar as Singapore and Finland, and Japan and Canada are doing much the same thing, their success has little to do with culture. In fact,

when researchers look closely at the strategies that these top-performing countries have used to produce top performance, they find that, as often as not, these nations have implemented strategies that run against the grain of their culture. Most countries that have done well have taken advantage of their culture when that works for them, and have overcome aspects of their culture that were not working for them.

4. *The American public education system as a whole is in bad shape, but the U.S. would be very competitive if we took our poorly-performing inner city schools out of the equation.*

- This is also not true. In the top-performing countries, much higher proportions of the national student body score at the top levels on the most valued international measures of performance than in the U.S., and much higher proportions of U.S. students score at the lower levels of performance. The idea that our top-performing students perform as well as the top-performing students anywhere is true by definition, but we have fewer of them as a proportion of our population than is the case in the top-performing countries. The performance problem in the United States is not just in our inner cities, or just among our rural poor, or just among our low-income students; it is much broader than that.

5. *More education spending will lead to better results.*

- The only OECD country that spends more than we do per capita on their schools is tiny Luxembourg, but student performance in the United States is average at best among the OECD countries. Research shows that *how much* money countries spend on their students and schools is less important than *how* they spend it. The top-performing countries spend more on the hardest to educate students, while the U.S., alone among the industrialized nations, provides the most money for the students who have the most advantages. And they spend less than we do on fancy school buildings, glossy four-color textbooks and intramural sports, and more on paying and training teachers well. That is why they get more for their money than the U.S. does.

6. *Strong unions are big impediments to reform.*

- Some of the countries with the best student performance in the world also have some of the strongest teachers' unions. The PISA international test data show no relationship between the presence or strength of teachers' unions and student performance. Top-performing nations such as Canada and Finland work constructively with their unions and treat teachers as trusted professional partners. The real issue may not be unions per se but rather the relationship between student performance and the level of professionalization of teaching. When teachers and their unions are treated as professionals rather than cogs in a system—with the support, responsibility and autonomy they need to be effective instructors—student performance improves.

7. *Smaller class sizes create more effective learning environments.*

In many of the top-performing Asian countries average class sizes range from 40 to 50 students and more. Teachers in those countries often want larger, not smaller class sizes so they can conduct a form of whole class or large group instruction vastly different from traditional lectures. Teachers ask students who have very different problem-solving strategies to present their strategies to the whole class, and the class discusses them. The more variety in the strategies presented, the more likely that each student will see a

strategy discussed that is like the one that student used, and the more likely that all the students will understand the underlying concepts. It turns out that whether small classes or larger classes are best is mainly a matter of instructional strategy. But, if the classes are larger, and the teacher/pupil ratio is the same, there is more time for teachers to plan, to work with individual students and to work with other teachers on improving the curriculum. So it turns out that the Asian preference for large class sizes is one of the secrets of their success.

8. *More student testing is needed to hold teachers and schools accountable.*

- The idea of grade-by-grade national testing has no takers in the top-performing countries. Finland, for years at the pinnacle of the international performance tables, has no tests that are taken by all students at any grade. Typically, there are state or national tests only at the end of primary or lower secondary education, and at the end of upper secondary school. Schools and teachers are expected to assess their students regularly as an indispensable aid to good teaching, but the assessments are not used for accountability purposes, as the basis of teachers' compensation, or to create different student tracks. Moreover, whereas these top-performing countries have valued the acquisition of knowledge, complex skills and problem solving at a high level, the U.S. in recent years has emphasized mastery of basic skills and used exams largely based on multiple choice questions and administered by computers.

9. *More charter schools and educational entrepreneurs are needed to shake up our public school system.*

- These ideas don't have any currency in the top-performing countries, either. Our most successful competitors are not trying to figure out how to disrupt their systems; they are trying to figure out how to improve them. The idea of improving them by funding competition for them strikes them as odd. And the idea of improving all schools by removing all or almost all of the regulations from some of them also strikes them as odd. The issue for the top-performing countries always is how to improve the system as a whole, and every school in it, not how to build pockets of excellence.

10. *The path to a high quality teaching force lies in using student performance on standardized tests to identify the worst teachers and removing tenure and seniority protections so those teachers can be fired.*

- Not one of the top-performing countries got there by firing their worst teachers. Instead of focusing on the symptoms of the disease by eliminating bad teachers, the high-performing nations tackle its causes by greatly strengthening the pool of teachers who enter the classroom. Unlike in the U.S., the standards for entering the teaching profession in these countries are very high. The teacher colleges reject far more applicants for entry than they accept, and many are housed in the prestigious research universities. And once teachers enter the classroom, they are offered competitive salaries, given plenty of support and time to collaborate with and learn from their colleagues, and provided opportunities to gain greater responsibility and corresponding higher pay and prestige. The result is that they have a very large pool of highly qualified teachers to call on. We cannot fire our way to a high quality teaching force.