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## The Adequacy Study's School District Ranking: What It Adds to What We Already Know

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Since the Texas Legislature's school finance Adequacy Study was released last spring, it has been claimed by some that the study *proves* two things: 1) more money spent on schools improves student attainment, and 2) Texas schools need more money. While the Adequacy Study provides rich information on school spending, its authors would make neither of these claims. In fact, there is an abundance of research in the academic literature, by other national and international research institutes, and the Texas Public Policy Foundation that contradicts these assertions. The Adequacy Study is the best analysis available to inform a redesign of the state's current school finance system, but neither it nor any other study, statistical or otherwise, can justify a claim that more money is required for improvement in Texas' education system.

The Adequacy Study was conducted by capable researchers at Texas A&M University using sophisticated statistical methods and is an important contribution to policymakers' understanding of school finance. Its greatest contribution to our understanding of school spending, though – a ranking of districts according to relative inefficiency – is only now public. Previously unpublished Adequacy Study research, soon to be updated, includes a ranking of Texas school districts according to their degree of inefficiency.

The Texas Public Policy Foundation has analyzed school district ranking data from the Legislature's Adequacy Study. **Of particular interest is how the Legislature's rankings compare to rankings produced by two studies by the Texas Public Policy Foundation and what lessons can be learned from such a comparison.**

In mid-2003, the Foundation commenced a comprehensive school finance research program. Two independent projects by outside researchers were commissioned to study the relationship between spending and performance and to evaluate school efficiency. The papers and district rankings have been available on the internet.<sup>i</sup> The Adequacy Study ranks 694 of the state's roughly 1,030 school districts. The Texas Public Policy Foundation study by Vedder and Hall<sup>ii</sup> ranks all of the school districts and the study by Jaggia and Vachharajani<sup>iii</sup> includes several rankings of over 900 districts.

The Vedder/Hall ranking is very straightforward. It divides district expenditures by the number of students who pass all the TAKS tests to get "cost per passing student" for each district. Lower costs per passing student are more efficient and the districts are ranked accordingly.

The Adequacy Study and the Jaggia/Vachharajani study both produce rankings based on

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statistical predictions. The Adequacy Study first predicts *cost of education* based on several factors such as student performance, numbers of low-income students, numbers of limited English proficient students, and other characteristics. The Jaggia/Vachharajani study first predicts *student passing rates* based on some of the same factors.

The Adequacy Study compares a district's actual costs to its statistically predicted costs. The lower the actual costs compared to the predicted, the more efficient is a district. The Jaggia/Vachharajani study compares a district's student passage rate to its statistically predicted student passage rate. The higher the rate compared to the predicted, the more efficient is a district.

The Vedder/Hall ranking does not lower expectations for schools with "hard-to-educate" students in determining a district's efficiency. The Adequacy Study and the Jaggia/Vachharajani do make excuses for districts with certain characteristics. For example, districts are increasingly given a "bye" when they have more special education students or more poor students. The Adequacy Study makes many more such allowances than does the Jaggia/Vachharajani study.

The Adequacy Study and the Jaggia/Vachharajani study might be expected to have more in common than either would have to the Vedder/Hall study. They do not. In fact, the two studies with the more similar and complex methodologies, the adequacy and Jaggia/Vachharajani studies, produce rankings that bear very little resemblance to each other. In contrast, it is somewhat likely that a district ranked highly by Vedder/Hall will be ranked highly by the Adequacy Study. It is somewhat *more* likely that a district ranked highly by Vedder/Hall will be ranked highly by Jaggia/Vachharajani.

Consider Arlington ISD. It is ranked in the bottom half of districts in the Adequacy Study ranking, in the top third in the Jaggia ranking and in the top fifth in the Vedder ranking. Ector County ISD is even more varied, ranked in the top two percent in the Adequacy Study ranking, in the bottom tenth in the Jaggia ranking and in the top third in the Vedder ranking. There are districts ranked roughly the same by all three, others where two of the rankings agree but the other is very different. Any two rankings might agree on some districts but not on others.

These facts dramatically illustrate that *different sophisticated methodologies yield dramatically different results*. A third different, just as intellectually defensible, sophisticated methodology looking at school efficiency would likely yield yet more wildly different results. Also likely is that the relatively simple Vedder/Hall ranking would have more in common with any ranking produced by a new highly complex method than would any two rankings produced by a multitude of various complex methods.

**The Legislature's Adequacy Study and other statistical studies only measure what is associated with school spending, not necessarily what causes school spending.** By giving the current state of affairs, they tell us the way things are, not how they can or even ought to be and they *cannot* tell us whether more or less total spending is needed or what the appropriate amount to spend is. Many unknown and unquantifiable effects on student performance render the best-designed statistical studies incapable of reliably determining cost. Knowing this, House

policymakers have taken care to let the study offer insights rather than define proposed school finance formulas.

The studies by the Texas Public Policy Foundation show little to no relationship between the level of spending and student performance. This matches the conclusion of premier education researcher, economist Eric Hanushek of the Hoover Institute that “The distribution of spending across districts is only vaguely related to the amount of learning provided in different communities.”<sup>iv</sup>

The real strength of the Adequacy Study’s methodology and other statistical studies lies in ranking school districts in terms of relative inefficiency, allowing policymakers to concentrate on those districts that are using resources least wisely. *The relatively simple Vedder/Hall ranking, which ranks all districts, might be the best efficiency measure given its simplicity and greater likelihood to be at least somewhat consistent with other measures.*

**NO statistical study, or any other type of study purporting “adequacy,” should be interpreted as a final answer to the question of how much or in what way taxpayer money should be spent on public education.** This is true whether the study is performed by academics in Ohio, academics in Massachusetts, academics at Texas A&M University, or academics for hire by interests enriched by greater spending.

Noted education researcher, economist Caroline Hoxby of Harvard University, says it best: “The adequacy method of choosing a [spending] target is unreliable because there is *no* scientific, accepted method of determining the causal effect of spending on student achievement. Therefore, the adequacy method is an invitation to interest groups of all sorts to propose their own favorite target based on their own analysis of the statistical relationship between spending and achievement.”<sup>v</sup>

The Texas Legislature should acknowledge the mounting evidence that Texas spends enough on public education. It should produce a simple definition of basic funding based on what we can afford using comparisons not just across Texas districts, but with other states and other nations. The Legislature should recognize that student success is much more dependent on how schools spend rather than how much they spend.

## ENDNOTES

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<sup>i</sup> See *Effective, Efficient, Fair: Paying For Education In Texas* and *Assessing Performance: Spending And Learning In Texas Public Schools* at [http://www.texaspolicy.com/research\\_reports.php?cat\\_level=13](http://www.texaspolicy.com/research_reports.php?cat_level=13). These were published in February and March, respectively, in 2004.

<sup>ii</sup> *Effective, Efficient, Fair: Paying For Education In Texas*

<sup>iii</sup> *Assessing Performance: Spending And Learning In Texas Public Schools*

<sup>iv</sup> Hanushek, Eric A., “Thinking about School Finance in Texas,” *Putting the Sides Together: Twelve Perspectives on Texas Public School Finance*, ed. Chris Patterson, Texas Public Policy Foundation: Austin, December 2003, p. 43.

<sup>v</sup> Hoxby, Caroline, M. “A New School Finance Plan for Texas,” *Putting the Sides Together: Twelve Perspectives on Texas Public School Finance*, ed. Chris Patterson, Texas Public Policy Foundation: Austin, December 2003, p. 67.