

A Misleading Statistic

The Governor in his State of the State address used the following statistic:

“The brute facts persist: only one in three of our children can pass the national math or reading exam. We trail far behind most states and even more foreign countries on measures like excellence in math.”

The Governor’s use of this statistic, derived from the National Assessment of Educational Progress (NAEP) is misleading. Here’s how:

- 1) NAEP reports the percentage of each state passing three levels: basic, proficient, and advanced. Most observers of NAEP data consider “passing” to be the percentage of students passing the basic standard. In Indiana, 87% of 4th graders and 78% of 8th graders passed the basic standard in math. Governor Daniels, however, has apparently skipped this level of NAEP and has taken the unconventional position that “passing” is to be judged by the proficient standard. In Indiana, 42% of 4th graders and 36% of 8th graders passed the proficient standard in math, which he rounded down to say “only one in three” are passing.
- 2) Diane Ravitch, in article entitled “The Myth of Charter Schools”, has called this interpretation of NAEP data a “distortion”:

“I served as a member of the governing board for the national tests for seven years... The highest level of performance, “advanced,” is equivalent to an A+, representing the highest possible academic performance. The next level, “proficient,” is equivalent to an A or a very strong B. The next level is “basic,” which probably translates into a C grade.”

- 3) The Governor’s term “persist” ignores the improvements Indiana has made. Tracing his reference to math, Indiana began the NAEP era in 1992 with a 4th grade score of 16% passing the proficient standard. In 2009, 42% of our 4th graders passed the proficient standard. Can he really ignore an improvement from 16% to 42% so easily?
- 4) On the 4th grade basic standard, improvement is also clear. In 1992, 60% of Indiana’s 4th graders passed the basic standard. In 2009, 87% passed the basic standard. Is that stagnation? Of course we would like to see higher numbers, but improvement is clear.
- 5) Do we “trail far behind most states”? Indiana 4th graders outscored all but 15 states on NAEP math in 2009.
- 6) Now let’s move to 8th grade math. The first Indiana NAEP scores for 8th grade math came in 1990 when 17% passed the proficient level. In 2009, 36% passed the proficient level.
- 7) At the basic level for 8th grade math, 56% passed in 1990 and 78% passed in 2009.
- 8) Indiana 8th graders outscored all but 14 states on NAEP math in 2009.

Stagnation is in the eye of the beholder.