

TRIBUTE FOR A LIGHT

PUBLIC EDUCATION SPENDING & STAFFING



A REPORT OF THE
EDUCATION INTELLIGENCE AGENCY
MAY 2001

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PUBLIC EDUCATION FINANCES & STAFFING

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Why tribute? Why should we pay tribute? If Caesar can hide the sun from us with a blanket, or put the moon in his pocket, we will pay him tribute for a light; else, sir, no more tribute, pray you now.

C Cymbeline, Act III, Scene I

EXECUTIVE SUMMARY

This report updates the findings of *One Yard Below: Education Statistics from a Different Angle*, a report released by the Education Intelligence Agency in April 1998. That report examined per-pupil spending, teacher salaries, non-teacher employment, teacher mobility and demographics, and special education. The study deliberately used unusual formulations, such as ?cents spent on benefits for every dollar of salary,@classroom teachers as a percentage of the public education work force,@and Aper-teacher spending,@in the hope that consumers of education statistics would reexamine the basis upon which many of their favorite tables and graphs were created.

One Yard Below received a great deal of attention and I have received numerous requests over the past three years to bring it up-to-date. *Tribute for a Light: Public Education Spending & Staffing* does this for the most popular tables in *One Yard Below*, corrects and restructures some of that report's figures, and provides new tables that constitute a slightly different view of some widely used education statistics.

The report is short and the tables are easy to read, so this summary will serve to highlight the one or two most noteworthy statistics for each of the 50 states and the District of Columbia.

Alabama: Shallowest climb from starting teacher salary to average teacher salary.

Alaska: Highest starting teacher salary; highest average total of teacher salary plus cash value of benefits.

Arizona: 2nd highest in teacher compensation as percentage of instructional spending; 50th in amount of benefits paid relative to salary.

Arkansas: Highest in classroom teachers as percentage of total public education work force; 49th in starting teacher salary.

California: 2nd highest per-teacher spending rate; 5th highest number of teachers for every district administrator.

Colorado: 47th in amount of benefits paid relative to salary.

Connecticut: 2nd highest starting teacher salary; 3rd highest average total of teacher salary plus cash value of benefits.

Delaware: 5th highest starting teacher salary.

District of Columbia: Lowest percentage by which teachers' wages exceed workers' wages; 4th highest starting teacher salary.

Florida: 47th in teacher compensation as percentage of instructional spending; 47th in classroom teachers as percentage of total public education work force.

Georgia: 6th highest per-teacher spending rate.

Hawaii: 3rd highest in classroom teachers as percentage of total public education work force.

Idaho: 50th in starting teacher salary; 3rd highest per-teacher spending rate.

Illinois: 44th in number of teachers for every district administrator.

Indiana: 3rd highest in teacher compensation as percentage of instructional spending; 49th in classroom teachers as percentage of total public education work force.

Iowa: 42nd in teacher compensation as percentage of instructional spending; 42nd in classroom teachers as percentage of total public education work force.

Kansas: 49th in amount of benefits paid relative to salary; 47th in number of teachers for every district administrator.

Kentucky: 50th in classroom teachers as percentage of total public education work force.

Louisiana: 3rd highest in number of teachers for every district administrator.

Maine: 46th in teacher compensation as percentage of instructional spending; 6th highest in amount of benefits paid relative to salary.

Maryland: 2nd highest in amount of benefits paid relative to salary.

Massachusetts: Lowest in teacher compensation as percentage of instructional spending; 47th in percentage by which teachers' wages exceed workers' wages.

Michigan: Lowest in classroom teachers as percentage of total public education work force; 2nd highest average total of teacher salary plus cash value of benefits.

Minnesota: 4th highest in number of teachers for every district administrator.

Mississippi: 50th in average total of teacher salary plus cash value of benefits; 48th in classroom teachers as percentage of total public education work force.

Missouri: 49th in percentage by which teachers' wages exceed workers' wages; 48th in amount of benefits paid relative to salary.

Montana: 49th in per-teacher spending rate.

Nebraska: 47th in per-teacher spending rate.

Nevada: 4th highest per-teacher spending rate, 5th highest in teacher compensation as percentage of instructional spending.

New Hampshire: 49th in teacher compensation as percentage of instructional spending.

New Jersey: Steepest climb from starting teacher salary to average teacher salary; lowest per-teacher spending rate.

New Mexico: 49th in number of teachers for every district administrator; 4th shallowest climb from starting teacher salary to average teacher salary.

New York: 3rd highest starting teacher salary; 4th highest in teacher compensation as percentage of instructional spending.

North Carolina: 41st in amount of benefits paid relative to salary.

North Dakota: Lowest starting salary; lowest in number of teachers for every district administrator.

Ohio: 50th in number of teachers for every district administrator; 2nd steepest climb from starting teacher salary to average teacher salary.

Oklahoma: 2nd shallowest climb from starting teacher salary to average teacher salary; 4th highest in classroom teachers as percentage of total public education work force.

Oregon: 3rd highest percentage by which teachers' wages exceed workers' wages.

Pennsylvania: 2nd highest percentage by which teachers' wages exceed workers' wages.

Rhode Island: Highest percentage by which teachers' wages exceed workers' wages; 2nd highest in classroom teachers as percentage of total public education work force.

South Carolina: 2nd in number of teachers for every district administrator.

South Dakota: Lowest in average total of teacher salary plus cash value of benefits; 48th in number of teachers for every district administrator.

Tennessee: 48th in teacher compensation as percentage of instructional spending.

Texas: Lowest amount of benefits paid relative to salary; 50th in percentage by which teachers' wages exceed workers' wages.

Utah: Highest in number of teachers for every district administrator; Highest per-teacher spending rate.

Vermont: 50th in teacher compensation as percentage of instructional spending; 50th in per-teacher spending rate.

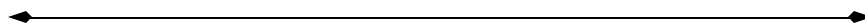
Virginia: 7th in teacher compensation as percentage of instructional spending; 43rd in percentage by which teachers' wages exceed workers' wages.

Washington: 48th in percentage by which teachers' wages exceed workers' wages.

West Virginia: Highest in teacher compensation as percentage of instructional spending; highest amount of benefits paid relative to salary.

Wisconsin: 4th highest amount of benefits paid relative to salary.

Wyoming: 48th in per-teacher spending rate.



