

POLICY BRIEF

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Explaining Differences in School Performance

Improving student performance seems to be the "Holy Grail" for educators everywhere. The education establishment, with the help of politicians, is not opposed to spending billions of dollars to find it. Countless studies have been conducted to assess which factors help achieve academic success. These studies have produced policies and programs designed to help children succeed in school. Most have met with little success.

Taxpayers are required to dig deeper and deeper into their pockets to fund programs designed to add more teachers to the system, pay them more and build more classrooms in which to house them. The question to be asked by the taxpayer is simply this: Are we receiving a fair return for our tax dollars?

The current fad of researchers is to focus their studies on a handful of variables: class size (student-teacher ratios), teacher salaries, and expenditures per student. According to recent studies across the country, there is no unambiguous statistical relationship between lower student-teacher ratios and academic performance. Adding more teachers to the school system to lower student-teacher ratios only minimally increases student one-on-one time and does not translate to better performance. Even in studies that claim class size reductions improve student performance, the cost of such a policy heavily outweighs minimal improvements.

In 1996, California hired 60,000 teachers at a cost of \$8 billion annually to reduce student-teacher ratios in grades K through 3. Six years later, a consortium of researchers from RAND, the American Institute for Research, WestED, and EDSOURCE, which had monitored the program, concluded that there is no relationship between statewide student achievement and reduced class sizes. The program did however, add 60,000 new union members to the California Teachers Association, advocates of reducing student-teacher ratios.

Increasing teacher salaries has also not been proven to cause an improvement in student performance. Teacher salaries explain less than 4 percent of the variation in student test scores. Advocates of such a policy claim that higher salaries reward quality teachers, but in some states teacher pay is not based on performance or merit. Therefore increasing

salaries will reward both good and bad teachers and not provide a noticeable increase in academic performance.

The latest research shows that per pupil spending nationwide rose 300 percent (adjusted for inflation) from 1965 to 1995 without a noticeable improvement in achievement test scores. There is no strong or consistent relationship between student performance measures and the bulk of school resources. In fact, researchers conclude that family and community factors have far greater influence on student performance than does per pupil spending.

The Allegheny Institute recently analyzed Pennsylvania's 501 districts and our findings substantiate the national findings. Our multiple regression analysis shows that per pupil spending and district enrollment levels have positive but very small effect on school academic performance. For example, each \$1,000 increase in per pupil spending is associated with a PSSA score increase of only 5.8 points, less than one half of one percent. Thus, simply raising spending is not an effective way to improve education.

We also observe that certain community factors, such as being in a metro district and the percentage of low income students enrolled, appear to exert negative influence. For each one percent increase in the proportion of low-income students, the average PSSA score decreases by 1.72 points.

It is popularly believed that measures such as student-teacher ratios, teacher salaries, and higher per pupil spending are areas where policy should be directed. We find no support for these popular misconceptions.

Based on our findings, we would recommend that schools, particularly in poorer communities or with high percentages of children from troubled families, should focus on the basics. Make sure that all the time that is necessary be devoted to reading and mathematics. Instruction in social studies, self esteem, ecology, etc. could be set aside if need be. But reading and basic arithmetic must be mastered by the third grade. As a way of validating progress, PSSA exams should also be administered to third graders. If students do not have a mastery of reading and math in the early grades, the whole education process will be an exercise in futility.

Frank Gamrat, Ph.D. Senior Research Associate

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Allegheny Institute for Public Policy
305 Mt. Lebanon Blvd.* Suite 305* Pittsburgh PA 15234
Phone (412) 440-0079 * Fax (412) 440-0085
E-mail: aipp@alleghenyinstitute.org