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Following the Money: A Tennessee Education Spending Primer

Analyzing the true amount and purpose of education spending and the impact it has

by Benjamin Clark & Alexandria Gilbert

EXECUTIVE SUMMARY

One of the most frequent critiques of public education is that more money needs to be spent in order to achieve better results. This study analyzes education spending in Tennessee and uncovers some interesting facts. First, the amount that taxpayers already spend on public education is significantly underreported. While the average stated amount spent per pupil is $9,123, the true figure is about 11 percent more than reported, or $10,088 per student, per year.

What is more interesting is where the money is spent. Less than 54 percent of total spending is directed at classroom instruction, such as teacher salaries, textbooks, supplies, and other instructional spending. And that figure is in constant decline, whereas administrative spending is on the upswing. For instance, since 2000, the number of administrators in Tennessee's education system has grown by 34.5 percent, while the number of teachers has increased by less than 17 percent, and the number of students has grown by just seven percent. Salary increases for administrative leaders have also climbed at a faster pace than salaries for teachers.

Finally, this study examines whether there is any correlation between overall spending and education performance, as well as whether there has been an increase in student achievement as a result of the focus on administrative spending growth. After comparing similarly situated school districts within the state, while also comparing Tennessee to other states, this report can find no measureable correlation between spending and student performance. Ultimately, more spending does not equal better results. Rather than spend more money, especially on administrative personnel, school districts should focus on spending education funds more wisely. Only then can Tennessee expect to provide its students with the quality education they deserve.

- Justin Owen, President & CEO

Introduction

Tennesseans currently have the ability to right the course of their state in determining how to approach public education. Our communities have modest and unsurprising expectations: teachers who teach, students who learn, and parents who actively facilitate both of these processes. The problem is that the current system does not always allow even these fundamentals. Bureaucracy, politics, and special interests have compromised the integrity of a system meant to help some of the most vulnerable and most valuable members of society: children.

This report examines the ways in which a lack of transparency in government finances, rather than a lack of funding, has slowed state educational progress. This report will consider three basic questions:

1) How much is spent on education in Tennessee?
2) For what purpose is this money used?
3) Is the current allocation of funds justified?

First, this report analyzes how much state and local taxpayers really spend on education versus what is publicly reported. The report then looks to specific examples to bring to light weaknesses such as wasteful spending that produces no tangible results, as well as disproportionate spending and staffing for non-instructional purposes. And third, it examines how spending impacts student achievement, indicated by the Tennessee Comprehensive Assessment Program (TCAP) and National Assessment of Educational Progress (NAEP).

Current Spending

In order to truly understand the impact of education spending, the precise amount spent and purpose of spending must first be determined. Unless otherwise noted, this report relies upon figures provided by the Tennessee Department of Education Annual Statistical Report and Education Report Cards for 2012, which present detailed expenditure breakdowns for each school system and the state as a whole. Of particular interest for this study are Instructional Expenditures and Administrative Expenditures.

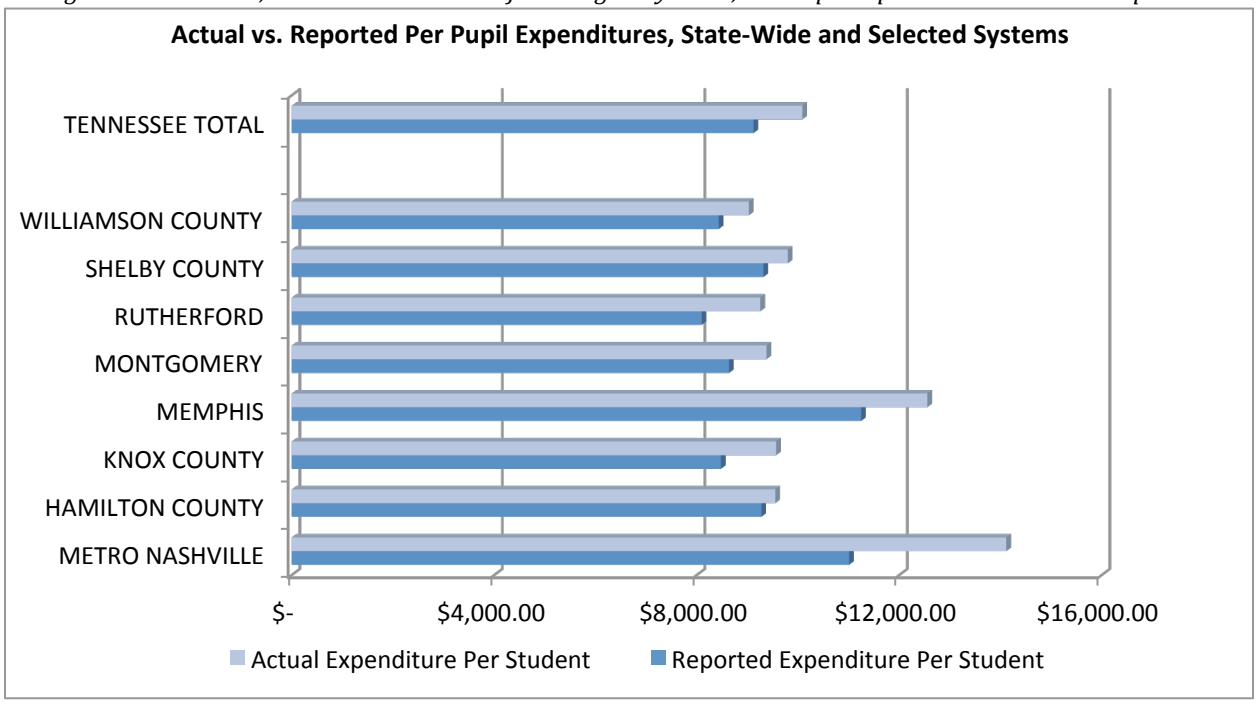
When discussing its total relevant spending, the Tennessee Department of Education generally cites total operating expenditures of $8,229,189,860 for the fiscal year ending in 2012; however, this is only a partial figure and does not represent the true costs of public education in Tennessee. The state formula for calculating Per Pupil Expenditures (PPE) excludes categories such as community services, capital outlay, debt service, capital projects, and student body education, all of which involve taxpayer money spent on education services. This exclusion is likely due to the rationale that these expenditures are not directly incurred by day-to-day operations; however, they do still constitute educational expenses and thus should be factored into any accurate picture of total per-

pupil funding. Like the Tennessee Department of Education, this report derives the number of students from the Average Daily Attendance (ADA); that is, the approximate number of students actually attending school and receiving services. Thus, the state calculates PPE as operating expenditures divided by ADA. This report calculates the true PPE as the grand total of all expenditures, minus expenditures for student populations not covered by ADA (such as early childhood education and adult education), divided by ADA.

The total expenditures referenced in this report contain the noted exclusions from operating expenditures and account for the deduction of non-K-12 expenditures. Thus, the total amount spent in Tennessee was $9,100,216,241 for the fiscal year ending in 2012. This more precise figure indicates that taxpayers spend an average of $10,088 per student instead of the reported $9,123, or 10.6 percent more than is officially reported. This disparity is notable because it demonstrates a fundamental misunderstanding of how much money is actually spent on educational expenses and because it conceals a great deal of wasteful and inefficient spending.

From the outset then, it becomes evident that criticisms that Tennessee fails to spend enough taxpayer money on education are based on underreported numbers. As seen in Figure 1, this tendency toward underreporting exists within several of the largest systems in the state, which exhibit a larger true PPE than is reported. Some school systems report fairly similar PPEs versus the true expenses; other systems' figures, usually because of capital costs and debt service, are underreported by as much as double-digit percentages.

Figure 1: Statewide, as well as in several of the largest systems, Per Pupil Expenditures are underreported.