INDEX OF TABLES

Table 1. Top 25 school districts of over 15,000 students in per-pupil spending, 1996-97 school year

Table 2. Bottom 25 school districts of over 15,000 students in per-pupil spending, 1996-97 school year

Table 3. State rankings, current expenditure per pupil in average daily attendance, 1997-98 school year

Table 4. State rankings, average salaries of public school teachers, 1997-98 school year

Table 5. Current expenditures for public education in the United States, by function, 1997-98 school year

Table 6. Current expenditures for public education in the United States, by recipient and service, 1997-98 school year

Table 7. State rankings, teacher compensation as percentage of instructional spending, 1997-98 school year

Table 8. State rankings, full-time equivalent public school employees, by occupation related to classroom instruction, expressed as percentage of total school work force, Fall 1998

Table 9. State rankings, number of classroom teachers for every district-level administrator, Fall 1998

Table 10. State rankings, percentage by which average teacher's salary exceeded average worker's salary, 1998

Table 11. State rankings, average starting teacher's salary, with percentage climb to average teacher's salary, 1998-99 school year

Table 12. State rankings, cents spent on school employee benefits for every dollar spent on school employee salaries, 1997-98 school year

Table 13. State rankings, estimated average compensation for teachers (average salary plus average cash value of benefits), 1997-98 school year

Tables 1 & 2. Top and bottom 25 school districts of over 15,000 students in per-pupil spending, 1996-97 school year.

The relationship, if any, between the amounts spent on public education and the results achieved, is responsible for a large number of public policy arguments. Opposing sides generate a lot of heat, but not much light. Generally speaking, people who spend the money want more of it to spend, and people who pay and collect the money don't want to give more, especially if they lack assurances that the money is being efficiently spent.

There is no "correct" amount of money to spend for each pupil in the public education system. So few standard economic principles are applied that it is a virtual impossibility to determine things like marginal costs and optimal pricing. If we accept as given that public education's financial structure will never be comparable to that of IBM or Delta Airlines, we still can't help but notice the vast differences in per-pupil spending from state to state, even from district to district within a state, occur without discernible economic justification.

Tables 1 and 2 list, respectively, the top 25 large school districts in per-pupil spending for the school year 1996-97, and the bottom 25 large school districts in per-pupil spending. The top spending large district in the entire United States -- Newark, New Jersey -- spent almost 3.5 times the amount spent by the lowest spending district in Alpine, Utah. Cost-of-living accounts for the fact that the high-spending districts are in the Northeast and the upper Midwest, while the low-spending districts are in the South and Mountain regions. But geography can't explain such large discrepancies. If Newark required \$11,578 per-pupil to get along, how could nearby Jersey City make it on a mere \$9,653? What's that extra \$2,000 per student buying?

Your child could get a good education in Yonkers, New York, for \$9,903, but could get one just as good - perhaps better - in Davis, Utah, for \$3,664. And you could find lousy test scores in Desoto County, Mississippi, but you could find even lousier test scores in Washington, DC - for more than twice the cost.

Per-pupil spending statistics are helpful, but when they stand alone they do little for our understanding of the costs of public education. Does Newark's high per-pupil spending signify a deeper commitment to education than that of the citizens of Alpine? Or conversely, is Alpine's fiscal management 3.5 times more efficient than Newark's? Both? Neither?

It may be easier to answer these questions if we take a small step away from the standard way of looking at school spending and approached it from a different angle.

**Table 1. Top 25 school districts of over 15,000 students in per-pupil spending, 1996-97 school year
(Derived from Table 91 C Digest of Education Statistics 2000, National Center for Education Statistics, US Department of Education)**

| U.S. \$5,578 | | |
|--------------|-----------------------|----------|
| 1) | Newark, NJ | \$11,578 |
| 2) | Hartford, CT | \$10,679 |
| 3) | Camden, NJ | \$10,004 |
| 4) | Yonkers, NY | \$9,903 |
| 5) | Jersey City, NJ | \$9,653 |
| 6) | Boston, MA | \$9,537 |
| 7) | Paterson, NJ | \$9,378 |
| 8) | New Haven, CT | \$9,212 |
| 9) | Arlington, VA | \$9,051 |
| 10)) | Elizabeth, NJ | \$8,993 |
| 11) | Pittsburgh, PA | \$8,686 |
| 12) | Buffalo, NY | \$8,677 |
| 13) | Waterbury, CT | \$8,666 |
| 14) | Rochester, NY | \$8,490 |
| 15) | Springfield, MA | \$8,453 |
| 16) | Syracuse, NY | \$8,398 |
| 17) | Minneapolis, MN | \$8,391 |
| 18) | Madison, WI | \$8,305 |
| 19) | Montgomery County, MD | \$8,223 |
| 20) | Tom’s River, NJ | \$8,075 |
| 21) | Washington, DC | \$8,048 |
| 22) | Ann Arbor, MI | \$7,988 |
| 23) | Bridgeport, CT | \$7,908 |
| 24) | Kansas City, MO | \$7,688 |
| 25) | Dearborn, MI | \$7,681 |

**Table 2. Bottom 25 school districts of over 15,000 students in per-pupil spending, 1996-97 school year
(Derived from Table 91 C Digest of Education Statistics 2000, National Center for Education Statistics, US Department of Education)**

| U.S. \$5,578 | | |
|--------------|---------------------------|---------|
| 1) | Alpine, UT | \$3,390 |
| 2) | Rankin County, MS | \$3,423 |
| 3) | Desoto County, MS | \$3,439 |
| 4) | Nebo, UT | \$3,487 |
| 5) | Washington, UT | \$3,546 |
| 6) | Jordan, UT | \$3,590 |
| 7) | Davis, UT | \$3,664 |
| 8) | Weber, UT | \$3,687 |
| 9) | Gilbert Unified, AZ | \$3,706 |
| 10) | Granite, UT | \$3,706 |
| 11) | Cartwright Elementary, AZ | \$3,755 |
| 12) | Meridian Junction, ID | \$3,791 |
| 13) | St. Landry Parish , LA | \$3,835 |
| 14) | Tangipahoa Parish, LA | \$3,852 |
| 15) | Kyrene Elementary, AZ | \$3,860 |
| 16) | Chandler Unified, AZ | \$3,872 |
| 17) | Livingston Parish, LA | \$3,952 |
| 18) | Putnam City, OK | \$3,972 |
| 19) | Montgomery County, TN | \$4,034 |
| 20) | Peoria Unified, AZ | \$4,043 |
| 21) | Moore, OK | \$4,070 |
| 22) | Shelby County, TN | \$4,093 |
| 23) | Terrebone Parish, LA | \$4,106 |
| 24) | Amphitheater Unified, AZ | \$4,113 |
| 25) | Onslow County, NC | \$4,153 |

Table 3. State rankings, current expenditure per pupil in average daily attendance, 1997-98 school year.

Table 4. State rankings, average salaries of public school teachers, 1997-98 school year.

If you have only looked at two education input statistics in your entire life, chances are good they were per-pupil spending and average teacher salary. State rankings of these two measures are ubiquitous in the nation's newspapers and magazines, as well in public policy reports and government fiscal analyses. State legislatures below the national average in either one of these categories are relentlessly lobbied to increase spending until the national average is reached. Of course, the national average is a moving target, and the more states that succeed in getting increases, the harder it is for all states to maintain or better their rankings.

