



College of Education

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Research Highlights of Current Faculty Projects

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Student Background and Math Achievement in Public and Private Schools

According to common wisdom, students do better in private schools than in public schools, and this perspective was supported by several decade-old studies. However, Sarah Theule Lubienski, associate professor of Curriculum and Instruction, and Christopher Lubienski, assistant professor of Educational Organization and Leadership, found that the opposite is true. The Lubienskis have conducted two studies using statistics from the National Assessment of Educational Progress (NAEP), a nationally representative ongoing assessment of U.S. academic achievement. In their first study, based on 2000 data, they analyzed more than 13,000 fourth-grade and 15,000 eighth-grade students in several hundred public and private schools and found, as expected, that, overall private school math scores were higher than those of public schools. However, after using a socio-economic status (SES) composite of several environment measures to account for the demographic differences between public and private school students, they found **achievement was higher in public schools than in private schools with equivalent demographics**. After their findings were fiercely contested by private schools, the Lubienskis conducted a second study with a much larger 2003 math sample containing 190,000 fourth-grade and 153,000 eighth-grade students. They included additional variables, such as student race/ethnicity, limited English proficiency, school location and a variety of school types. Results again showed that after controlling for demographic factors, public schools did at least as well as private and charter schools at both grade levels—specifically, public schools scored significantly higher than all other school types at Grade 4, and higher than most types at Grade 8 (Lutheran and charter schools performed slightly better in eighth-grade at statistically insignificant levels). Interestingly, the fastest-growing segment of the private school sector, conservative Christian, was lowest performing, trailing public schools by more than ten points at both grade levels.

What this Research Can Tell Us:

In typical comparisons, private schools generally appear to outperform public schools because *overall* scores are compared. A closer look, though, reveals that private school students are disproportionately of high-SES. A closer analysis comparing students within each SES group (Low, Low-Med, Mid-High, High) revealed that public school students out-perform private school students *within* each of these groups. The results are significant because they counter the prevailing wisdom behind prominent market-style reforms such as school choice, vouchers, and charter schools, which assume that private schools do better at boosting achievement of disadvantaged children. The Lubienskis caution, however, that more research is needed to study the development and progression of students' math abilities. Their analyses were only snapshots of students' scores in one year periods, and not measures of student movement between school sectors or assessments of students' growth over time.

What this Research Means:

- Traditional analyses comparing public and private schools often use only overall comparisons and do not account for demographic differences in student populations. In both of the Lubienskis' studies, demographic measures were found to more than account for the apparent "private school advantage" in schools' raw mathematics scores.
- These data suggest significant reasons to be suspicious of claims of general failure in public schools, and raise substantial questions regarding a basic premise of the current generation of school reforms based on mechanisms such as choice and competition drawn from the private sector.

For more information:

Lubienski, S. T. & Lubienski, C. (2005). A new look at public and private schools: Student background and mathematics achievement. *Phi Delta Kappan*, May, 696-699. Retrieved April 25, 2006 from http://www.pdkintl.org/kappan/k_v86/k0505lub.htm

Lubienski, C. & Lubienski, S. T. (2006). *Charter, Private, Public Schools and Academic Achievement: New Evidence from NAEP Mathematics Data* (The National Center for the Study of Privatization in Education, No. 112). New York: Teachers College. Retrieved April 25, 2006 from http://www.pdkintl.org/kappan/k_v86/k0505lub.htm

We invite your response...

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