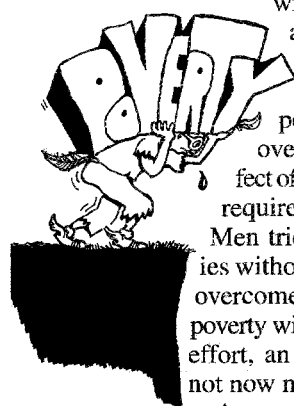


# RESEARCH

READERS might recall that, in 1996, Stanley Pogrow of the University of Arizona took me to task for invoking poverty as a cause of low achievement. He argued that my contention promoted "the excuse that students who do poorly do so because of demographic factors, such as poverty, that are beyond the control of schools. This is like arguing that we shouldn't expect to be able to fly because gravity is beyond human control." My response at the time was that it wasn't like arguing that at all. "Poverty, like gravity, is a fact, a condition," I

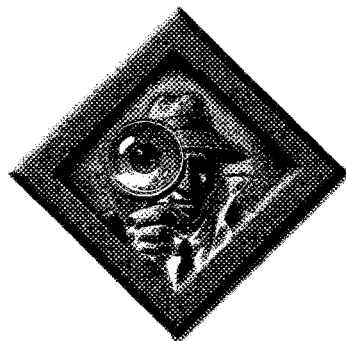


wrote. "Gravity acts on people in profound ways. So does poverty. . . . To overcome the effect of gravity and fly requires great effort. Men tried for centuries without success. To overcome the effects of poverty will require great effort, an effort we are not now making."

An empirical blow to the poverty-is-no-excuse school of thought can be found in the August/September issue of *Educational Researcher*. There, researchers Kevin Payne and Bruce Biddle of the University of Missouri, Columbia, note that, for a wealthy country, we sure do have a lot of poverty. They find that 21.5% of our children are living in poverty (the most recent reports I've heard on the radio indicate that the figure has fallen to "only" 20% in the current economic boom). No other developed nation even comes close. Australia is second at 14%. Only five of the 18 countries mentioned have poverty rates above 10%. Interestingly, all of the top six countries are Anglophone, with the exception of Israel. Besides the U.S. and Australia, these include Canada, 13.5%; Ireland, 12%; Israel, 12%; and the United Kingdom, 9.9%.

Before presenting their own analysis, Payne and Biddle examine the econometric data on the relationship between mon-

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## POVERTY AND ACHIEVEMENT

BY GERALD W. BRACEY

ey and achievement, especially those provided by "the untiring efforts" of economist Eric Hanushek. They find that many of these studies have used only proxies for funding, not actual funding itself, with the consequence that the estimates of the impact of money on achievement are lower than they ought to be.

Payne and Biddle take up some details about economic studies. They argue as follows:

Norms for publication in the field of economics stress the need for careful specification and derivation of structural models but give short shrift to the operational details of empirical studies. Thus, many studies in this literature provide few-to-no details about the sample used, the ways in which data were collected, the ways in which measuring scales were constructed, the reliability or validity of those scales, the distribution or range of values for variables in the analysis, or even the values of basic correlations among those variables.

The above paragraph should be read carefully. In polite language, Payne and Biddle indicate that much of the published econometric research would not get passing grades even in undergraduate courses of educational or psychological research. When Payne and Biddle pore over the econometric literature, they conclude:

Because of the widespread prevalence of design flaws in this literature, one cannot use the bulk of its studies to reach valid conclusions about the net effects of school funding in America. Previous reviewers have tried to reach such

conclusions by aggregating results from the effort as a whole, but one cannot make a silk purse even out of many sows' ears, and unfortunately, their efforts have implied, to the unwary, that one should take the corpus of this largely flawed literature seriously.

Strong stuff for the usually stodgy *Educational Researcher*.

Using data from the *School District Data Book* and from the Second International Mathematics Study (the analysis was actually done before data on the Third International Mathematics and Science Study were available), Payne and Biddle find that the impact of money is enormous:

If American math achievement scores had been generated only by well-funded schools in districts with low levels of poverty, the United States would have earned an aggregate achievement score slightly better than the second-ranked nation in the study, the Netherlands. In contrast, had our country been represented only by miserably funded schools in high-poverty districts, our aggregate achievement scores would have been below those of other industrialized nations studied and nearly on a par with those of Nigeria and Swaziland!

As for the idea that money doesn't matter, Payne and Biddle have this to say:

Surely it is time to put to rest the absurd myth that level of funding does not matter for public schools in America. Rich American parents have known otherwise for years, hence their willingness to provide well-funded public (and private) schools for their own children in affluent suburbs. It is long since time that parents from middle-class and disadvantaged homes woke up and demand-



Illustrations by Jim Hull

ed that well-funded schools also be made available for their sons and daughters.