Instructional Expenditures

Of the total $9.1 billion spent statewide in the fiscal year ending in 2012, $4.9 billion, or 53.9 percent, went toward Instructional Expenditures, defined as compensation for teachers and other classroom personnel, as well as various classroom expenses (e.g., textbooks and supplies). At first blush, this may seem appropriate—more than half the money spent statewide on education is directly related to what happens at the student-teacher level (Figure 2). This is not suggesting that Tennessee spends too much paying teachers. The question is whether Tennessee spends *too little* of its budget on instruction and, instead, liberally disburses funds for various other purposes that could be considered secondary. According to the National Center for Education Statistics, the national standard for instructional expenditures is approximately 60 percent of total spending. Thus, Tennessee falls significantly behind the standard in prioritizing instruction.[1] Within this instructional category, roughly eight percent goes to expenses other than salaries, which ultimately means that only about four percent of total expenditures go directly toward improving students' classroom experiences (Figure 3). Moreover, only 49 percent of total expenditures go toward teacher compensation (including benefits), while only 32.5 percent of total expenditures go directly toward teacher salaries. Thus, barely half of total educational funds go directly to the classroom.

Figure 2: Instructional expenditures account for just over half of total expenditures, while much of the rest goes toward other expenses that do not directly benefit students or teachers.

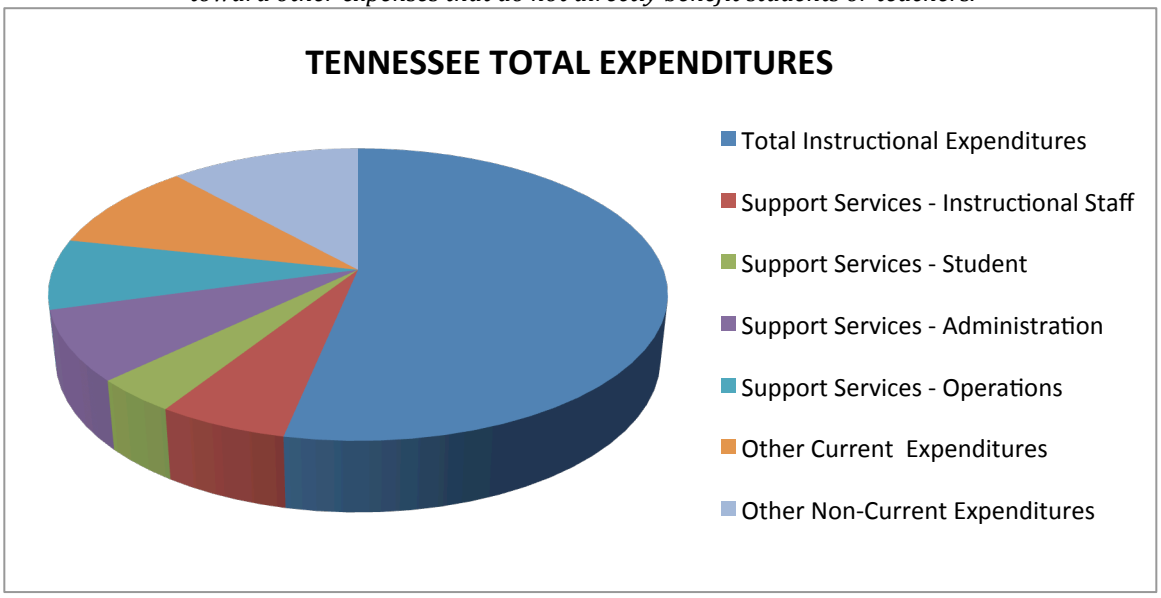
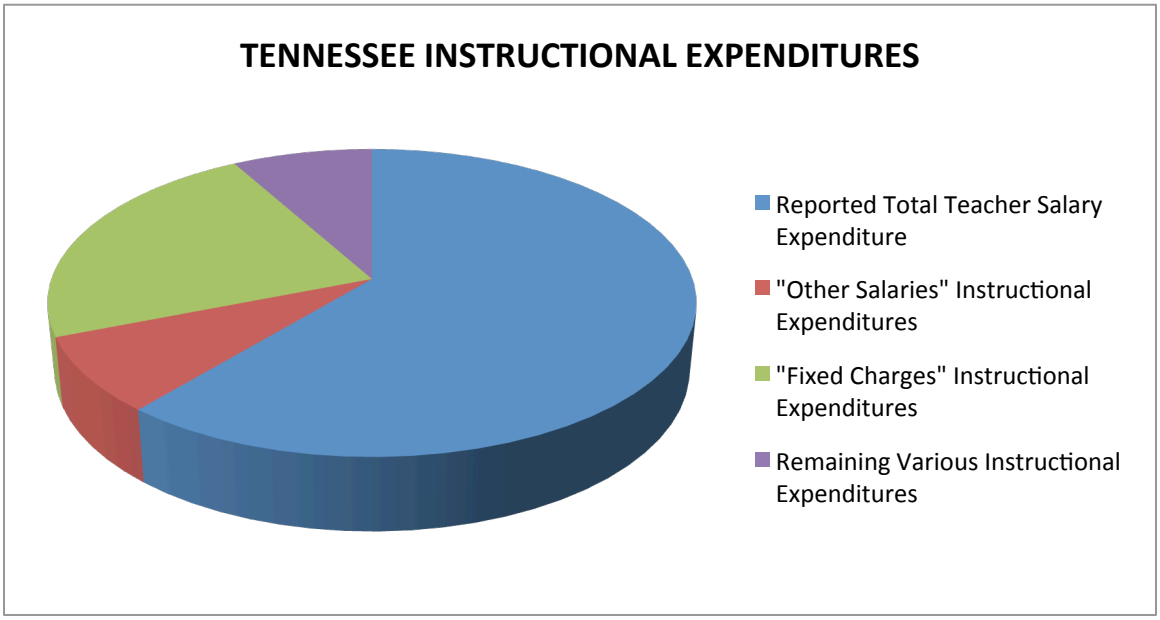


Figure 3: Approximately eight percent of instructional expenditures are for classroom support (including textbooks and other instructional materials for the students), which accounts for less than five percent of total expenditures. The remaining 92 percent is for salaries and benefits.[2]



Administrative Expenditures

Overall, 7.77 percent of expenditures were reported under "Support Services – Administration" in 2012. Spending on administration has increased dramatically in recent years. While total spending statewide increased by 64 percent from 2000-2012, total administrative costs rose by nearly 89 percent. Inflation during this time period was only 33 percent, and thus does not account for this dramatic increase. Some of this increase is due to a seven percent increase in the number of students. Yet administrative expenditures per pupil have risen from $449.66 to $793.07—an increase of 76 percent—demonstrating that the increase in administrative spending has much less to do with increasing enrollment than other factors. In that same span of time, fifteen school systems more than doubled their per-pupil administrative costs (Figure 4). These dramatic increases highlight the prioritization of non-instructional expenses as local education budgets have grown.

Figure 4: Fifteen school systems more than doubled per-pupil administration spending from 2000 to 2012.