Table 3 ranks the states according to their per-pupil spending for 1997-98. These figures do not account for all spending in public education. Interest on debt and capital outlays, for example, are not computed into current expenditures. Per-pupil spending is also computed using average daily attendance. That is, the figures here are not arrived at by dividing expenditures by enrollment. On any given day, student absences, transfers, and suspensions affect the number of students actually attending classes. Most states deliver funds to schools based on the number of students who show up each day to learn. Thus schools have a financial incentive to keep students in the system and attending class.

As we saw in the previous table, states in the Northeast dominate the per-pupil spending ranks, and states in the South and Mountain states fall at the bottom. Otherwise, there are few distinguishing characteristics for high-spending states in terms of achievement. Low-achieving DC is four dollars per-pupil ahead of high-achieving Connecticut. Large, sparsely populated Alaska ranks just ahead of small, more densely populated Rhode Island and Delaware.

Table 4 ranks the states according to average salaries of public school teachers for the same year. It bears mentioning that the National Education Association and the American Federation of Teachers appear to be the only organizations that gather and compute average salary data. Even the U.S. Department of Education simply uses NEA and AFT statistics. This causes a small amount of difficulty, because the NEA and AFT figures do not agree with each other. Moreover, both organizations update the figures from past years as more comprehensive and detailed figures become available to them. Since neither union's methodology appears to be superior to the other, I have split the difference. Any average teacher salary data in this report from 1997-98 is courtesy of the NEA, and any average teacher salary data from 1998-99 is courtesy of the AFT.

The majority of states have rankings five places apart or less on the two measures. Other states - California, Wyoming - rise or fall significantly between the two. Is there something about the interaction between these two sets of statistics that can help illuminate how and why money is spent in public education?

Table 3. State rankings, current expenditure per-pupil in average daily attendance, 1997-98 school year (Derived from Table 168 – Digest of Education Statistics 2000, National Center for Education Statistics, US Department of

| U.S. \$6,662 | | | | | |
|--------------|----|----------|-----|----|---------|
| 1) | NJ | \$10,233 | 27) | KS | \$6,406 |
| 2) | NY | \$9,970 | 28) | IA | \$6,295 |
| 3) | DC | \$9,225 | 29) | FL | \$6,183 |
| 4) | CT | \$9,221 | 30) | KY | \$6,125 |
| 5) | AK | \$9,074 | 31) | CO | \$6,099 |
| 6) | RI | \$8,627 | 32) | MO | \$6,096 |
| 7) | MA | \$8,299 | 33) | GA | \$5,947 |
| 8) | DE | \$7,963 | 34) | VA | \$5,938 |
| 9) | MD | \$7,812 | 35) | TX | \$5,910 |
| 10) | PA | \$7,777 | 36) | CA | \$5,795 |
| 11) | MI | \$7,717 | 37) | NV | \$5,758 |
| 12) | WI | \$7,680 | 38) | NC | \$5,667 |
| 13) | VT | \$7,500 | 39) | LA | \$5,645 |
| 14) | OR | \$7,348 | 40) | SC | \$5,643 |
| 15) | ME | \$7,238 | 41) | OK | \$5,389 |
| 16) | IL | \$6,858 | 42) | ND | \$5,353 |
| 17) | OH | \$6,808 | 43) | SD | \$5,281 |
| 18) | MN | \$6,795 | 44) | TN | \$5,274 |
| 19) | IN | \$6,786 | 45) | AL | \$5,166 |
| 20) | WV | \$6,779 | 46) | AZ | \$5,122 |
| 21) | WY | \$6,718 | 47) | ID | \$5,012 |
| 22) | NE | \$6,584 | 48) | AR | \$4,999 |
| 23) | WA | \$6,534 | 49) | NM | \$4,984 |
| 24) | NH | \$6,487 | 50) | MS | \$4,575 |
| 25) | MT | \$6,448 | 51) | UT | \$4,256 |
| 26) | HI | \$6,409 | | | |

Table 4. State rankings, average salaries of public school teachers, 1997-98 school year (From National Education Association Winter Update, revised figures for 1997-98, produced January 29, 1999)

| U.S. \$39,502 | | | | | |
|---------------|----|----------|-----|----|---------|
| 1) | AK | \$51,738 | 27) | VT | \$36,29 |
| 2) | CT | \$50,730 | 28) | TN | \$35,34 |
| 3) | NJ | \$50,422 | 29) | KY | \$34,61 |
| 4) | NY | \$48,712 | 30) | FL | \$34,47 |
| 5) | PA | \$47,542 | 31) | AZ | \$34,41 |
| 6) | MI | \$47,500 | 32) | ME | \$34,34 |
| 7) | DC | \$46,350 | 33) | TX | \$34,13 |
| 8) | CA | \$44,585 | 34) | IA | \$34,08 |
| 9) | RI | \$44,300 | 35) | MO | \$33,94 |
| 10) | MA | \$43,930 | 36) | SC | \$33,69 |
| 11) | IL | \$43,690 | 37) | WV | \$33,39 |
| 12) | DE | \$42,439 | 38) | NC | \$33,31 |
| 13) | OR | \$42,200 | 39) | ID | \$32,83 |
| 14) | MD | \$41,739 | 40) | AL | \$32,81 |
| 15) | WI | \$39,899 | 41) | NE | \$32,66 |
| 16) | IN | \$39,741 | 42) | UT | \$32,39 |
| 17) | MN | \$39,103 | 43) | WY | \$32,02 |
| 18) | OH | \$38,985 | 44) | AR | \$31,59 |
| 19) | WA | \$38,765 | 45) | OK | \$30,69 |
| 20) | HI | \$38,377 | 46) | MT | \$30,62 |
| 21) | GA | \$37,569 | 47) | NM | \$30,15 |
| 22) | CO | \$37,240 | 48) | LA | \$30,09 |
| 23) | NV | \$37,095 | 49) | MS | \$28,69 |
| 24) | KS | \$36,811 | 50) | ND | \$28,23 |
| 25) | NH | \$36,663 | 51) | SD | \$27,34 |
| 26) | VA | \$36,654 | | | |

Table 5. Current expenditures for public education in the United States, by function, 1997-98 school year.

Table 6. Current expenditures for public education in the United States, by recipient and service, 1997-98 school year.

“Tables” 5 and 6 are actually two pie charts, designed to explain how public education expenditures are broken down. The U.S. Department of Education divides current expenditures into the 10 categories used in Table 5. It defines each of them in the following way:

Instruction is classroom spending, including the cost of teachers, teachers’ aides, books and supplies.

Student support includes the cost of guidance counselors, school nurses, attendance officers and speech pathologists.

Instructional support includes the cost of librarians and media specialists, as well as the costs of curriculum development and staff training.

General administration includes the cost of the bureaucracy away from the school site - superintendents, district officials and their clerical and management staff.

School administration includes the cost of the principals, vice principals and other school-site administrators and their clerical staff.

Operation and maintenance includes the cost of custodians, electricians, and costs associated with buildings and structures.

Student transportation includes the cost of school buses, the drivers, and vehicle maintenance.

