

# INFORMATION CAPSULE

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### Defending Public Education

#### Abstract

*Dr. Toby Tetenbaum has provided nine recommendations for countering critics' misleading statements about public education. Critics too often misstate research results or misuse data when judging public schools. Educational leaders must be ready to counter any attacks made on public education that are based on faulty data or flawed reasoning.*

Despite widespread attacks on America's public schools, Dr. Toby Tetenbaum, a professor at Fordham University's Department of Educational Leadership, Administration, and Policy, contends that public education is not in the grim condition detractors claim. Dr. Tetenbaum advises educators to sharpen their research and statistical skills in order to refute critics' arguments and to offer an unbiased assessment of public education. He provides nine recommendations for standing up to critics' false assertions.

**Look for the evidence.** Reports regarding the state of public education are often issued without the evidence to back them up. A wave of criticism started in 1983 with the release of the "A Nation at Risk" report. The report stated that high school students' achievement on standardized tests was lower than it had been 26 years ago, but no evidence to support this claim was provided. In the years following the publication of the "A Nation at Risk" report, former Presidents Reagan and Bush both released documents stating that student achievement had declined sharply and that American students' levels of achievement trailed those of students in other western countries. Again, no evidence was provided. Today, public schools are still being criticized and the evidence is still lacking. The education community must publicly question criticisms that are leveled without data to back up the claims.

**Question the validity of the argument.** Sometimes, inappropriate data are used to draw conclusions about education. For example, former Secretary of Education William Bennett stated that "from 1950-1989 we probably experienced the worst educational decline in our history." Secretary Bennett cited falling SAT scores as proof of this educational decline, but SAT scores are predictor measures and should not be used to assess previous academic achievement. Furthermore, the SAT's 138 items were not a sufficient basis upon which to assess 12 years of education. Since the population of SAT test takers is self-selected, the test's publisher (College Board) strongly discourages its use as a basis for evaluating educational institutions.

**Recognize that different isn't necessarily better.** Different educational programs may not be directly comparable. When research studies compare two educational programs, differences and similarities in methodology must be examined. For example, are the groups of students comparable? Are the funds expended for the programs comparable? Are data collected on the same outcome measures?

### Use data to refute criticisms of expenditures.

Critics state that the U.S. spends more on public school education than most other industrialized nations, but in 1988, the U.S. ranked ninth among 16 industrialized nations in per-pupil expenditures, spending 14 percent less than Germany, 30 percent less than Japan, and 51 percent less than Switzerland. Between 1990 and 1995, per-pupil spending in the U.S. rose by less than 1 percent. Despite the 10 percent spending increase that occurred between 1995 and 2000, countries such as Austria, Denmark, Norway, and Switzerland were still outspending the U.S. in 1998.

Critics also claim that large bureaucracies and salary increases for teachers have led to higher education costs, but these expenditures account for only a small portion of educational spending. Most of the increases in educational budgets are due to the high cost of special education programs. It costs about two and one-half times as much to educate a special education student as it does to educate a standard curriculum student. Federal law requires public schools to provide special education programs and facilities. The U.S. Congress originally committed to contribute 40 percent of the funding for states' special education services, but has historically provided only eight percent. School budgets have increased because states have had to provide 56 percent of the special education funding, with local communities paying the remaining 36 percent.

An awareness of how a district's funds are expended will help educational leaders respond accurately to criticisms about increasing costs and declining student performance.

### Use data to refute criticisms about student achievement.

Critics claim that student achievement is declining, but reading, mathematics, writing, science, geography, and computer skills scores on the National Assessment of Educational Progress (NAEP, the nation's report card for assessing educational progress) show very little change over the past 20 years. A review of 20 years of

NAEP scores, conducted by the Educational Testing Service, concluded that "over the long term, achievement levels are quite stable."

Each year for the past 10 years, students have scored higher in reading and mathematics on commercial tests, such as the Stanford Achievement Test and the Comprehensive Tests of Basic Skills. These tests are recalibrated about every seven years so that the typical student scores at the fiftieth percentile in each subject. If the tests weren't recalibrated, they would show that today's students are scoring at even higher levels.

### Educate the public about cultural differences.

Results from the 1999 Trends in International Mathematics and Science Study (TIMSS, formerly called the Third International Mathematics and Science Study) indicated that, in mathematics, eighth grade U.S. students outperformed students in 17 nations, received scores similar to students in six nations, and scored lower than students in 14 nations. Results were similar in science. By grade 12, however, the scores of U.S. students were considerably lower than the scores of students from Japan, Korea, and countries in western Europe.

Critics claimed the lower level of grade 12 performance pointed to serious deficiencies in U.S. public education. What the critics failed to mention was that the TIMSS scores compared two very different groups of students. In western Europe and much of Asia, rigorous national exams separate students at the end of elementary or middle school. Only those who pass these exams enter specialized high schools that prepare students for post secondary education and take the TIMSS in grade 12. Therefore, the European and Asian grade 12 TIMSS scores were based on an elite group of students. In contrast, U.S. TIMSS scores were based on the full range of students.

Japan's after school program is an example of a cultural difference that influences test scores. While American students participate in a variety of after school activities (sports, music lessons,

part-time jobs), students in Japan attend private academies after school and on weekends that offer additional instruction in academic subjects. By the time Japanese students reach the age of 16, they have received the equivalent of about two more years of academic instruction than students in the U.S.

**Demand disaggregated data.** Research reported by the media is often simplified so it is easier to understand. One way to simplify research results is to aggregate the data, or show what the group looks like as a whole. The problem with aggregated data is that it can misrepresent results because it does not always accurately represent the performance of particular groups of students. Following is an example of how it's possible to reach a different conclusion when results are based on disaggregated, rather than aggregated, data.

The National Center for Educational Statistics used disaggregated data to compare the mathematics achievement of eighth grade U.S. public school students with age-equivalent students from other countries. Test scores were disaggregated by students' state of residence. The scores of students from high-achieving states (such as Iowa, Minnesota, and North Dakota) were similar to the scores of students from the highest-achieving foreign countries (Korea and Taiwan). Scores from lower performing states (Louisiana and Mississippi) were similar to those from Jordan.

**Be skeptical.** Research results are often published in the media before being reviewed and critiqued by other researchers. In May 2003, for example, the *New York Times* reported the results of a study that concluded that school vouchers improved the test scores of Black students. After one of the research project's partners issued a dissent, data were independently re-analyzed. It was determined that a group of Black students' test scores had been excluded from the original analysis. Once these test scores were included in the analysis, the results indicated that vouchers had no significant impact on the test scores of Black students or on any other ethnic group of students.

The public had been ready to make new policy based on one flawed study.

**Spread the good news.** The media are more willing to report bad news than good news about public education. Schools that perform as expected aren't news, but accusations of problems or failures often make headlines.

Although public schools are in need of improvement, characterizing them as total failures is both unfair and inaccurate. Public schools teach children of every race, ethnicity, socioeconomic status, and ability level and are responsible for a broad range of instructional, political, economic, and social tasks. Considering the magnitude of the responsibility our schools have been given, they are doing an exemplary job.