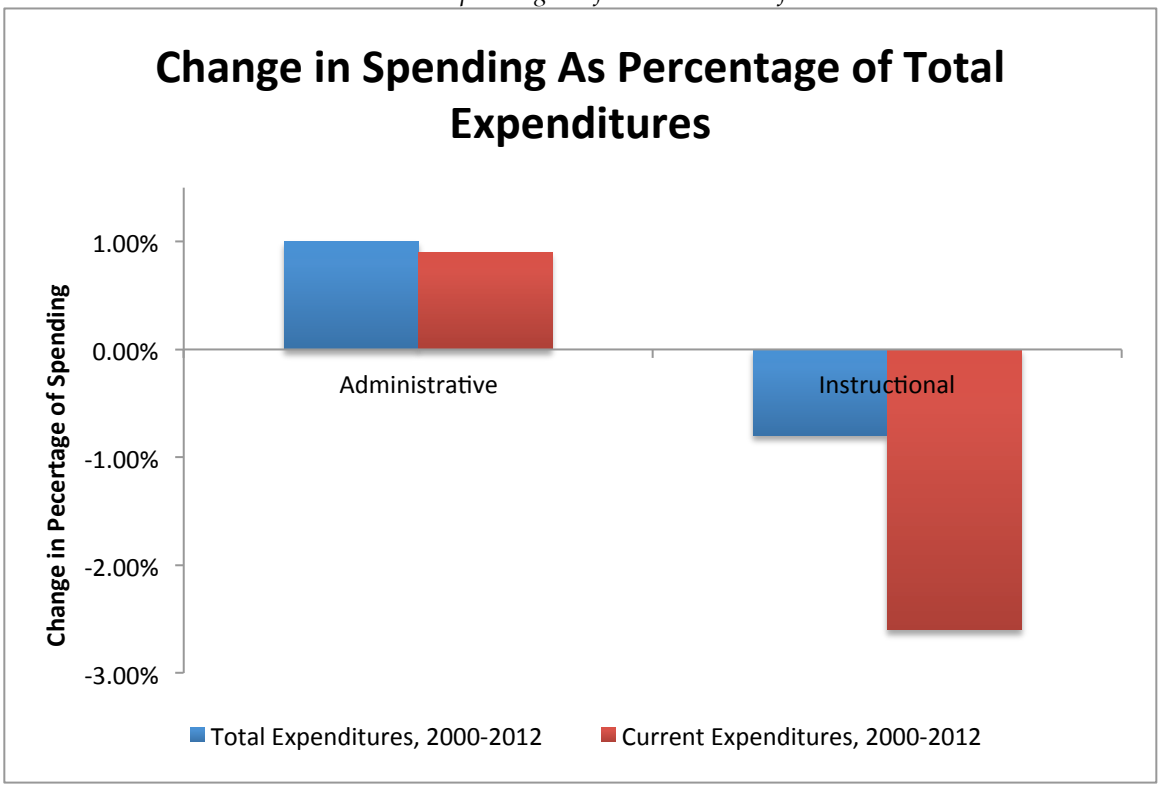
	Increase in Administrative Costs per ADA, 2000-2012	ADA increase 2000-2012	Total Increase in Administrative Costs 2000-2012
Lexington City Schools	193.50%	7.70%	216.10%
Clay County	163.74%	-16.55%	120.08%
Hickman County	153.94%	-0.32%	153.13%
Memphis City Schools	151.15%	-9.31%	127.75%
Obion County	151.03%	-9.41%	127.42%
Smith County	139.04%	1.37%	142.33%
Bradford Special School District	138.51%	-37.00%	50.27%
Etowah City Schools	137.52%	-19.17%	102.47%
Shelby County	129.93%	3.89%	138.87%
Jackson County	113.44%	-4.49%	103.96%
Hardin County	108.70%	-8.03%	91.94%
S. Carroll Special School District	108.28%	-17.43%	71.97%
Fayette County	106.21%	-3.73%	98.52%
Johnson County	104.29%	-6.07%	91.85%
Dayton City School	102.07%	11.19%	124.56%

Comparing administrative expenditures over time or between different school systems presents a unique methodological challenge. Because the number of pupils in each school system varies widely, simply looking at the total dollar amount spent on administration is not a helpful analytical tool. Small school systems that spend a large amount of money on administration relative to their budget might not stand out against moderate-to-large school systems that spend a much more modest amount on administration. Furthermore, because some school systems spend large chunks of their budget on various non-instructional expenditures, looking at the percentage of a school system's budget spent on administrative costs is not always instructive. For example, in 2012, Metro Nashville Public Schools (MNPS) spent 6.4 percent of its budget on administrative costs, considerably below the state average of 7.8 percent. Based on this alone, one might be led to the conclusion that MNPS underspends on administration compared to the rest of the state. However, this percentage is skewed by the nearly $142 million that MNPS spent on debt service that year. Only by looking at administrative costs per pupil does it become clear that MNPS spends more than the state average on administration: $896.50 per pupil, compared to the state average of $793.07 per pupil.

From 2000 to 2012, statewide Administrative Expenditures grew from 6.8 percent to 7.8 percent of Grand Total Expenditures, and from 7.9 percent to 8.8 percent of Current Expenditures. In the same period, Instruction Expenditures fell from 54.1 percent to 53.3

percent of Grand Total Expenditures, and from 62.9 percent to 60.3 percent of Current Expenditures.[3]

Figure 5: While administrative spending has grown to account for more of both total and current expenditures, instructional spending has fallen to account for less.



Administrative Staffing

The growth in the number of administrative positions, compared to teaching positions and student body size, illustrates the importance of an obvious and reasonable question for public school officials to answer: Why is administration such a priority? This administrative growth trend results in a disparity between administrator and teacher hiring rates. In addition, administrative growth dramatically outpaces the growth of student bodies (Figures 6 and 7).

Figure 6 shows a dramatic increase in the number of administrators from 2000 to 2012, along with a much more modest increase in the number of teachers and students.

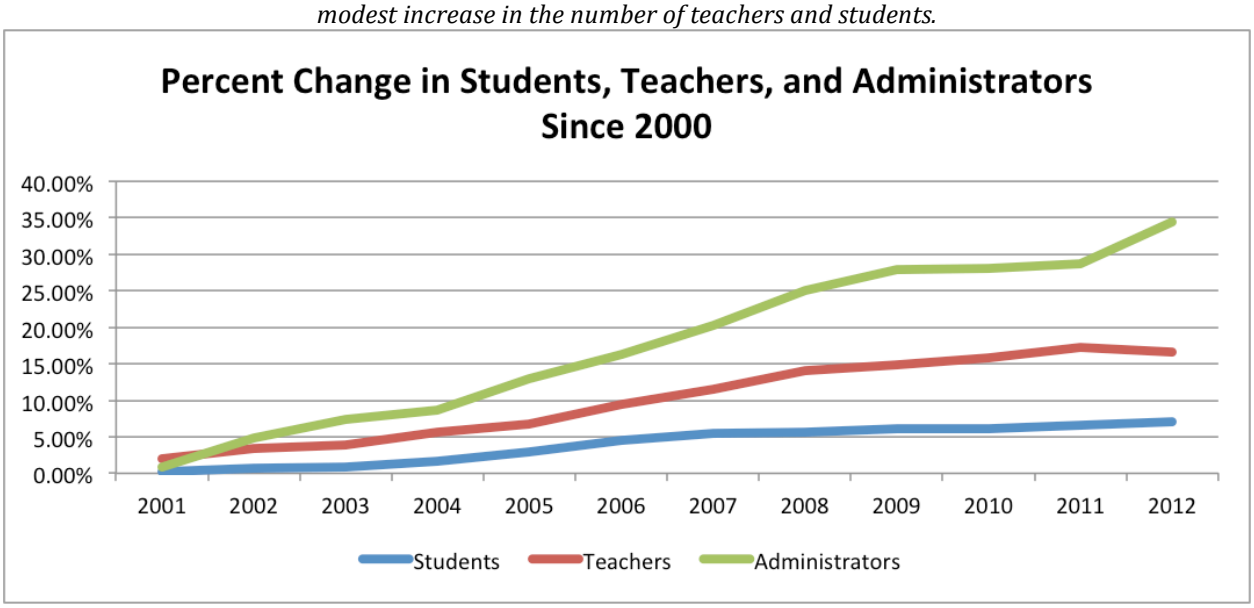
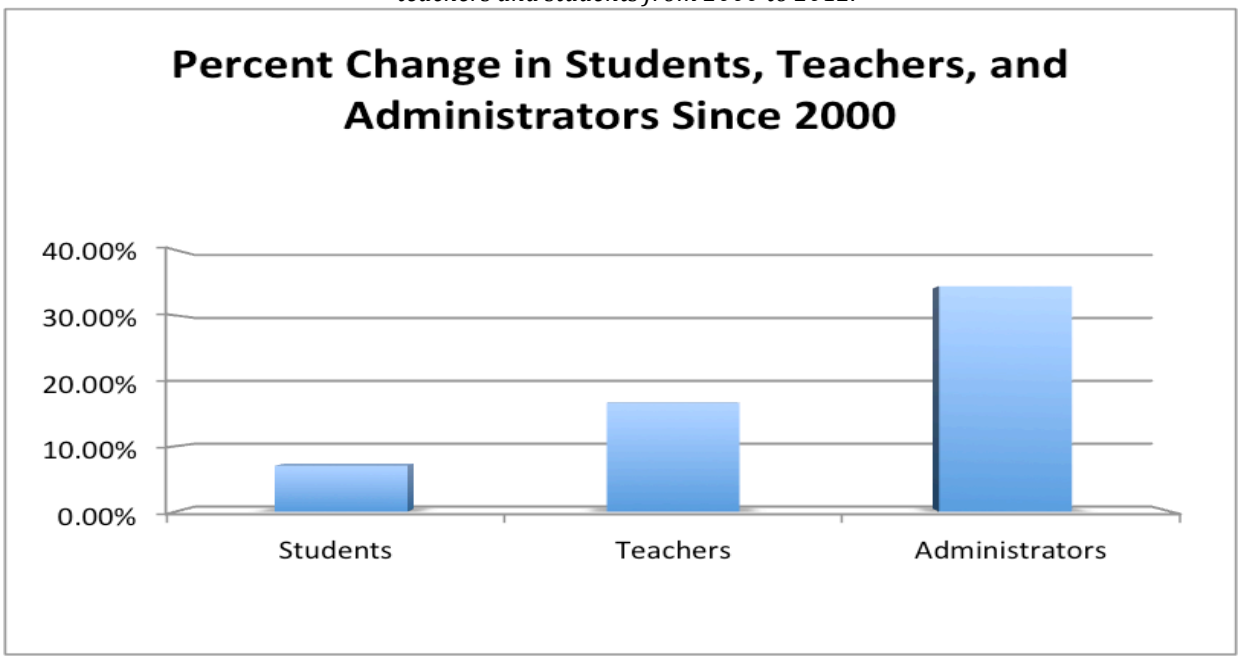


Figure 7 shows the total growth in the number of administrators outstripping the growth in the number of teachers and students from 2000 to 2012.