Food service includes the cost of cafeteria workers, the food itself, and related services.

Enterprise operations include the expenses of services like a school bookstore or computer center.

Other support includes miscellaneous expenditures not covered by the previous categories.

The percentages in Table 5 indicate a substantial majority of funding is spent in the classroom, with relatively little spent on administration. Once again, the official statistics are helpful, but they leave something fundamental out of the picture. School boards and legislatures rarely worry about the number of school buses, or the price of bread for sandwiches, or even the cost of glass for new windows. Instead, they devote themselves to the costs of labor.

Table 6 takes the same current expenditures for 1997-98 and divides them into five categories:

Employee salaries, employee benefits, purchased services, supplies, and other. This pie chart reveals the obvious - that public education is a labor-intensive enterprise - but it also illustrates that the debate over school spending is often focused on things, rather than people. And this is perpetuated by both education insiders and outsiders.

Almost 82 cents of every dollar spent on public education in America that year ended up in the paycheck or the benefits package of a public education employee. So, except on the margins, debates over public education spending are really about this: Shall we hire more people and/or shall we increase compensation for the people we have?

TABLE 5. Current Expenditures

(Derived from Table 164 - Digest of Education Statistics 2000, National Center for Education Statistics, U.S. Department of Education)

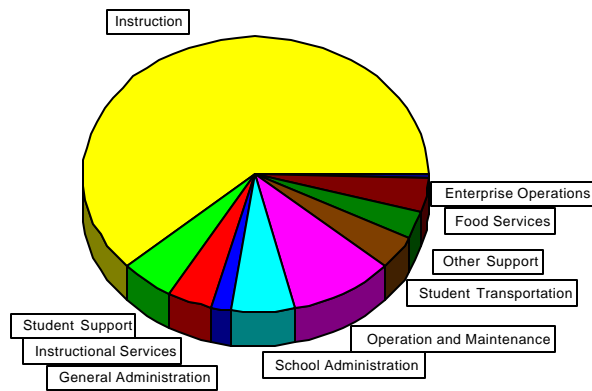


TABLE 6. Current Expenditures

(Derived from Table 166 - Digest of Education Statistics 2000, National Center for Education Statistics, U.S. Department of Education)

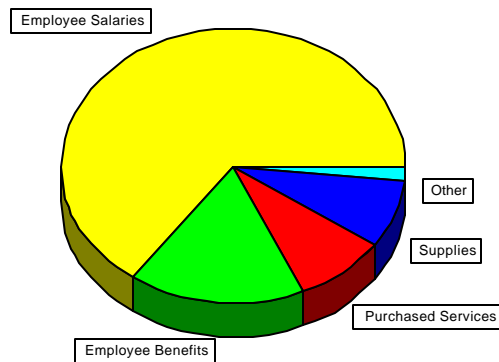


Table 7. State rankings, teacher compensation as percentage of instructional spending, 1997-98 school year.

This question becomes even more critical when we examine the point of the spear - classroom instruction. The U.S. Department of Education tells us that more than three-fifths of all education spending is spent on instruction. Politicians of all political stripes demand that administrative spending be reduced and more money reach the classroom. But what does that mean? When money gets sent to the classroom, how is it spent? Table 7 takes the instructional spending figures for each state for 1997-98 and determines what percentage goes toward the salaries and benefits of instructional personnel. We can therefore infer that the remainder is what is spent on books and supplies.

No state spends less than 85 percent of its instructional revenues on compensation for teachers and teacher aides. When we compare the rankings of Table 7 with the per-pupil spending rankings we can draw some broad conclusions about certain states. West Virginia, for example, ranks 20th in per-pupil spending, but 95.63 percent of its instructional spending is devoted to teacher compensation. While people can differ about the total amount West Virginia devotes to education, it is clear that the money it does spend is overwhelmingly devoted to its teaching force.

It seems obvious that states with low per-pupil spending, like Arizona and Louisiana, appear in the top ten on this list in an effort to be as competitive as possible when it comes to attracting and retaining classroom teachers.

When one finds a high-paying, high-spending state such as Massachusetts at the bottom of the list, one can reasonably assume that its teacher salaries are high enough to fill available slots, allowing excess instructional funds to be devoted to books and supplies. For other states on the list, these rankings may express conscious decisions to invest in people rather than things, or vice versa.

Table 7. State rankings, teacher compensation as percentage of instructional spending, 1997-98 school year (Derived from Table 168 – Digest of Education Statistics 2000, National Center for Education Statistics, US Department of Education)

| U.S. 91.18% | | | | | |
|-------------|----------------------|-------|-----|---------------|-------|
| 1) | West Virginia | 95.63 | 27) | Mississippi | 91.28 |
| 2) | Arizona | 95.21 | 28) | Alabama | 91.12 |
| 3) | Indiana | 95.11 | 29) | Wyoming | 91.01 |
| 4) | New York | 94.57 | 30) | Illinois | 90.82 |
| 5) | Nevada | 94.53 | 31) | Maryland | 90.72 |
| 6) | Georgia | 94.14 | 32) | Washington | 90.67 |
| 7) | Virginia | 93.77 | 33) | Montana | 90.25 |
| 8) | Kentucky | 93.41 | 34) | Delaware | 90.06 |
| 9) | Michigan | 93.15 | 35) | California | 90.02 |
| 10) | Louisiana | 92.90 | 36) | New Jersey | 89.67 |
| 11) | Minnesota | 92.77 | 37) | Oklahoma | 89.64 |
| 12) | North Carolina | 92.74 | 38) | Connecticut | 89.42 |
| 13) | Wisconsin | 92.59 | 39) | Missouri | 89.42 |
| 14) | Kansas | 92.57 | 40) | Oregon | 89.40 |
| 15) | Arkansas | 92.53 | 41) | Texas | 89.08 |
| 16) | South Carolina | 92.35 | 42) | Iowa | 89.03 |
| 17) | Utah | 92.27 | 43) | Colorado | 88.99 |
| 18) | Rhode Island | 92.03 | 44) | South Dakota | 88.47 |
| 19) | Ohio | 91.86 | 45) | Alaska | 88.39 |
| 20) | Pennsylvania | 91.86 | 46) | Maine | 88.19 |
| 21) | New Mexico | 91.83 | 47) | Florida | 87.32 |
| 22) | Nebraska | 91.78 | 48) | Tennessee | 87.10 |
| 23) | Idaho | 91.63 | 49) | New Hampshire | 86.98 |
| 24) | District of Columbia | 91.59 | 50) | Vermont | 86.90 |
| 25) | North Dakota | 91.50 | 51) | Massachusetts | 85.27 |
| 26) | Hawaii | 91.49 | | | |

Table 8. State rankings, full-time equivalent public school employees, by occupation related to classroom instruction, expressed as percentage of total school work force, Fall 1998.

Just as with per-pupil spending, there is no “correct” ratio for the number of teachers compared to the number of non-teachers, but again we are faced with vast differences between the states in how they proportion their various employees.

