## SAVE OUR SCHOOLS Education Research Brief

## More Studies Show That Money Really Does Matter in Education

Three new US studies have found that increasing funding for disadvantaged students increases school results. They bring to 21 the number of studies in the last five years showing that funding increases targeted at disadvantaged students improves achievement. This is a remarkable degree of unanimity amongst education economists. Even notorious sceptics of the worth of increasing school spending such as Professor Eric Hanushek from Stanford University (USA) and The Economist magazine have been forced to concede that money matters for disadvantaged students.

A study published in the academic journal <u>Education Finance and Policy</u> in January found strong evidence that court-ordered finance reforms in the US between 1989 and 2010 increased revenues and graduation rates in high-poverty school districts. It found that high-poverty districts in states that had their finance regimes changed by court order increased real per-student revenues by 11.5 to 12.1% and increased graduation rates of six to twelve percentage points in seven years following reform. High-poverty districts in states undergoing reform increased revenues and graduation rates relative to high-poverty districts not subject to school finance reforms. There were no achievement gains in wealthier school districts.

The marginal effect of an increase in real per-pupil revenues increased graduation rates in poorer districts but not wealthier districts. [p. 33]

...the marginal effect of an additional dollar of spending is more productive in poor districts than it is in nonpoor districts. [p. 57]

The results were robust to various model specifications. However, the results vary substantially between individual states undergoing court ordered finance reform. Some states with little to no observed change in resources were able to improve graduation rates, whereas others that increased revenues failed to translate those resources into improvements in high school completion. The authors said these differences warrant further investigation.

A study published by <u>Ohio University</u> in April found that increased expenditure on schools in high poverty districts led to significant improvements in student achievement but no achievement effects in low-poverty districts. It concluded:

Overall, this study provides convincing evidence that spending increases can have a significant impact on districts serving impoverished students. To the extent that these results are generalizable to districts outside of our effective analytic sample, we corroborate recent claims that school finance policy could realize gains by targeting funding to districts serving impoverished students – perhaps without the spending restrictions that accompany some state and federal programs. [p. 4]

The study estimated the impact of increases in education spending on education spending and student outcomes following local tax referenda in approximately 800 school districts across seven states: Arkansas, Louisiana, Michigan, Missouri, Pennsylvania, Texas, and Wisconsin. Districts in which referenda passed spent an average of \$300-\$500 more annually per student after seven years.

They spent this money on higher salaries per employee (over half of which were teachers) as opposed to employing more teachers or support staff.

The study found statistically and substantively significant achievement effects in districts that are above the median in the proportion of students eligible for free or reduced-price lunches. In these districts, the levy was associated with an average increase in spending of up to \$700 per student annually through 6-8 years.

This study provides evidence that, even after the large increase in K-12 spending associated with state finance reforms in the late 20th Century, additional investments can still have significant impacts on the achievement of disadvantaged students. ...policymakers could realize significant gains in student achievement by targeting unrestricted funding more directly to impoverished districts. [p. 23]

The study was unable to determine whether districts increased salaries of existing personnel or whether they replaced them with higher-paid staff. It said that referenda may have enabled poorer districts to hire more effective full-time teachers instead of relying on temporary options or less qualified teachers.

The study did not find any gains in achievement from lower spending increases of \$350 per student or less in low-poverty school districts. The increase in spending was not associated with statistically significant changes in student achievement, graduation rates or dropout rates, although the achievement estimates often approached common benchmarks for substantive significance.

Another study published by the <u>Annenberg Institute at Brown University</u> in May examined the outcomes of the school funding formula in Texas which grants additional funds to geographically large rural school districts with few students. Schools receive the additional funding irrespective of district wealth. The study found that the additional funding increased reading and maths achievement, reduced drop-out rates and increased graduation rates, college enrolment and degree graduation. The effects were largely concentrated in districts with more poor and Hispanic students, and in later grades, when students have had more exposure to additional resources.

Taken together, while these findings suggest that increased discretionary funds yield meaningful academic gains, supporting the "money matters" camp.. [p. 4]

The authors argue that their study offers novel insights on the impact of additional expenditures because the additional funding was not targeted to low funded districts.

....we contend that additional funding to well funded districts with few poor students yields little in terms of test score gains. Yet, additional funding yields significant and meaningful gains for districts with high proportions of poor students, even if their initial funding levels were high. [p. 24]

The diversity of school systems in the United States permit more detailed studies of changes in funding arrangements. These studies add to an abundance of evidence that money matters in education, especially for disadvantaged students. At least 21 studies in the last five years found that increases in school funding improve student results. Numerous other studies in earlier years produced similar results. The studies variously show that increased funding improves test score results, reduces achievement gaps between rich and poor, and increase high school completion rates, post-school earnings and employment. They provide compelling evidence of the worth of

targeting funding increases to meet the learning needs of disadvantaged students. As an article in the US <u>Education Week</u> last week said:

...a growing number of researchers are pushing back against what they see as a simplistic, reductionist view of the role that spending plays in school quality and student performance. More money does, in fact, make a difference, they say – provided that you spend enough, and in the right manner. They point to research in the past five years that provides examples of instances where politicians and taxpayers invested more money in teacher salaries, school construction, and schools with high populations of low-income students and saw students' test scores jump.

Even long-term opponents of more spending on schools have been forced to concede that money matters for disadvantaged students. Professor Eric Hanushek from Stanford University, whose work is frequently cited by critics of more spending on school education, recently agreed that that more money can improve student outcomes. He told <a href="Education Week">Education Week</a>:

It's not that resources don't matter and that they can't matter. It's that you can't trust that you can just drop in a pile of money and expect good performance to come out. That doesn't mean you should cut spending on schools. I think that there's still a case to be made on targeting extra resources on schools to get better performance.

An article in <u>The Economist</u> last week highlighted the impact of cuts to education spending in the US during the recession following the financial crisis of 2007-09. It cited studies showing that school budget cuts led to lower reading and maths scores and lower school graduation rates. Poor schools experienced the largest budget cuts and affected low income and racial minority students the most.

Since children from racial minorities disproportionately attend low-income schools, they endured the brunt of the consequences. Test scores in poor and minority school districts suffered most...

Despite the overwhelming research evidence that funding increases for disadvantaged schools improves student achievement and post-school outcomes, government funding increases in Australia continue to favour more privileged, better-off school sectors and students. The latest figures published by the Australian Curriculum, Assessment and Reporting Authority (ACARA) show that total government funding for public schools, adjusted for rising costs, was cut by \$17 per student between 2009 and 2017 while funding for Catholic schools increased by \$1,420 per student and by \$1,318 for Independent schools (see forthcoming brief by Save Our Schools).

Yet, public schools account for over 90% of disadvantaged schools and over 80% of all disadvantaged students. Large proportions of low SES and Indigenous students do not achieve national and international learning standards and don't complete Year 12.

The new research studies and the many previous studies show that money matters for disadvantaged schools and students. Education outcomes for disadvantaged students are unlikely to improve significantly until government funding increases are better targeted to public schools.

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## References

Carolyn Abott, Vladimir Kogan, Stéphane Lavertu & Zachary Peskowitz, School District Operational Spending and Student Outcomes: Evidence from Tax Elections in Seven States, Working Paper, <u>The Ohio State University's John Glenn College of Public Affairs</u>, April 2019.

Christopher A. Candelaria & Kenneth A. Shores, Court-Ordered Finance Reforms in the Adequacy Era: Heterogeneous Causal Effects and Sensitivity, <u>Education Finance and Policy</u>, 2019, 14(1): 31-60.

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