From 2000 to 2012, the number of administrators statewide grew from 3,625 to 4,874, for an increase of 34.5 percent.[4] However, the increase in number of teachers was only 16.6 percent, while the change in number of students was merely seven percent. On average from 2000 to 2012, one new administrator was hired for every 48 new students, as

opposed to just one new teacher for every six new students. As a result, for every seven teachers added, another administrator was added.

This represents a radical change in educational hiring trends, as well as a shifting of focus away from teacher-student interaction and toward bureaucratic growth. The result is that administrative salaries (including those that are significantly higher than teachers') divert funds from instructional uses such as hiring more teachers, raising teacher salaries, and simply providing more material support for students.

In addition to the growth in the number of administrators, salaries for principals and system superintendents have consistently risen. Statewide, the average salary for a public school classroom teacher in Tennessee rose from $36,327 to $47,082 between 2000 and 2012, an increase of 29.6 percent, not adjusted for inflation.[5] After adjusting for inflation, Tennessee's teachers made *less* money in 2012 than they did in 2000. In that same span of time, the average salary for a public school principal rose from $59,064 to $78,514, an increase of 32.93 percent. The average pay for a school system superintendent rose from $77,127 to $103,692, an increase of 34.36 percent. Given that the rate of inflation between 2000 and 2012 was approximately 33 percent, principals and superintendent salary raises have at least roughly kept pace with or exceeded the rate of inflation, whereas teachers' salaries have not. Thus, these pay raises are somewhat tempered by the rate of inflation, even if the same cannot be said for teachers. Either way, not only has the hiring rate of administrators risen far more dramatically than that of teachers, administrators' salaries have risen at a faster pace as well.

Between 2000 and 2012, dozens of school systems opted to give their superintendents significant pay raises at the taxpayers' expense, but such raises appear to have had little impact on academic performance (Figure 8). From 2000 to 2012, five school systems raised their superintendent's salary by 80 percent or more:

- MNPS (Davidson County) raised superintendent salaries by 122.89 percent
- Knox County, by 86.97 percent
- Sumner County, by 80.92 percent
- Franklin Special School District, by 80.59 percent
- Henry County, by 80.51 percent

These five districts represent some of the largest systems with the highest number of administrators, signaling an even greater increase in total dollars allocated for administration. In all, 28 school systems gave their superintendents a pay raise of 50 percent or more, while 27 additional school systems gave their superintendents a pay raise of between 40 and 50 percent. By comparison, only three school systems raised their teacher salaries by 40 percent or more, while none raised teacher salaries by as much as 50 percent.

Other administrative personnel also benefited from swelling administrative costs. While the salaries of principals statewide from 2000 to 2012 may not have increased much more

than the salaries of teachers, the growth in the total number of administrators has resulted in much higher costs of principals' salaries per pupil. In 2000, Tennessee public school systems paid $168.04 per pupil toward the salaries of principals and assistant principals. By 2012, that number had risen to $265.46, an increase of nearly 58 percent. By comparison, the increase in teacher salary expenditures per-pupil rose from $2,402.09 to $3,318.86 over the same period, representing just a 38 percent increase.

In the same time span, numerous school systems gave substantial pay raises to their principals. Fourteen different school systems increased salaries for school principals by more than 50 percent, while an additional 24 school systems increased salaries between 40 and 50 percent. This marked increase in spending is without any corresponding increase in student performance (Figure 9). In fact, many of the school systems with the most dramatic increase in principals' salaries are failing when it comes to student performance:

- Etowah City Schools in McMinn County raised its average principal salary by 93.69 percent. The system's three-year average TCAP scores are 46 in Math and 51 in Reading, which is slightly above the state average of 50 in Reading, but well below the state average of 52 in Math.
- Hancock County raised its average principal salary by 82.45 percent. Hancock County ranks as one of the lowest-scoring systems in the state, with three-year average TCAP scores of 45 in Math and 41 in Reading.
- Jackson County raised its average principal salary by 60.18 percent, while its three-year average TCAP scores rest well below the state average with a 48 in Math and a 46 in Reading.
- Van Buren County raised its average principal salary by 54.79 percent, while scoring a 42 on Math and a 47 on Reading over the past three years.
- Union County raised its average principal salary by 50.82 percent, while scoring a 42 on Math and a 43 on Reading over the past three years.

Figure 8: The vast majority of Tennessee school systems' average ACT score dropped between 2000 and 2012, regardless of changes to superintendent salary.

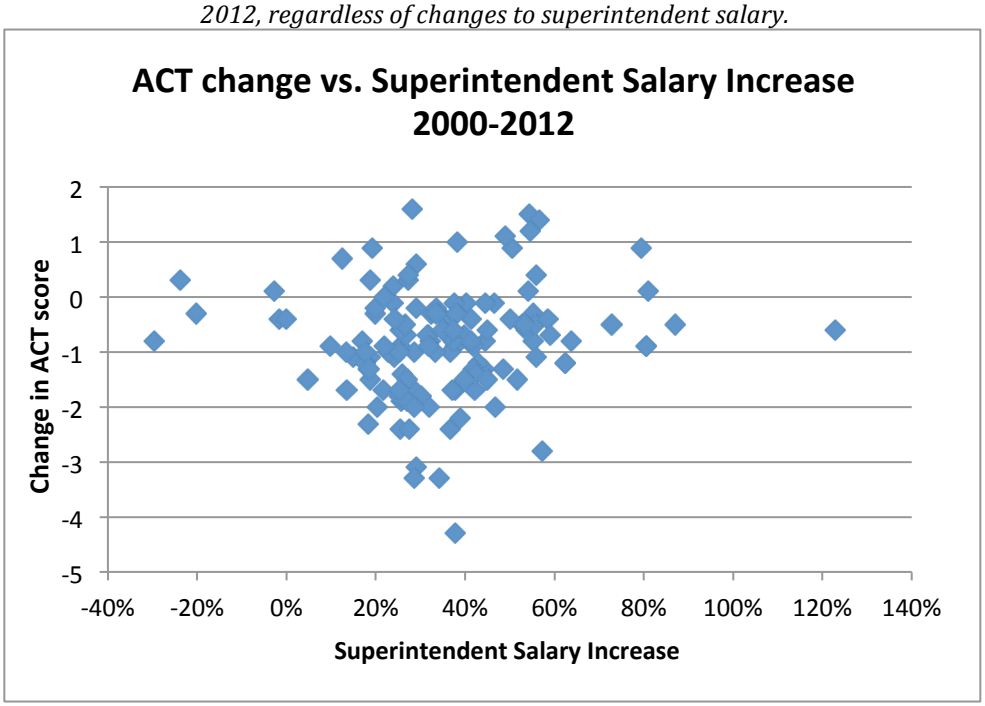
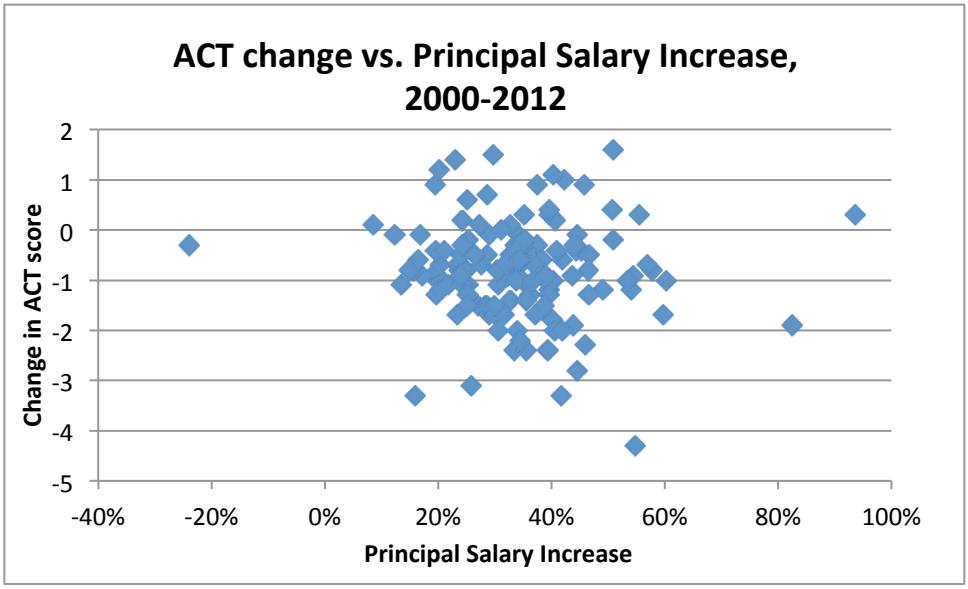