Table 8 breaks down the public education work force (in full-time equivalents) of Fall 1998 by job description and expresses each category as a percentage of the total work force. A similar table for *One Yard Below* in 1998 was criticized for not allowing for differences between states that routinely handle district level functions at county level. In an effort to avoid that problem this time around, I have restructured the table. Now, instead of defining education personnel by their physical proximity to students, they are defined by their job’s proximity to classroom instruction. This modification expands the categories from the previous four, to six:

Teachers are those whose primary job is in the classroom, including elementary specialists who may not have classrooms of their own.

Aides are instructional support personnel whose primary job is also in the classroom, helping to instruct students on a daily basis.

School staff work at school sites and their primary focus is the instruction of students and the orderly operation of a school, but they normally do not teach themselves. This category includes principals, assistant principals, librarians, school secretaries and administrative assistants.

Support staff normally work at school sites and their primary focus is in areas related to the well-being of students, but not their instruction. This category includes guidance counselors, attendance officers, health specialists, speech pathologists, et al.

Other staff may or may not be stationed at school sites, but their primary duties are unrelated to instruction. This category would include bus drivers, custodians, security personnel, food service workers, and any office worker or administrator not assigned to school or district levels.

District staff are officials, administrators, instruction coordinators and administrative support staff, all of whom work at the district level.

Twelve states have fewer teachers than non-teachers in their public education work force. In one instance, Vermont, this is not as alarming as it may appear because Vermont has almost double the national average of teacher aides. But one has to wonder about the priorities of Michigan, where teachers comprise only 44.5 percent of the work force, and the system still has fewer aides and school staffers than the national average. It may be only a coincidence that two states lauded for recent advances in student achievement - Texas and North Carolina - also have the two lowest percentages of personnel working at the district level.

Table 8. State Rankings, full-time equivalent public school employees, by occupation related to classroom instruction, expressed as percentage of total school work force, Fall 1998 (Derived from Table 81, Digest of Education Statistics 2000, National Center for Education Statistics, U.S.)

| US | 52.2% | 10.8% | 7.9% | 4.4% | 20.2% | |
|--------------------|----------|-------|--------------|---------------|-------------|----------------|
| State | Teachers | Aides | School Staff | Support Staff | Other Staff | District Staff |
| 1) Arkansas | 68.6 | 7.9 | 8.1 | 10.1 | 2.8 | 2.5 |
| 2) Rhode Island | 62.4 | 11.2 | 7.8 | 3.9 | 11.3 | 3.4 |
| 3) Hawaii | 61.3 | 6.0 | 8.7 | 6.5 | 13.0 | 4.5 |
| 4) Oklahoma | 57.8 | 8.0 | 8.9 | 3.6 | 18.0 | 3.7 |
| 5) Idaho | 56.3 | 10.0 | 7.9 | 4.3 | 17.8 | 3.7 |
| 6) Nevada | 56.3 | 7.4 | 8.7 | 6.4 | 17.9 | 3.3 |
| 7) South Dakota | 56.1 | 11.5 | 7.7 | 4.8 | 15.2 | 4.6 |
| 8) Wisconsin | 56.0 | 10.6 | 8.3 | 5.8 | 14.4 | 4.8 |
| 9) Massachusetts | 55.0 | 13.0 | 4.9 | 3.4 | 16.6 | 7.1 |
| 10) Delaware | 55.0 | 7.9 | 8.0 | 5.8 | 19.0 | 4.4 |
| 11) Utah | 54.9 | 12.7 | 8.5 | 3.0 | 17.4 | 3.5 |
| 12) California | 54.8 | 11.5 | 8.9 | 3.3 | 15.8 | 5.7 |
| 13) Alabama | 54.5 | 7.7 | 7.6 | 2.6 | 24.7 | 2.8 |
| 14) Ohio | 54.4 | 6.2 | 8.0 | 2.2 | 21.5 | 7.6 |
| 15) Virginia | 54.3 | 9.5 | 8.2 | 4.3 | 20.5 | 3.3 |
| 16) West Virginia | 54.3 | 8.0 | 4.5 | 4.5 | 22.1 | 6.6 |
| 17) North Dakota | 54.0 | 11.4 | 7.6 | 4.6 | 17.7 | 4.8 |
| 18) New Jersey | 53.9 | 9.7 | 8.8 | 7.3 | 14.6 | 5.8 |
| 19) Tennessee | 53.8 | 10.7 | 10.0 | 4.0 | 16.7 | 4.7 |
| 20) Montana | 53.7 | 11.5 | 9.2 | 2.6 | 18.9 | 4.1 |
| 21) South Carolina | 53.7 | 11.1 | 8.6 | 4.9 | 18.4 | 3.3 |
| 22) Missouri | 53.7 | 7.9 | 7.9 | 5.2 | 17.1 | 8.2 |
| 23) Maryland | 53.4 | 8.3 | 10.2 | 3.7 | 22.0 | 2.4 |
| 24) Nebraska | 53.2 | 10.3 | 8.1 | 4.6 | 19.7 | 4.1 |
| 25) Washington | 53.0 | 10.3 | 9.3 | 5.0 | 18.0 | 4.4 |
| 26) Pennsylvania | 52.9 | 8.9 | 7.6 | 6.3 | 19.0 | 5.2 |
| 27) Minnesota | 52.7 | 13.1 | 8.7 | 3.5 | 17.8 | 4.3 |
| 28) DC | 52.7 | 3.9 | 6.6 | 4.5 | 27.1 | 5.3 |
| 29) Kansas | 52.6 | 9.8 | 8.6 | 3.5 | 22.0 | 3.5 |
| 30) New York | 52.4 | 9.1 | 4.5 | 3.7 | 22.5 | 7.7 |
| 31) New Hampshire | 52.0 | 17.0 | 6.5 | 4.6 | 15.9 | 4.1 |
| 32) North Carolina | 52.0 | 16.9 | 4.3 | 4.5 | 20.9 | 1.5 |
| 33) Illinois | 51.9 | 11.7 | 7.7 | 4.4 | 19.3 | 5.1 |
| 34) Alaska | 51.8 | 13.8 | 11.5 | 3.3 | 14.8 | 4.9 |
| 35) Colorado | 51.8 | 10.6 | 8.8 | 5.1 | 19.0 | 4.8 |
| 36) Texas | 51.3 | 10.2 | 8.0 | 2.6 | 26.7 | 1.3 |
| 37) Maine | 50.8 | 15.0 | 7.9 | 5.7 | 16.5 | 4.2 |
| 38) Oregon | 50.5 | 13.6 | 10.9 | 4.6 | 15.6 | 4.8 |
| 39) Connecticut | 50.1 | 12.9 | 8.0 | 6.3 | 18.6 | 4.2 |
| 40) Georgia | 49.9 | 12.8 | 8.1 | 3.6 | 22.9 | 2.7 |
| 41) Arizona | 49.8 | 13.6 | 11.3 | 10.8 | 12.9 | 1.6 |
| 42) Iowa | 49.8 | 11.7 | 10.7 | 6.6 | 18.3 | 2.9 |
| 43) Louisiana | 49.4 | 10.4 | 6.9 | 4.1 | 27.0 | 2.1 |
| 44) Vermont | 48.9 | 21.4 | 8.3 | 5.8 | 12.4 | 3.2 |
| 45) Wyoming | 48.7 | 11.2 | 9.1 | 7.3 | 19.0 | 4.9 |
| 46) New Mexico | 48.6 | 11.6 | 9.3 | 5.9 | 18.0 | 6.6 |
| 47) Florida | 48.4 | 11.0 | 8.2 | 5.5 | 20.8 | 6.1 |
| 48) Mississippi | 47.9 | 13.9 | 7.5 | 4.9 | 20.8 | 4.9 |
| 49) Indiana | 46.8 | 14.3 | 9.8 | 2.8 | 23.8 | 2.4 |
| 50) Kentucky | 44.8 | 15.3 | 5.4 | 3.7 | 26.3 | 4.6 |
| 51) Michigan | 44.5 | 10.4 | 7.5 | 5.3 | 29.1 | 3.1 |

