

EDUCATION IN AMERICA: LET THE COMPETITION BEGIN

By

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Introduction

In 2008, the Thomas B. Fordham Institute published a report titled Education Olympics: The Games in Review. The report was timed to coincide with the summer Olympic games in Beijing. The authors created a competition that involved comparisons between medals in the Olympics with a contrived medal competition in education. Education "events" were devised using test scores on four international tests administered periodically since the year 2000. Each test and each administration counted as an "event". High school graduation rate and percentage of college completers were added events. Gold, silver and bronze medals were awarded for first, second, and third place in test score comparison. Results of this contrived competition in education showed that the United States (US) won only one medal while the frontrunners Finland, Hong Kong, and Singapore had 35, 33, and 16 medals respectively. The authors proclaimed our competition in the education events "disgraceful" and a notable contrast to our US Olympic athletes who led all other countries with 110 medals.

As a number of researchers have noted, alarming reports about the quality of education in the US relative to other countries are not new and are based more on myth and conjecture than substance. Test score comparisons have been used to declare that US schools are failing and without reform, our economic well-being as a nation is threatened. Such arguments have been made for more than 100 years and began in the early 1900s after the Industrial Revolution. This argument has plagued public education ever since.

Fifty years ago in the Sputnik era, comparison was made with education in the Soviet Union. In the 1980's, it was unfavorable comparisons with education in Japan. In each case, arguments were made that education needed to improve dramatically or the economic competitiveness of the country would be threatened. The alarm reached a fever pitch that has not subsided with the publication of a national report titled A Nation at Risk in 1982.

Typical claims made for international test score comparisons are reviewed here along with a brief summary of what educational research suggests with respect to those claims.

Claim 1: International rankings using test scores are valid measures of the quality of education systems.

International test score comparisons are almost impossible to interpret for many reasons. Test scores only provide a limited sample of what students learn in school. Only a small segment of the curriculum is represented in a typical comparison. Reading, math, and science have been the major focus of attention. The content sampled in any test may match the curriculum of one country better than another. Student samples may not be comparable since education systems differ in terms of how high school is defined. The degree of access to higher levels of schooling can also vary. While efforts are made to draw representative samples of students from each country, the sampling of students and content is never perfect and sometimes highly suspect.

Claim 2: Countries that rank high in test scores compete better in the global economy.

This argument has been used consistently over the years to suggest fearful implications for not ranking high in international test score comparisons. While the United States is often in the “middle of the pack” among industrialized nations on test scores, the economy of the United States has been ranked number one throughout recent history. Furthermore, countries like Hong Kong, Singapore, and Finland that have typically ranked highest are not our major economic competitors. Finally, most researchers who have tested the relationship between test scores and economic productivity do not find any meaningful relationships among industrialized countries.

Claim 3: Test score comparisons can be made without taking into account the effects of poverty.

While the United States is among the richest and economically most productive nation in the world, we also have one of the highest percentages of people who live in poverty. Every country in the world has an “achievement gap” between the children of the rich and the children of the poor. The US has larger gaps between rich and poor than the countries we are being compared with on test scores. Furthermore, we have fewer support systems for the poor than most industrialized countries. Disparities in health care, nutrition, and exposure to toxins are much more evident in our country than those at the top of the test score heap. The impact of poverty on international test scores has been studied and demonstrates striking contrasts among US students depending on the percentage of students in the school in poverty.

Similar contrasts are evident in all other international comparisons as well (Bracey, 2009). Table 1 illustrates the relationship in average US scores schools with varying percentages of students in poverty. The relationship is clear and dramatic. Over one-third of US students are in schools where the percent of students in poverty is over 50%. The scores for students where the percentage is less than 50% have average scores as good or better than any of the top ranking nations.

Table 1.
PIRLS Performance and Poverty (from Bracey, 2009)

Percent of Students in the School in Poverty	Score	Percent of U.S. students attending schools in this category
< 10	589	14.3
10-24.9	567	19.5
25-49.9	551	29.8
50-74.9	519	21.3
75+	485	15.1

No other industrialized country has a higher rate of child poverty than the United States while the support systems for children in poverty are typically better. Poverty and the conditions associated with poverty have more impact on test scores and school achievement than any other variable. This relationship must be acknowledged in test score comparisons among school districts, states, or nations.

Claim 4: The economy needs students with advanced preparation in math and science.

Labor statistics and projections for the state of Iowa and the nation do not seem to support the argument for a current or future shortage of workers with advanced math and science skills. Proposals for requiring advanced math and science skills for all students do not seem to square with these projections and the rhetoric of educational reformers. Many science graduates of doctoral programs are apt to be doing post-doctoral studies for lack of jobs that demand their skills. In addition, science and math college graduates often apply their science and math skills in more highly paid positions in finance or commerce.

Claim 5. Math and science are the only subjects that matter in preparing students.

Our selective focus on subjects that are alleged to be critical to our economic future ignores areas of the curriculum that are also important to a democratic and benevolent society. Traditionally, schools have focused on developing “well-rounded” curricula that provided both formal and informal avenues for learning. Ironically, educators from countries like China, Korea, and Singapore, come to the United States to learn more about how math and science may be taught in a way that promotes creative and new applications of math and science.

Summary and Implications

The effects of our current obsession with standardized tests have not benefited the education of our students. Most curriculum experts agree that current tests do not match how science and mathematics need to be taught. Our current No Child Left Behind policies have not helped to address educational disparities between wealthy and poor children but has enriched testing companies and undermined public education. Finally, the focus on achievement gaps in math and science has narrowed the curriculum and purpose of education to serving the cogs and cubicles of business and industry.

Just as the spirit of the Olympics is not captured by which nations “won,” education is better served by a focus on doing one’s best as a student, teacher, parent, and administrator. The education of our young can always be improved, but requires better strategies than pumping up test scores in selected subjects.

Our most urgent need in the improvement of education is to reform the ways in which we assess the quality of education in our schools. We need to have multiple criteria and appreciate what we do well as well as the things we need to improve. Exclusive focus on the barometer of test scores and test score ranks has created change that only hurts the learning of our students, the morale of teachers in our most needy schools, and the confidence of the public in public education.

References

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