Figure 9: Most Tennessee school systems' average ACT score dropped between 2000 and 2012, regardless of any increase in principal salaries.



Some might argue that increased administrative spending is necessary to help those schools with low test scores. However, whatever the rationale behind raising administrative salaries, the data show no correlation between rising administrative

salaries and increased student achievement. If anything, school systems with low test scores have even less reason to spend money on administrative pay raises, given that they should be spending more money on remedial instructional costs. From 2000 to 2012, there was a significant *decrease* in ACT test scores across the board.[6] Furthermore, NAEP scores for Tennessee have either improved only by a few points, or not at all, through the most recent tests in 2011.

As demonstrated in a 2012 study by the Friedman Foundation for Educational Choice, there is no evidence that this extreme expansion of non-teaching staff enhances the student experience whatsoever.[7] The Friedman Foundation's study includes decades of trends across the country, with particular emphasis on the stagnation in student advancement from 1992 to 2008, thereby demonstrating both that increased administration does not improve education and that this lack of progress has been ongoing for decades. In fact, the study demonstrates that in the same time period, administrative staff grew by 46 percent while enrollment increased by only 17 percent nationally; simultaneously, Reading scores declined while Math scores remained flat.[8] The rapid expansion of administrative staff in recent years indicates that attempts to improve academic performance through increased administrative staffing have had little to no positive effect. Instead of focusing on streamlining education personnel to free up instructional expenses, systems have preferred to pump more and more money into expanding their non-teacher workforces with no clear justification. The emphasis on quantity over quality has caused only increased spending without benefits to the students.

Capital Expenditures and Debt Obligations

In addition to funding for day-to-day operations, another point to consider is the more than $1 billion, or 11.7 percent of total expenditures, that are deemed "Non-Current Expenditures" by the Department of Education. One of the most disconcerting uses of school funds under this category is the amount of money spent each year on debt services: more than $252 million in 2012 alone. Although accounting for only 2.74 percent of education expenditures statewide, debt services amounts to a much more sizeable price tag for a handful of school systems.

Of the 137 school systems in the state of Tennessee, only 37 expended no money on debt services in 2012. Of the 100 remaining systems, 26 spent in excess of $500 per pupil, an incredible cost inflator at a time when school boards continually claim to need more money to educate students and pay teachers. Three school systems in particular spent in excess of $1,500 per pupil:

- MNPS (Davidson County) - $1,972.57 per pupil, or 13.9 percent of total expenditures
- Franklin Special School District - $1,612.18 per pupil, or 10.6 percent of total expenditures
- Sequatchie County - $1,543.11 per pupil, or 15.8 percent of total expenditures

Of these districts, MNPS spent the most by a very large margin, with $141,932,392 in total debt service expenditures. In fact, MNPS accounted for an incredible 56.2 percent of the total money spent on debt service statewide in 2012. This is not a new development. Going back to 2004, MNPS has spent nearly an entire year's K-12 education budget—$917 million—on debt service payments alone.

It should be noted that the 2012 debt service figure for Sequatchie County is a bit of an anomaly. Sequatchie County is making strides in its attempt to pay off all debt by February 2014.[9] The total spent by Sequatchie County on debt services was significantly higher in 2012 than in recent years and $3,068,143 of the $3,279,851 spent went toward "Principal on Bonds and Notes" as opposed to $198,537 going to "Interest on Bonds and Notes" and $13,171 to "Other Debt Service," a rather broad category which includes debt expenditures that do not fit into specific categories. By contrast, MNPS showed absolutely no sign of any move toward reducing debt. Of the nearly $142 million spent by MNPS, a miniscule $5,753,626, or just over four percent, went toward paying off the principal, while $29,793,335 went to interest payments and $106,385,431 went to "Other Debt Service." For MNPS, as for many systems, debt service as a whole remains an unclear and unjustified use of significant funding.

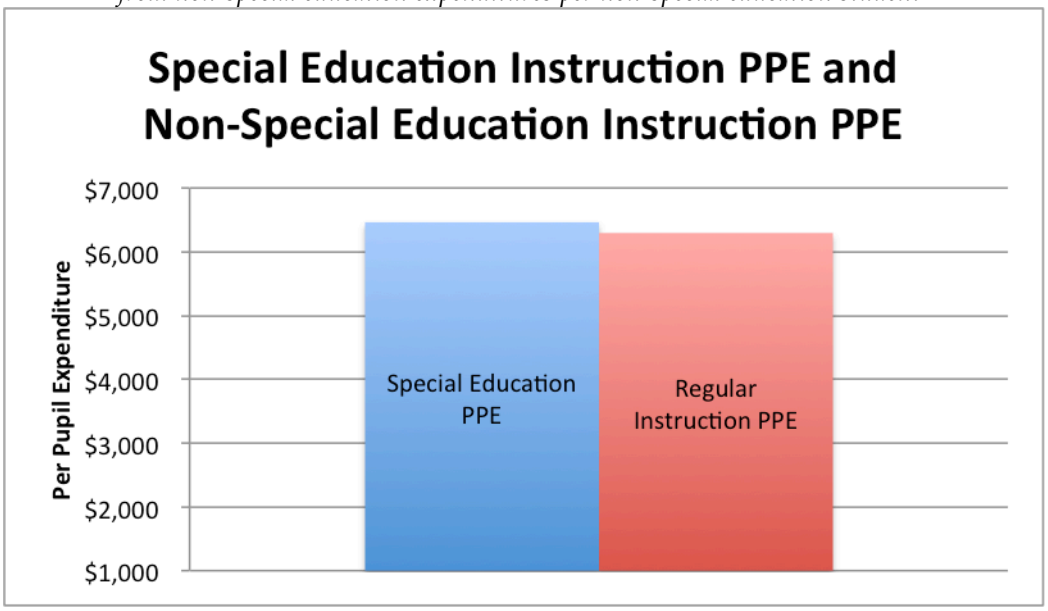
Special Education

Special education funding is also frequently used to justify exorbitant education expenditures, and opponents of various education reforms regularly claim that those reforms will jeopardize special education programs, due to their disproportionate costs. For example, according to popular anti-school choice rhetoric, all typical students would surge into private schools, while those needing special accommodations would remain in public schools that would lack the other students necessary to "subsidize" special education. However, the data do not support this claim.

In order to compare these costs, this report uses a simple calculation: the amount spent on special education instruction per student receiving special education benefits versus the amount spent on instruction for traditional students. While these groups may, in some cases, overlap, the results still present a basic similarity between the costs of both typical and special education students. Furthermore, the instructional costs include teacher compensation and classroom supplies for each group, but omit shared resources such as student support services.