Table 9. State rankings, number of classroom teachers for every district-level administrator, Fall 1998.

When people complain about a bloated education bureaucracy, they don't usually mean secretaries, custodians and bus drivers. Though the figures in Table 8 suggest that certain states need to closely examine those areas of personnel management, most observers have a perception that public education is top-heavy, that there are too many administrators and officials relative to other workers. This, I might add, is a perception usually shared by both advocates and critics of public education. No one is more vocal about administrative bloat than the president of a state teachers' union.

Does this perception have a basis in reality? Since the number of state and county administrative officers cannot be determined from the data available, Table 9 concentrates purely on the number of teachers for every school district administrator and official. Note that these numbers include only classroom teachers, and only district officers. There are no secretaries, instruction specialists, support staff or others to be found. For Fall 1998, the U.S. average was 55.6 teachers for every district administrator. But, as you can see, the spread is astonishing.

Utah somehow manages to get by with one administrator for every 204.8 teachers, while nearby North Dakota requires one for every 17.7 teachers. If we were able to break these figures down further, we may find that a large number of these administrators are administering support functions, such as transportation or food service. Whatever the differing circumstances, it would be refreshing to hear someone call for a state's teacher/administrator ratio to be raised to the national average, instead of always concentrating on money.

This is especially a problem for large school districts. Only 41.5 percent of the employees of the Jefferson County (Kentucky) school district are classroom teachers. Only 41.3 percent of the employees of the Detroit Public Schools are classroom teachers. St. Paul, Minnesota, comes in worst of the 100 largest public school districts, with only 39.5 percent of its employees designated as classroom teachers, although, to be fair, the district designates another 30.6 percent as "instructional support."

And remember low-spending Alpine School District in Utah? About 67.7 percent of that district's employees are classroom teachers.

Table 9. State rankings, number of classroom teachers for every district-level administrator, Fall 1998 (Derived from Table 81 – Digest of Education Statistics 2000, National Center for Education Statistics, US Department of Education)

| U.S. 55.6 | | | | | |
|-----------|----------------------|-------|-----|----------------|------|
| 1) | Utah | 204.8 | 27) | New Jersey | 54.7 |
| 2) | South Carolina | 178.3 | 28) | Missouri | 54.6 |
| 3) | Louisiana | 170.6 | 29) | North Carolina | 53.2 |
| 4) | Minnesota | 132.0 | 30) | Georgia | 52.6 |
| 5) | California | 124.0 | 31) | Arkansas | 46.9 |
| 6) | District of Columbia | 115.3 | 32) | Colorado | 46.1 |
| 7) | Idaho | 114.8 | 33) | Virginia | 45.8 |
| 8) | Arizona | 103.8 | 34) | Washington | 45.4 |
| 9) | Texas | 94.9 | 35) | Michigan | 42.7 |
| 10) | Delaware | 81.3 | 36) | Iowa | 40.3 |
| 11) | Hawaii | 80.6 | 37) | Kentucky | 39.0 |
| 12) | New York | 79.4 | 38) | Nebraska | 37.2 |
| 13) | Florida | 79.3 | 39) | Connecticut | 35.1 |
| 14) | Nevada | 77.8 | 40) | Wyoming | 34.6 |
| 15) | Pennsylvania | 77.6 | 41) | New Hampshire | 34.0 |
| 16) | Alaska | 76.6 | 42) | Maine | 33.7 |
| 17) | Maryland | 71.1 | 43) | Oregon | 33.5 |
| 18) | Alabama | 70.1 | 44) | Illinois | 33.4 |
| 19) | Wisconsin | 68.3 | 45) | Tennessee | 32.2 |
| 20) | Rhode Island | 66.6 | 46) | Mississippi | 32.1 |
| 21) | Montana | 65.9 | 47) | Kansas | 31.5 |
| 22) | Massachusetts | 65.0 | 48) | South Dakota | 25.7 |
| 23) | West Virginia | 63.6 | 49) | New Mexico | 25.2 |
| 24) | Indiana | 63.5 | 50) | Ohio | 20.9 |
| 25) | Oklahoma | 56.2 | 51) | North Dakota | 17.7 |
| 26) | Vermont | 55.9 | | | |

Table 10. State rankings, percentage by which average teacher's salary exceeded average worker's salary, 1998.

Of all the statistics in *One Yard Below*, the one that caused the most uproar was the ranking of states by how much the average teacher salary exceeded the average worker's salary. One reader accused me of comparing college-trained teachers to the "bagger at the local Piggly Wiggly." The table, of course, was not a measure of the comparative worth of teaching against any other profession, but rather an examination of the relationship between the wages of public employees and the people whose taxes pay those wages. While both the National Education Association and the American Federation of Teachers release teacher salary rankings each year, they acknowledge that these rankings do not account for the difference in the cost-of-living between one region of the United States and another. Rather than try to generate my own cost-of-living measure, as union researchers have done, I thought it much more correct to compare teachers against everyone else in that state. Surely workers in Nevada experience the same inflation rate as teachers in Nevada do.

In Table 10, I make no judgment about what the difference between teacher salaries and worker salaries ought to be (the United States as a whole paid its public school teachers 27.0 percent more than its average workers earned). But without the "bagger at the local Piggly Wiggly" and his colleagues who work at the factory, the bank, the hospital, city hall, the newspaper, etc., there can be no public school teacher salaries. Workers who earn \$50,000 per year are much more able to support a teacher who earns \$50,000 per year than are workers who earn only \$20,000 per year. The District of Columbia makes the point clear.

