Small class-size benefits extend beyond school

New study links smaller class sizes with better health and wealth

One of the most important pieces of education research ever done in the United States looked at the impact of lower class sizes through an intervention called Project STAR (Student Teacher Achievement Ratio). The Project STAR analysis remains one of the key studies supporting the significant educational value of lower class sizes in the early grades.

When researchers recently took the Project STAR findings and looked at how the educational benefits translate to a variety of other areas, including health, the results were even more impressive. In a study published in the November issue of the American Journal of Public Health, Peter Muennig of Columbia University and Steven Woolf of Virginia Commonwealth University conclude that reducing class sizes in elementary schools may be more cost-effective than most public health and medical interventions.

The authors come to that conclusion first by looking at the improved outcomes for high school graduates compared with dropouts. Project STAR showed that students in smaller classes graduate from high school at higher rates: a 12 percent increase among the general student population and 18 percent among those eligible for free lunches. The analysis shows that high school graduates not only earn more but they also enjoy significantly better health—the increased earnings and improved health generate almost $170,000 over a lifetime for each additional graduate.

“Higher earnings and better job quality enhance access to health insurance coverage, reduce exposure to hazardous work conditions, and provide individuals and families with the necessary resources to move out of unfavorable neighborhoods and to purchase goods and services,” Muennig says. “The net effect of graduating from high school is roughly equivalent to taking 20 years of bad health off of your life.”

When targeted to low-income students, the savings are more dramatic because these students benefit even more from the smaller class sizes. The study shows the estimated savings increase to $196,000 per additional low-income student who graduates.

The researchers used a number of data sources and statistical analyses to draw their conclusions, which they characterize as conservative. Among the areas they analyzed were health-related quality of life, healthcare expenditures, and Medicare and Medicaid enrollment; future earnings and taxes paid; use of welfare services such as food stamps and housing assistance; and crime rates. The health effects are especially striking, with the researchers noting that “the health status of the average college graduate aged 45 years was comparable to that of the average high school dropout aged 25.”

Future earnings for high school graduates are almost double those of high school dropouts, and because of progressive tax rates, graduates pay about 2.5 times more in taxes than dropouts pay. The taxes-paid figure rises to 4.5 times as much for college grads. Other savings include $2,700 per student in reduced demand for welfare services and $31,000 per student in lower costs associated with crime.

The researchers admit that it is possible the findings from Project STAR might not translate completely to a broad national program. Nevertheless, they say there would still be cost savings to society even if the impact of smaller class sizes were only half of what it was with Project STAR.

“Further research is needed to refine models and produce more precise estimates,” the researchers write, “but our findings point to the importance of looking more broadly at the options available for improving health outcomes—including those outside the boundaries of clinical medicine.”

TRY IT!

IT’S MATERIAL: First-grade teacher Becky Warren of Jenera, Ohio, uses plain or small-patterned fabric as the background for her bulletin boards, noting that it doesn’t fade or tear like paper, and can be used for many years. When it’s no longer good enough to use on the board, she says it makes a great cover for shelves over the summer months.

WHERE WAS I? To put her third-grade class into an “inquiry mood” and to use students’ prior knowledge based on observation, teacher Delores Wright of Orlando, Fla., sent each student a photo from a trip she had taken to Africa (the children were unaware of her trip). She asked students to guess where she had traveled, based on the photo, then had them place their guesses in a box on “Meet the Teacher Day.” On the first day of school, she read all the guesses and confirmed the “real”answer. Each student who had guessed correctly was given a small token.

BAG IT: To streamline distributing dry-erase markers to her middle school students, French teacher Ginni Brandt of Sidney, N.Y., came up with the idea of taping plastic zip bags to the side of each desk; each bag contains a marker and an old rag (socks work well) to use as an eraser. Students each have a board stored at their desks. All the materials are readily available; as soon as students are done, markers and cleaners are returned to the bag. Brandt says the process cuts down on doodling and wasting costly markers.