## Breaking Through

**S**TORIES ABOUT low-income schools that nonetheless have high achievement are often met with a "Great Man or Woman" explanation. In order for such outcomes to be explained, there must be a Jaime Escalante or a Marva Collins whose extraordinary energy and personality produce success, but whose extraordinary energy and personality cannot be replicated by others.

H. Guy Glidden, director of pupil evaluation and testing for the Wichita Public Schools, decided to see if something a bit more generalizable might be found in high-achieving, low-income schools. The first step, of course, was to determine whether there were any schools meeting these criteria. Using a variety of test instruments over a three-year period, Glidden found that six of the 54 schools in Wichita met the criteria. Over the span of three years, they had more students eligible for free and reduced-price lunches than the district average, but their test scores were also above the district average.

Although more general than the Great Man or Woman theories, Glidden's results might be taken as support for a "Pretty Good Person" theory with regard to the person in the role of principal. While Glidden generally found the same correlation between poverty and achievement as did Payne and Biddle, not all schools fit that pattern.

In the case of the six "Breakthrough Schools," as Glidden has called them, the principals were able to establish high expectations for all students; they emphasized high involvement of teachers in planning, organization, and staff development; they produced school improvement plans that were shared with parents, students, and staff members; and they established a school climate that was both businesslike and accepting. Glidden emphasizes that these outcomes were accomplished through a variety of personal leadership styles, not just one.

In addition, the schools were smaller than average, which, judging from interviews with the principals, made the schools simultaneously more manageable and more personal. That is, teachers got to know students and their parents better. Aside from

their slightly smaller size, the Breakthrough Schools were a diverse lot in terms of ethnic mix and poverty rates, the latter ranging from 56% to 88% of students eligible for free or reduced-price lunches.

The study is really only half complete and, without further investigation, is subject to the base-rates fallacy. An example of this fallacy occurred in a study that examined the characteristics of nations that had high TIMSS (Third International Mathematics and Science Study) scores and observed that they all had highly centralized curricula. A later study found that nine out of the 10 lowest-scoring TIMSS countries also had highly centralized curricula. To establish that the listed characteristics are important to building Breakthrough Schools, Glidden needs to see whether they exist in schools that have high rates of poverty and low test scores. Even so, it is useful to know that schools with higher than average poverty rates can have higher than average test scores.

We should note that the schools Glidden studied were not in straits nearly as dire as the poor schools in the Payne and Biddle study. Wichita's funding is close to average for Kansas, and the test scores of Wichita's schools tend to run in the 50th to 60th percentile range.

Glidden's study appears in the spring 1999 issue of *ERS Spectrum* and is available through the Educational Research Service, 2000 Clarendon Blvd., Arlington, VA 22201; <http://www.ers.org>.

## Picture This

**T**HE USE of drawings to study the psychological makeup of children has a long history. It is common in therapeutic situations and has also been used to study gender differences and ethnic attitudes. Walter Haney and his colleagues at Boston College have lately been using drawings to get a read on how students perceive their lives in classrooms.

The researchers directed children to "think about the teachers and the kinds of things you do in your classrooms. Draw a picture of one of your teachers working in his or her classroom." In one study, Lisa Jackson, Nicole Malec, and Amy Seldin looked for gender differences in the perceptions of third- to fifth-graders.

Despite the specificity of the instruction concerning teachers, just over half of the students of both genders put children

in the pictures, too. Boys' drawings were much less likely to show the teacher with a positive or neutral demeanor, but few children of either gender presented a negative demeanor: 17% of boys and 6% of girls. Girls were much more likely than boys (63% to 37%) to present the teacher in a position of addressing the class. Boys, though, were more likely (59% to 41%) to interpret such addresses as involving discipline.

In another study, Mike Russell and Haney looked at the variability of the drawings among schools and over time. They found considerable variation in the proportion of students who show teachers addressing the class. There is also considerable variation among schools in the proportion of drawings depicting students in the traditional way — alone at desks in rows — and those showing students in clusters. Over a three-year period, there was a trend for most schools to show students depicted in clusters. Still, at several schools that were emphasizing group work and cooperative learning, teachers were disappointed to see how often they were depicted as standing at a blackboard, talking to the whole class.

According to the researchers, the drawings cause teachers to reflect profoundly on how they teach. And individuals can be deeply affected. One student teacher, who was considering abandoning the field, decided to continue after seeing herself lovingly depicted in the children's drawings. One teacher was reprimanded after a drawing showed him punishing a student in an improper manner. (There are large ethical considerations in the use of these drawings.)

One drawing showed a teacher saying (by way of a series of dialogue balloons) to the (unseen) class, "Be quiet. Do it now please. You have work to do. Do it now. Shhhh!" At the same time, thought balloons show her thinking, "Shut up!" and "I'm losing my mind." And another drawing showed a teacher surrounded by about 100 words, all of them "blah." **■**

