

## EDUCATION WEEK

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### Commentary: Throwing Money at Schools

By **Eric A. Hanushek**

By our cultural heritage we are led to believe that the performance of students can be improved by providing more resources to the schools. This would allow schools to provide more individualized instruction, to hire more qualified teachers, and to expand program offerings. But what is often missed in current discussions is that this is exactly the experiment that we have been conducting. School expenditures per pupil, after allowing for inflation, almost doubled between 1960 and 1975.

These increases led to smaller classes, more teachers with advanced degrees, more experienced teachers, and better paid teachers. But there were no concomitant improvements in student achievement.

The most celebrated measure of student performance comes from the declines in Scholastic Aptitude Test scores—a fall of some nine percent between 1963 and 1980. While part of this decline, particularly in the earlier years, might be attributable to changes in the composition of student groups taking the tests, such an explanation is no longer possible. Moreover, declines in performance are also found on other tests, although diligent and careful searching can uncover some scattered reasons for optimism. (Indeed, the recent announcement that last year's sat scores didn't fall has already led to pronouncements that the situation has now turned around.)

It is perhaps possible to explain declines in aggregate student performance by factors unrelated to the performance of schools. Since the 1960's, divorce rates have risen, more mothers have entered the labor market, and so forth. Alternatively, the tests may be bad, or schools may have turned increasingly to education that is not well measured by standardized tests. Thus, one might argue, that the aggregate statistics do not necessarily provide an indictment of the schools.

It is, however, impossible to dismiss the evidence that has accumulated from direct investigation of the determinants of students' scholastic performance. Over the past 15 years, there have been some 130 studies of the factors that dictate success in schools and in subsequent careers. These studies cover all grades in public schools found in all areas of the country. Further, they consider several dimensions of schooling outcomes including students' standardized-test scores, pursuit of further schooling, attitudes toward school and society, and subsequent performance in the labor market. Advanced statistical techniques are employed to disentangle the influences on achievement of schools and teachers from those of other factors such as family backgrounds and student abilities.

The results of this work are consistent and startling. They tell the same story as the aggregate evidence: The performance of students is not systematically related to the amount of money schools spend per student. But, they also provide more details about the problem.

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Differences in class size, education levels of teachers, and experience of teachers—the traditional

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focus of much school policy—are also not systematically related to student performance. For example, a majority of studies looking at the relationship between class size and student performance find that performance appears greater in larger classes and that teachers with bachelor's degrees tend to outperform those with more advanced degrees. In short, the conventional (and costly) remedies for the problems of school performance don't necessarily help.

But, you ask, how could this be? Everybody associated with schools—parents, students, teachers, and administrators—perceives differences among schools and teachers. Indeed, there are dramatic differences. There are good programs and bad programs; there are good teachers and bad teachers. The simple fact is that, as schools are currently constituted, good programs don't systematically cost more than bad ones, and good teachers are not necessarily those with the most training or those with the highest salaries.

The record suggests that schools, wittingly or not, do not use available resources in a productive manner. It is clearly easier to request additional funds than to know how to use them effectively.

These findings suggest that many current and proposed policies are wasteful. A majority of states and local districts have enacted policies that limit student-teacher ratios, that establish early tenure for teachers, that encourage the attainment of advanced degrees, and that govern other facets of schools' operations, even though they cannot be justified in terms of student performance. Many also provide incentives to increase expenditures, and some even judge a school's success by increases in its expenditures.

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The findings are especially relevant to recent debates about state funding of local education. Since the landmark California court case of *Serrano v. Priest*, a majority of states have considered altering their school-finance formulas. The educational merits of doing so rest squarely upon the unsupported presumption that money buys quality, that the more a school spends, the better an education it provides its students. (There are two other arguments put forth in support of changing the finance formulas: "equality of opportunity" or the idea that even if expenditures don't matter, all districts should be able to spend the same amount per student; and "taxpayer equity," which suggests that tax rates for schools shouldn't differ across districts.) But, at least on educational grounds, there is little reason to support changing state-aid formulas. Moreover, finance "reform" generally entails spending more money, an apparently wasteful outcome.

At this point, we have a story about what doesn't improve schools, but we don't have a story about what does. An enormous amount of research has been devoted to identifying the elusive characteristics of teachers, classrooms, and schools that predict student achievement. The underlying notion is that such characteristics, once identified, could form a blueprint for a successful school system. Despite this considerable effort, no list of ingredients for a successful school or classroom has been uncovered. And there is little reason to believe that we are close to discovering one.

But developing conclusive evidence about the characteristics of schools that dictate success, and that can be replicated on a large scale, is not the only way to "fix" the schools. Identifying good teachers—and acting on that information—eliminates the need for describing what makes them good.

Here the research is quite suggestive. One approach has been to assess the gains in student achievement that can be expected from specific teachers—without figuring out why some teachers are more effective than others. Importantly, this research also indicates that the estimated gains in student performance are quite consistent with the independent evaluations that principals make of

each teacher's ability. All of which is to say that administrators can identify good teachers. (I also suspect that teachers can identify good teachers.)

Currently, evaluations of teachers have little to do with anything. Often neutralized by state and local regulations and by union-contract provisions, evaluations seldom enter into decisions about hiring, salaries, or promotions. However, if such information were used by school officials to reward and retain the better teachers, the overall quality of teaching could be substantially improved.

Basing decisions on evaluations is quite alien to schools and raises many serious issues. Could administrators be counted on to make honest and accurate assessments of teacher performance? Would teachers have an incentive to "hoard" information about successful techniques or programs? Would the school environment be degraded by arbitrary personnel decisions or cutthroat competition among teachers? Past observations of schools provide little information about these issues. However, we do know that a vast majority of professional employees outside the schools are subject to performance evaluations. They seem to work and they are not expensive.

The public schools now face another challenge: to improve their performance, and to do so in the face of little public support and even less money. It is unfortunate, but perhaps inevitable, that calls for reform coincide with current pressures. Indeed, since 1975 both teachers' salaries and expenditures per pupil have fallen in real terms. Coupled with declines in enrollment, these conditions are likely to place the basic issues of job security and survival of programs higher on the minds of school personnel than the reform of operations. Yet this is probably a mistake. The record tells us that money does not buy solutions, and without improvement in the performance of schools, support for schools is likely to fall faster than enrollments.

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