

Education Is All in Your Mind

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AS Department of Education officials consider how best to spend billions from the economic stimulus plan, they would be wise to pay attention to which programs actually help children's achievement — and keep in mind that sometimes very small influences in children's lives can have very big effects.

Consider, for example, what the social psychologists Claude Steele and Joshua Aronson have described as “stereotype threat,” which hampers the performance of African-American students. Simply reminding blacks of their race before they take an exam leads them to perform worse, their research shows.

Fortunately, stereotype threat for blacks and other minorities can be reduced in many ways. Just telling students that their intelligence is under their own control improves their effort on school work and performance. In two separate studies, Mr. Aronson and others taught black and Hispanic junior high school students how the brain works, explaining that the students possessed the ability, if they worked hard, to make themselves smarter. This erased up to half of the difference between minority and white achievement levels.

Black students also perform better on an exam when it is presented as a puzzle rather than as a test of academic achievement or ability, another study has shown. These are small interventions that have big effects.

Here's another example: Daphna Oyserman, a social psychologist at the University of Michigan, asked inner-city junior-high children in Detroit what kind of future they would like to have, what difficulties they anticipated along the way, how they might deal with them and which of their friends would be most helpful in coping. After only a few such exercises in life planning, the children improved their performance on

standardized academic tests, and the number who were required to repeat a grade dropped by more than half.

Geoffrey Cohen, a psychologist at the University of Colorado, found still another way to improve black students' test performance. He asked teachers at a suburban middle school, at the beginning of a school year, to give their seventh graders a series of assignments to write about their most important values. Afterward, the black students did well enough in all their courses to obliterate 30 percent of the difference that had existed between black and white students' grades in previous years.

Small interventions can make a big difference even as late as the college years. Dr. Cohen and another psychologist, Gregory Walton, who is now at Stanford, hypothesized that worries about social acceptance — which are common among all college students — would be especially great among black students on majority-white campuses.

So the researchers gave a group of students at a Northeastern university a detailed report of a survey showing that most upperclassmen had once worried about feeling accepted but had ultimately come to feel at home on campus. Black students who were given this information reported that they worked harder on their schoolwork than others did, and contacted their professors more. The payoff in grade-point average erased most of the usual difference between blacks and whites at the university.

These experiments may help explain the “Obama effect” on the test performance of African-Americans. Adult subjects in a study (still unpublished) answered comprehension questions from the verbal sections of the Graduate Record Examinations before and just after the presidential election. The black participants who were tested before the vote performed worse than whites; those tested immediately afterward scored almost as well as whites.

If simple interventions can have big effects, one might assume that bigger interventions would always be even better. But the truth is that some big interventions in education have had only minimal effects. Head Start, which places 3- and 4-year-olds in supposedly enriched classroom settings, and Early Head Start, which works with 1- to 3-year-olds, for example, have been found to have only modest effects on the children's academic achievement, and these often fade by early elementary school. Likewise, “whole-school interventions,” in which teams of education engineers descend on a

school and change its curriculum, introduce new textbooks and train teachers — often at great expense — typically produce little in the way of educational gain.

Some bigger programs have worked well, however. The Perry Preschool, which was set up in Ypsilanti, Mich., in the early 1960s, is a good example. In this school, highly trained and motivated teachers worked with groups of only six black preschoolers in educationally intensive sessions intended to help the severely disadvantaged children develop both cognitively and socially, and the teachers visited the children's families for 90 minutes every week.

By the time these students reached high school, almost half of them scored above the 10th percentile on the California Achievement Test, compared with only 14 percent of students in a control group. Almost two-thirds of the students who had been in the program graduated from high school, compared with only 43 percent of control students. And by age 27, one-third of the Perry children owned their own home; only 11 percent of the control students did.

James Heckman, a Nobel Prize-winning economist at the University of Chicago, has estimated that for every dollar spent on a prekindergarten like Perry, \$8 has been gained in higher incomes for participants and in savings on the costs of extra schooling, crime and welfare.

Similarly, a program called KIPP (for Knowledge Is Power Program) is having remarkable success with poor minority children in middle schools. KIPP students attend school from 7:30 a.m. to 5 p.m., their term is three weeks longer than normal, and every other Saturday they have classes for half a day. The curriculum includes sports, visits to museums and instruction in dance, art, music, theater and photography. During one academic year, the percentage of fifth-graders at KIPP schools in the San Francisco Bay Area who scored at or above the national average on the reading portion of the Stanford Achievement Test rose to 44 percent from 25 percent. And while only 37 percent started the year at or above the national average in math, 65 percent reached that level by spring.

Such creative programs must be tested to ensure that they work as they are meant to. The United States Department of Education's What Works Clearinghouse, which was established by the Bush administration, has the job of making public all significant evaluations of educational interventions. The Obama administration should heed the

Clearinghouse's reports. Stimulus money should be spent only on programs that work well — and on creating new programs, which in turn should be properly tested for effectiveness.

President Obama is in a position to not only inspire black youngsters by his example, but also make an enormous difference in their schooling — as long as he supports successful educational interventions, from the smallest to the most ambitious.

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