In 1998, DC public school teachers ranked 7th in average teacher salary. This would suggest that they are highly paid. But Table 10 shows that the average DC public school teacher actually made less money than the average DC worker. In Texas, teachers only made 9.3 percent more than the average Texas worker. These findings would suggest that the economies in the district and the state could easily manage a pay increase for teachers. Conversely, it will take a mighty effort to persuade taxpayers in Rhode Island, Pennsylvania and Oregon that they need to pony up additional funds for teachers who already make much more than they do.

Table 10. State rankings, percentage by which average teacher's salary exceeded average worker's salary, 1998 (Derived from Table I-2 – 1999 Salary Survey, American Federation of Teachers, and Table 1 – Average annual pay for 1998 and 1999 and percent change in pay for all covered workers, Bureau of Labor Statistics, US Department of Labor)

| U.S. 27.0% | | | | | |
|------------|----------------|------|-----|----------------------|------|
| 1) | Rhode Island | 53.5 | 27) | Nebraska | 28.7 |
| 2) | Pennsylvania | 53.4 | 28) | Maryland | 27.8 |
| 3) | Oregon | 48.2 | 29) | Florida | 27.4 |
| 4) | Alaska | 42.6 | 30) | Delaware | 27.2 |
| 5) | Indiana | 41.4 | 31) | Utah | 26.5 |
| 6) | Michigan | 41.1 | 32) | Georgia | 26.4 |
| 7) | Nevada | 40.8 | 33) | North Dakota | 26.2 |
| 8) | Montana | 39.2 | 34) | New Mexico | 25.1 |
| 9) | Hawaii | 39.2 | 35) | South Dakota | 24.8 |
| 10) | Wisconsin | 38.0 | 36) | Tennessee | 24.7 |
| 11) | Vermont | 37.9 | 37) | Minnesota | 24.1 |
| 12) | Idaho | 37.0 | 38) | Mississippi | 24.0 |
| 13) | West Virginia | 35.5 | 39) | Oklahoma | 23.8 |
| 14) | Wyoming | 35.4 | 40) | Connecticut | 22.9 |
| 15) | Maine | 34.9 | 41) | New York | 22.1 |
| 16) | Iowa | 34.5 | 42) | New Hampshire | 20.9 |
| 17) | Arkansas | 34.1 | 43) | Virginia | 20.2 |
| 18) | Ohio | 34.0 | 44) | Louisiana | 18.9 |
| 19) | Kentucky | 32.5 | 45) | Colorado | 18.3 |
| 20) | Alabama | 32.5 | 46) | Arizona | 17.9 |
| 21) | South Carolina | 31.9 | 47) | Massachusetts | 16.6 |
| 22) | California | 31.1 | 48) | Washington | 16.5 |
| 23) | North Carolina | 30.9 | 49) | Missouri | 15.8 |
| 24) | New Jersey | 30.8 | 50) | Texas | 9.3 |
| 25) | Illinois | 30.5 | 51) | District of Columbia | -0.4 |
| 26) | Kansas | 29.0 | | | |

Table 11. State rankings, average starting teacher’s salary, with percentage climb to average teacher’s salary, 1998-99 school year.

We tend to focus so much on average teacher salaries we forget that these salaries are conditional upon the teachers’ years of experience and graduate credits earned. Some districts have salary scales with as many as 26 steps. With many states reporting teacher shortages, we need to take a closer look at starting salaries. But it’s not enough to merely rank the states according to how much they pay new teachers. No one decides to enter a new career field based on how much their first paycheck contains. They choose careers based on future earning potential.

Table 11 ranks the states by starting teacher salaries but also includes a figure I call the “climb.” The climb is the difference between the starting salary and average salary in each state, expressed as a percentage of the starting salary. The higher the number, the steeper the climb to the average salary. It stands to reason that teachers would be more likely to take a \$25,000 teaching job with a steep climb than a \$25,000 teaching job with a shallow climb. In the United States as a whole, the starting teacher salary in 1998-99 was \$26,639, with a climb of 52.3 percent.

It’s easy to see how this works. New Jersey, for example, paid its new teachers only \$20 more per year than Alabama did. However, a New Jersey teacher’s salary will have increased 77.6 percent by the time it reaches the state average, while the Alabama teacher will have seen an increase of only 23.1 percent.

These figures can also give you some sense of how experienced each state’s teaching force is. As a rule of thumb, teachers’ unions negotiate salary schedules in which the top salary is roughly double the minimum salary. The closer the climb is to 100 percent, the closer the average teacher is to the top of the salary scale (and retirement, one might assume).

Table 11. State rankings, average starting teacher's salary, with percentage climb to average teacher's salary, 1998-99 school year (Derived from Table I-2 – 1999 Salary Survey, American Federation of Teachers)

| US \$26,639 52.3% | | | | | | | |
|-------------------|----------------|------------------------|------------------|-----|----------------|------------------------|------------------|
| | <i>State</i> | <i>Starting Salary</i> | <i>Climb (%)</i> | | <i>State</i> | <i>Starting Salary</i> | <i>Climb (%)</i> |
| 1) | Alaska | \$32,884 | 46.8 | 27) | Missouri | \$25,164 | 32.4 |
| 2) | Connecticut | \$31,391 | 60.2 | 28) | Maine | \$24,962 | 39.8 |
| 3) | New York | \$30,808 | 61.3 | 29) | Wisconsin | \$24,839 | 58.5 |
| 4) | DC | \$30,000 | 60.9 | 30) | Minnesota | \$24,462 | 62.7 |
| 5) | Delaware | \$29,981 | 44.2 | 31) | New Hampshire | \$24,406 | 53.3 |
| 6) | Pennsylvania | \$29,793 | 62.6 | 32) | Florida | \$24,402 | 47.2 |
| 7) | New Jersey | \$29,112 | 77.6 | 33) | New Mexico | \$24,393 | 31.8 |
| 8) | California | \$29,105 | 59.2 | 34) | Kentucky | \$24,387 | 45.1 |
| 9) | Alabama | \$29,092 | 23.1 | 35) | Iowa | \$24,333 | 43.9 |
| 10) | Illinois | \$28,954 | 56.4 | 36) | South Carolina | \$23,827 | 44.8 |
| 11) | Oregon | \$28,589 | 53.2 | 37) | Washington | \$23,645 | 63.0 |
| 12) | Nevada | \$28,482 | 49.3 | 38) | Louisiana | \$23,500 | 36.2 |
| 13) | Hawaii | \$28,315 | 42.7 | 39) | West Virginia | \$23,316 | 46.9 |
| 14) | Massachusetts | \$28,055 | 57.0 | 40) | Ohio | \$23,087 | 76.4 |
| 15) | Georgia | \$27,908 | 39.7 | 41) | Kansas | \$23,006 | 50.5 |
| 16) | Michigan | \$27,822 | 75.1 | 42) | Utah | \$22,957 | 48.1 |
| 17) | Maryland | \$27,605 | 54.1 | 43) | Wyoming | \$22,836 | 46.6 |
| 18) | Texas | \$26,261 | 31.2 | 44) | Tennessee | \$22,645 | 56.7 |
| 19) | Rhode Island | \$26,237 | 76.4 | 45) | Nebraska | \$22,611 | 45.4 |
| 20) | Indiana | \$26,171 | 57.3 | 46) | Montana | \$21,676 | 45.5 |
| 21) | Arizona | \$26,163 | 32.2 | 47) | South Dakota | \$21,376 | 32.8 |
| 22) | Virginia | \$25,777 | 46.3 | 48) | Mississippi | \$21,346 | 38.4 |
| 23) | Colorado | \$25,489 | 49.7 | 49) | Arkansas | \$21,273 | 54.0 |
| 24) | Vermont | \$25,435 | 44.3 | 50) | Idaho | \$20,814 | 63.6 |
| 25) | North Carolina | \$25,338 | 45.6 | 51) | North Dakota | \$19,136 | 51.6 |
| 26) | Oklahoma | \$25,258 | 23.2 | | | | |

Table 12. State rankings, cents spent on school employee benefits for every dollar spent on school employee salaries, 1997-98 school year.