When comparing the PPE for special education instructional costs and students with the PPE for non-special education instructional costs and students, the figures are generally similar. The PPE for students receiving special education benefits is $6,462, while the PPE for students not receiving special education benefits is $6,293. As a result, these students are *not* actively subsidizing each other (Figure 10).[10]

Figure 10: Special education instructional expenditures per special education student do not differ significantly from non-special education expenditures per non-special education student.



Student Achievement

In order to evaluate whether the established spending patterns actually improve student achievement, both intrastate and interstate comparisons of Math and Reading test scores provide clarity. To control for understandable curricular differences, this report focuses on these two fundamental and relatively universal subjects. The Tennessee Comprehensive Assessment Program (TCAP) offers insights into differences between school districts within the state, while the National Assessment of Educational Progress (NAEP) is a commonly used yardstick for comparisons between states.

Intrastate Comparisons

TCAP test results offer the opportunity to identify how achievement correlates with economic and financial factors often associated with school performance. The three-year statewide average scores over the period of 2010-2012 are 52 for Math and 50 for Reading. The median household income in Tennessee is $43,989. The statewide PPE is $10,088. Whether comparing results with PPE, median household income, or the percentage of individuals below the poverty line, the results are the same: Both high and low achievement can manifest, no matter how much money is spent or how affluent the students' families are (Figures 11 to 14). In fact, even dramatic differences in these factors do not necessarily advantage or disadvantage school systems.

When looking at the data in aggregate, one sees that schools with thousands of dollars difference in PPE—and even tens of thousands of dollars difference in median income—can present identical results, both low and high. This conclusion may be especially surprising to

those who assume a correlation between lower incomes and lower scores; after all, only 25 of the 137 districts actually have an above-average median household income.

Figure 11: The distribution of TCAP scores and PPE levels indicates that regardless of the amount spent per student, systems achieve at various levels. The red line indicates average PPE, while the average Math score is 52. Many of the high achievement systems spend relatively little per student and earn the same scores as those spending significantly more.

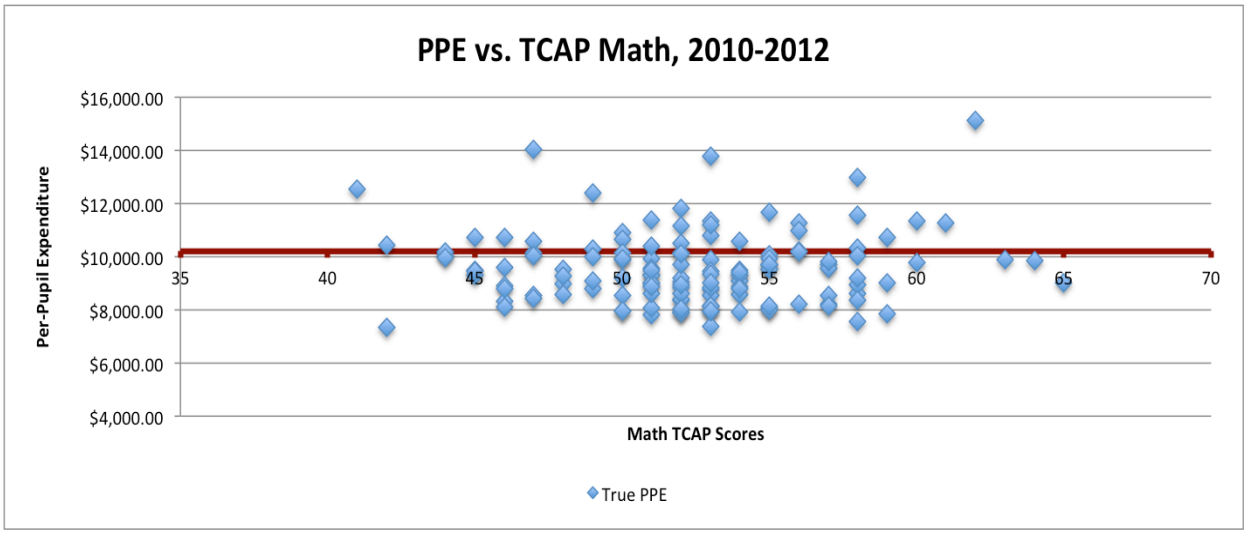


Figure 12: The distribution of TCAP scores and PPE levels indicates that regardless of the amount spent per student, systems achieve at various levels. The red line indicates average PPE, while the average Reading score is 50. Many of the high achievement systems spend relatively little per student and earn the same scores as those spending significantly more.

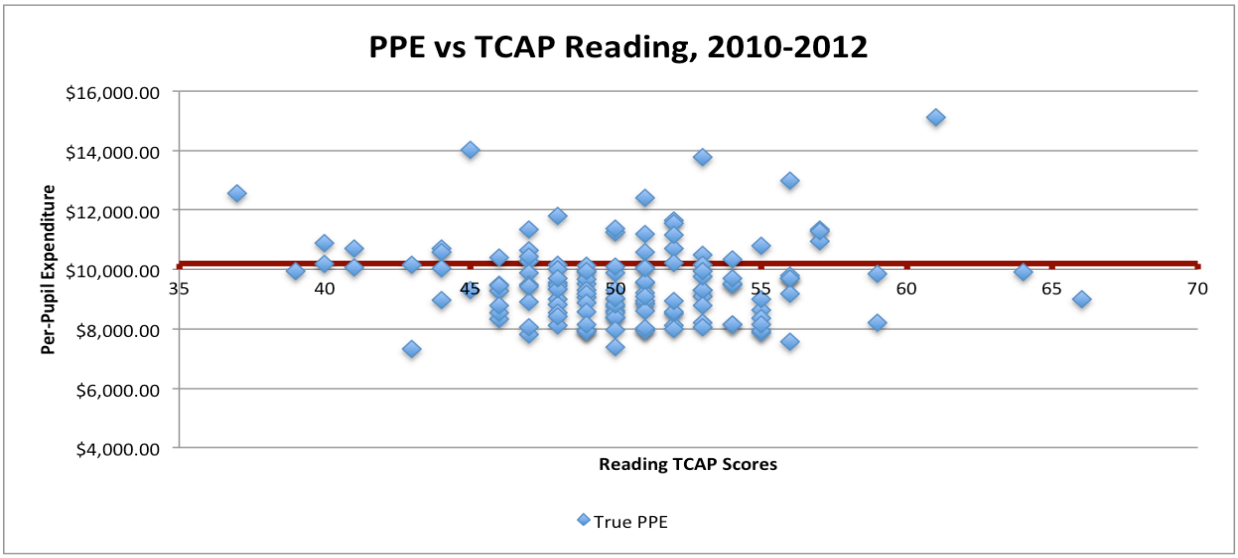


Figure 13: The distribution of TCAP scores and incomes contradicts the popular assumption that lower income school systems (displayed as those beneath the red line) underperform. In fact, systems with tens of thousands of dollars in income disparities perform at the same levels.

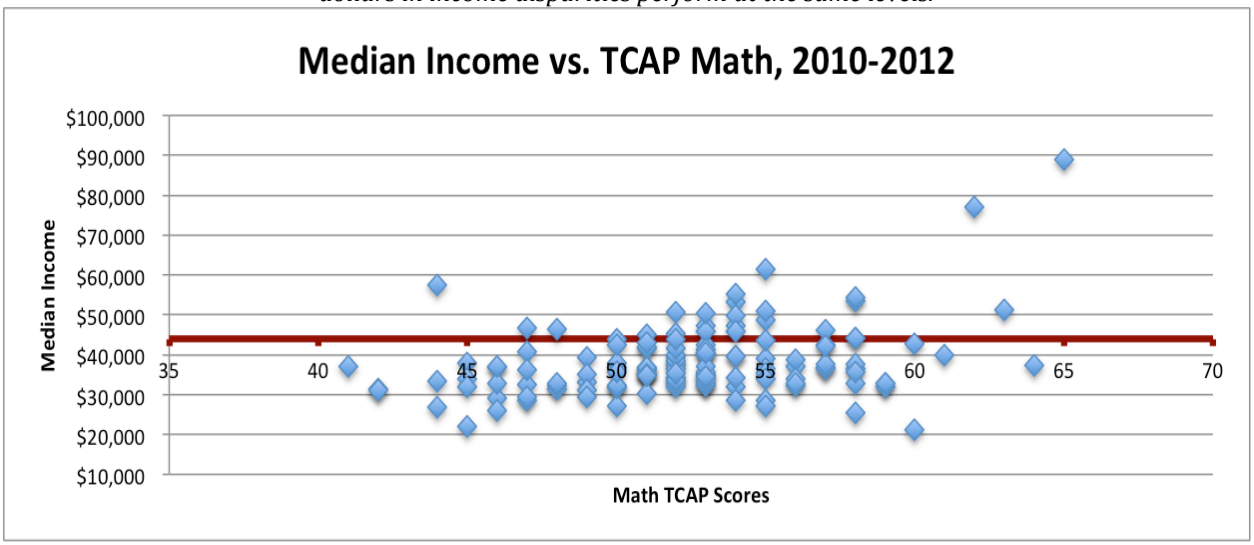
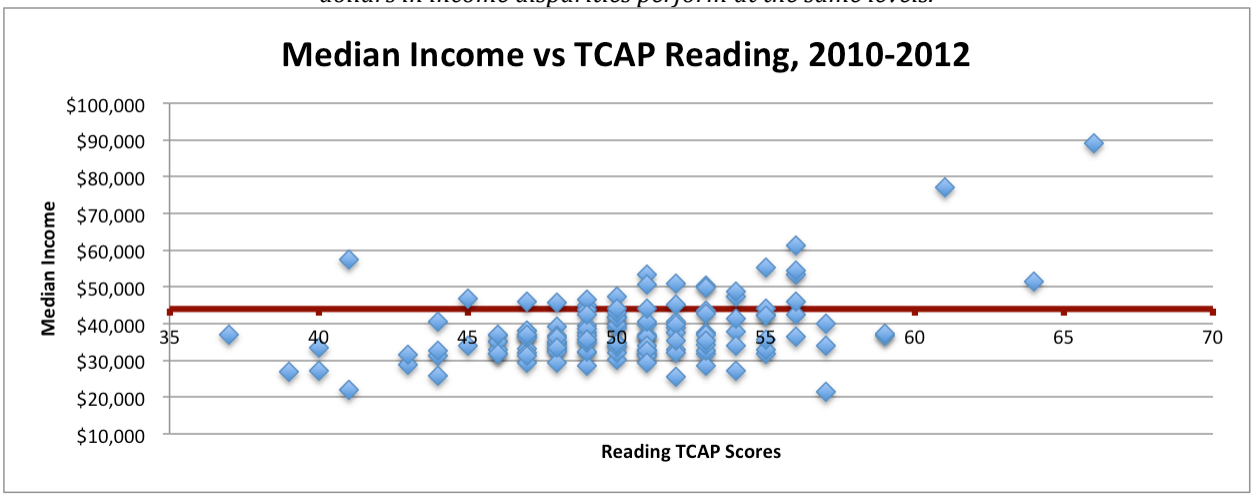


Figure 14: The distribution of TCAP scores and incomes contradicts the popular assumption that lower income school systems (displayed as those beneath the red line) underperform. In fact, systems with tens of thousands of dollars in income disparities perform at the same levels.



Based on these charts, there would seem to be a slightly stronger correlation between median income and student academic performance (Figures 13 and 14) than between spending and academic performance (Figures 11 and 12).[11] The relative affluence of a community can have an effect on academic results, but it is by no means the determining factor: poorer districts still can perform well, just as more affluent districts can perform at mediocre or low levels. It is clear that the solution for low-income schools is not to merely compensate for poorer communities through increased spending: the correlation between PPE and achievement is incredibly low, if it exists at all.

In addition to looking at the state as a whole, more focused comparisons prove helpful in observing this lack of correlation between money and achievement. For instance, compare Maury County and Carter County; both average scores of 48 in Math and 49 in Reading. As the significantly less affluent county, Carter should perform worse if a correlation actually exists. However, TCAP scores are identical in both of these underperforming systems.

	Median Income	Economically Disadvantaged Students	Per Pupil Expenditure
Maury County	$46,552	57.1 %	$8,563
Carter County	$32,148	71.6 %	$9,519

Alternately, comparing Oak Ridge City (58 in Math, 56 in Reading) and Lawrence County (58 in Math, 55 in Reading) demonstrates how significantly different economic circumstances can yield the same high scores. Though Oak Ridge residents are generally more affluent and schools spend a full $4,600 more per-pupil than in Lawrence County, the two systems have nearly identical scores.[12] Conventional wisdom would indicate that Lawrence County, with its low income and PPE, should not be nearly as successful as it is; however, the more serious concern should be why Oak Ridge spends so much more money to achieve the same results.

	Median Income	Economically Disadvantaged Students	Per Pupil Expenditure
Oak Ridge City	$53,419	45.7 %	$12,974
Lawrence County	$35,737	60.7 %	$8,368

From another perspective, comparing Hancock County (45 in Math, 41 in Reading) and Cocke County (55 in Math, 49 in Reading) offers insight into how two low-income systems perform very differently despite similar economic circumstances. In fact, Cocke County's cost of living index is slightly higher than Hancock County's, which one might expect to lead to a *higher* PPE than Hancock County. Hancock County fails to meet state standards while Cocke County excels in Math and is roughly average in Reading.

	Median Income	Economically Disadvantaged Students	Per Pupil Expenditure
Hancock County	$22,052	79.9 %	$10,707
Cocke County	$28,563	79.3 %	$9,657

It is readily acknowledged that anecdotal evidence can almost always be presented in such a way that will support a given point of view, especially when there are 137 different school systems from which to choose. Still, such district-to-district comparisons are valuable inasmuch as they demonstrate that neither spending nor relative affluence correlate perfectly to good test results. School systems with similar funding levels or economic backgrounds can experience such drastically different levels of academic achievement, calling into question the conventional wisdom that spending more money will universally lead to positive results for failing schools. Rather, achievement differences must lie in the management of funds and actual personnel. Attempting to quantify a standard for "good" schools through examining funding levels presents skewed results.

The truly important factors in school quality happen at the local level within individual schools. Simply put, spending more money does not lead to student achievement. Instead, critical examination must be directed to other factors (such as the actual learning environment) that make a school succeed or fail. Each school system requires different things in order to be successful. Similarly, each student is different in what he or she requires in order to be successful. For schools that are failing, the answer is *not* simply to increase funding, but rather to focus on ways to tailor instruction to fit individual student needs.

Interstate Comparisons

These observations also extend to interstate comparisons of NAEP results. This report focuses on Grade 4 and Grade 8 Math and Reading results with comparisons between Alabama, Arkansas, Kentucky, Tennessee, and Virginia. These states, which are all somewhat similar to Tennessee, all perform at different levels.[13] In fact, the *Education Week* "Quality Counts 2013 " report gives Alabama, Arkansas, Kentucky, and Tennessee "F" grades in spending, while Virginia squeaks by with a "D+."[14] Moreover, the National Education Association ranks all of these states in the bottom half for PPE (except Virginia, ranked twenty-second).[15] At the same time, Arkansas, Kentucky, and Virginia are all ranked in the *Education Week* report's top ten states for educational quality; Tennessee places just over the U.S. average, while Alabama falls just below it. The implication is that no significant correlation between achievement and median income or PPE exists, as observed within the state (Figures 15 and 16).

Figure 15: This series of charts based on NAEP Grade 4 tests replicates the trend found when comparing the systems within Tennessee. No strong correlation is present between spending and results.

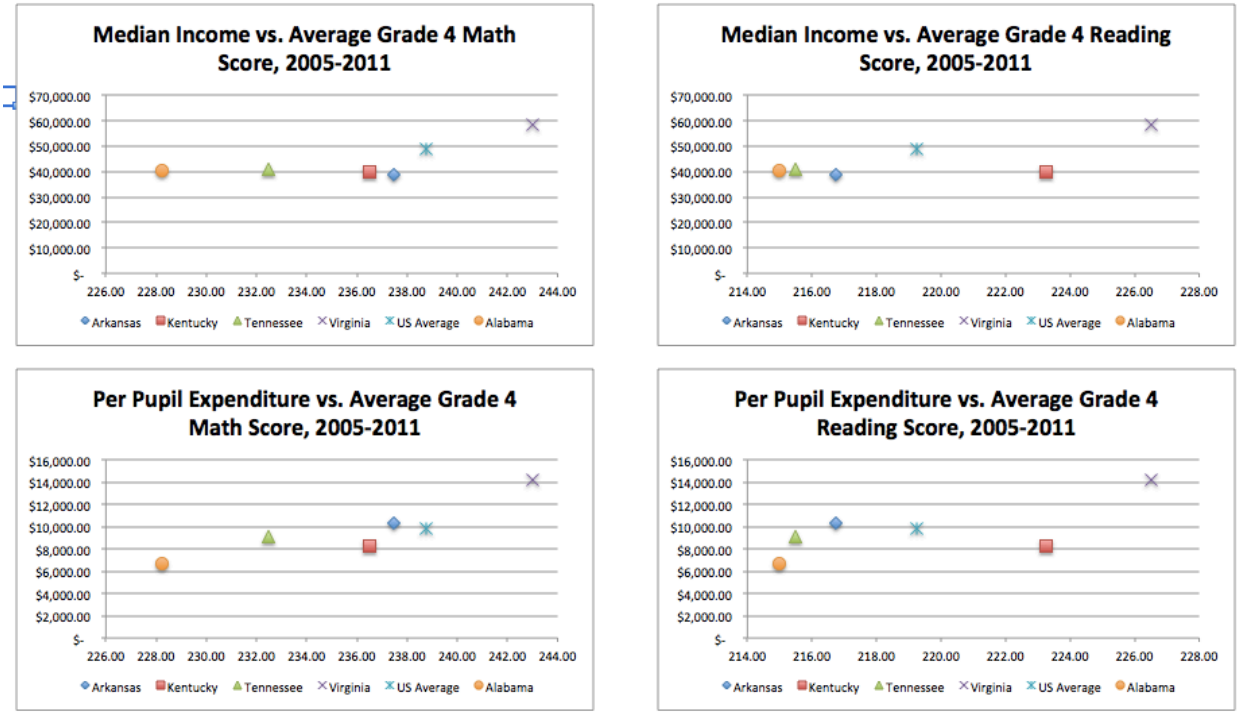
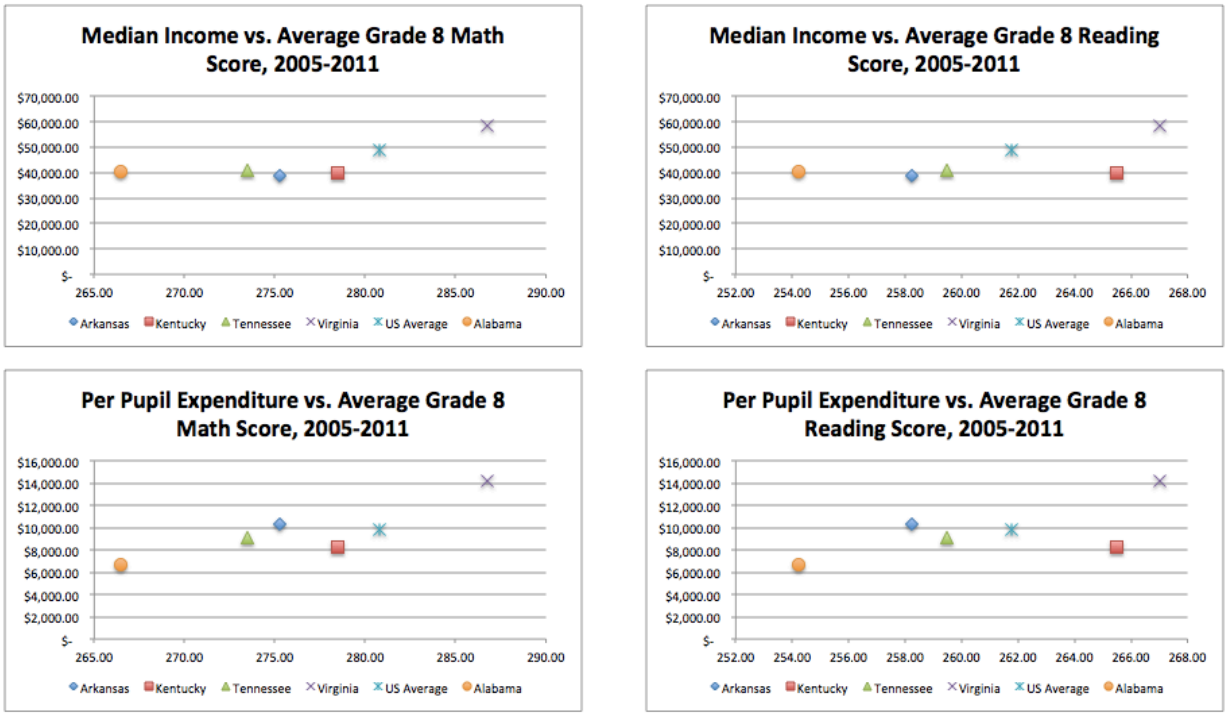


Figure 16: This series of charts based on NAEP Grade 8 tests replicates the trend found when comparing the systems within Tennessee. No strong correlation is present between spending and results.



These data further indicate that the real issue with school quality is separate from funding levels. American schools have a management problem exemplified by Tennessee. There are too many administrators without enough focus on actual education. Instead of spending more, systems need to focus on spending differently.

Conclusion

The idea that Tennessee needs to spend more on public education is based on significantly underreported data. Not only do state and local school districts spend more than reported, funding is increasingly directed toward out-of-classroom expenses such as administrative personnel. It is important for taxpayers and parents to understand these trends and what they mean for our students.

Unfortunately, the prioritization of administrative growth over instructional spending has failed to lift student achievement and has placed substantial constraints on teachers. Rather than simply call for additional funding, public school districts can reallocate funds to restore emphasis on actual instruction, thereby communicating that students and teachers, rather than administrators, warrant a greater portion of existing resources. Only then can Tennessee expect to provide its students with the quality education they deserve.

[1] "How Much Do Public Schools Spend on Teaching?" National Center for Policy Analysis. May 2011: http://www.ncpa.org/pub/ba745.
[2] The "fixed charges" category includes life insurance, medical insurance, dental insurance and other fringe benefits.
[3] For reference, this 2.6 percent change, based on 2012 Current Expenditures, is over $200 million, which signals a significant decrease in classroom-related spending.
[4] Based on the Annual Statistical Report, we consider the sum of Principals, Assistant Principals, Supervisors of Instruction, Superintendents, Assistant Superintendents, and Non-Certified Administrative Personnel to be administrators.
[5] Bureau of Labor Statistics inflation calculator: http://www.bls.gov/data/inflation_calculator.htm.
[6] For long-range achievement comparisons, the ACT and/or NAEP are preferable metrics, as the TCAP was overhauled in 2009 to correct score inflation.
[7] Scafidi, Benjamin. "The School Staffing Surge." Indianapolis: Friedman Foundation for Educational Choice, 2012.
[8] However, some correlation does emerge between an increased percentage of funds spent on instruction; that is, schools that make teaching, rather than administration, a priority seem to perform somewhat better. While perhaps not concrete enough to suggest causation, this trend is worth noting.
[9] Benton, Ben. "Sequatchie County school enrollment stalls." *Chattanooga Times Free Press.* 11 Nov. 2012, http://www.timesfreepress.com/news/2012/nov/11/sequatchie-school-enrollment-stalls.
[10] When considering how instructional costs are distributed across all students—receiving both special and regular services—special education costs $882 per student, while non-special education instructional expenses are $4,551 per student. Thus, the proportion of non-special education expenditures per each student to special education expenditures per each student is 5.16; for non-special education students to special education students, 6.32. Thus, while slightly disproportionate, the difference is by no means crippling.
[11] This difference is supported by a difference in correlation coefficients (.48 versus .008).
[12] The cost of living index for Oak Ridge is slightly higher than that of Lawrence County—86, compared to 83.1—but this slight difference is not enough to explain the disproportionate spending in PPE. *See* citydata.com.
[13] Note that the income and spending levels for Arkansas and Kentucky are very similar, while Alabama and Virginia present, respectively, lower and higher ends of this spectrum.
[14] "Quality Counts 2013." *Education Week.* 2013.
[15] "NEA Rankings and Estimates." National Education Association, 2013.

About the Authors

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