Along with expected career earning potential, teacher candidates must also choose where to work based on the total package of compensation, not just the weekly paycheck. The amount each state spends on benefits is almost wholly ignored when discussing education finance. In fact, there are no statistics that list “average teacher benefits.” The states do supply their total spending on employee benefits along with their total spending on salaries. By dividing one by the other, we can examine how many cents are spent on benefits for each dollar of salary. If we then apply this figure to the salary of the average teacher, we get a pretty good estimate of what that teacher earns in total compensation.

The U.S. average for public education employees is 25.4 cents of benefits for every dollar of salary. The results from Table 12 show enough of a spread among the various states for us to come to a few conclusions about how states allocate money for teachers. A relatively low-paying state like West Virginia looks a lot more inviting when benefits are computed. The same may be said for Utah. Maryland and Wisconsin, both relatively high-paying states, should be meccas for prospective teachers because they match their high salaries with high benefits ratios. On the other hand, states like New Jersey and Illinois, which pay fairly well, don’t match those lofty rankings when it comes to benefits.

If low-paying states also have low benefits ratios, as in Texas, then we can expect to see severe teacher shortages, even if such states offer other inducements.

Though researchers often try to offset regional differences in cost-of-living when computing teacher salaries and per-pupil spending, they omit one factor that may have a great deal to do with whether a prospective teacher will take a job in one state over another: income taxes.

Nine states do not tax income - Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington and Wyoming - giving teachers, and everyone else in these states, an effective five to six percent raise. At the same time, the majority of teachers in DC, Arkansas, California, Hawaii, Idaho, Maine, Oregon, South Carolina and Utah (assuming their income is computed separately from other household members) can find themselves paying the top marginal rates, which in California is 9.3 percent. The starting salary in California is \$623 more per year than the starting salary in Nevada, but when you factor in the difference in tax burdens, it might be a more rational financial decision to stay in Nevada.

Table 12. State rankings, cents spent on school employee benefits for every dollar spent on school employee salaries, 1997-98 school year (Derived from Table 167 – Digest of Education Statistics 2000, National Center for Education Statistics, US Department of Education)

| U.S. 25.4 cents | | | | | |
|------------------------|----------------------|------|-----|----------------|------|
| 1) | West Virginia | 39.3 | 27) | Ohio | 25.9 |
| 2) | Maryland | 35.2 | 28) | Alaska | 25.3 |
| 3) | Utah | 35.0 | 29) | Alabama | 24.9 |
| 4) | Wisconsin | 34.8 | 30) | New Mexico | 24.9 |
| 5) | Indiana | 34.7 | 31) | Oklahoma | 24.5 |
| 6) | Maine | 33.9 | 32) | Minnesota | 24.2 |
| 7) | Delaware | 33.6 | 33) | Iowa | 24.2 |
| 8) | Hawaii | 33.2 | 34) | South Carolina | 24.1 |
| 9) | Oregon | 33.1 | 35) | Kentucky | 23.9 |
| 10) | Florida | 32.9 | 36) | Vermont | 23.9 |
| 11) | Michigan | 32.6 | 37) | Mississippi | 23.9 |
| 12) | Rhode Island | 30.9 | 38) | Nebraska | 23.8 |
| 13) | District of Columbia | 29.4 | 39) | Connecticut | 23.6 |
| 14) | Washington | 29.1 | 40) | Arkansas | 23.4 |
| 15) | Idaho | 28.6 | 41) | North Carolina | 23.3 |
| 16) | Pennsylvania | 28.2 | 42) | South Dakota | 22.0 |
| 17) | Wyoming | 28.2 | 43) | New Hampshire | 20.7 |
| 18) | Nevada | 27.7 | 44) | Illinois | 20.6 |
| 19) | California | 27.3 | 45) | New Jersey | 20.2 |
| 20) | Georgia | 27.2 | 46) | Tennessee | 19.7 |
| 21) | Louisiana | 27.0 | 47) | Colorado | 18.6 |
| 22) | New York | 26.8 | 48) | Missouri | 18.3 |
| 23) | Virginia | 26.8 | 49) | Kansas | 18.0 |
| 24) | Massachusetts | 26.6 | 50) | Arizona | 15.5 |
| 25) | Montana | 26.5 | 51) | Texas | 13.0 |
| 26) | North Dakota | 26.5 | | | |

Table 13. State rankings, estimated average compensation for teachers (average salary plus average cash value of benefits), 1997-98 school year.

If we assume that benefits/salary ratio holds true for all education employees, it's simply a matter of arithmetic to compute an estimate of what the average total compensation is for teachers in each state. By applying each state's ratio from Table 12 to the average teacher salary in that state, we can generate state rankings based on a teacher's total salary/benefits package. You can compare the usual average salary rankings from Table 4 on page 9 with this table and see what effect the addition of benefits has on the rankings.

The average compensation package for U.S. teachers for 1997-98 was \$49,536. Michigan makes the greatest gain of states near the top of the list, moving up to second place from sixth. But the most profound differences were in the middle to lower levels. Arizona fell from 31st to 42nd while Texas dropped from 33rd to 45th. In the other direction, West Virginia rose from 37th to 23rd and Utah climbed from 42nd to 30th.

Table 13. State rankings, estimated average compensation for teachers – average salary plus average cash value of benefits, 1997-98 school year (Derived from Tables 4 and 12 – Tribute for a Light, Education Intelligence Agency, May 2001)

| U.S. \$49,536 | | | | | |
|---------------|----------------------|----------|-----|----------------|----------|
| 1) | Alaska | \$64,828 | 27) | Vermont | \$44,974 |
| 2) | Michigan | \$62,985 | 28) | New Hampshire | \$44,252 |
| 3) | Connecticut | \$62,702 | 29) | Colorado | \$44,167 |
| 4) | New York | \$61,767 | 30) | Utah | \$43,732 |
| 5) | Pennsylvania | \$60,949 | 31) | Kansas | \$43,437 |
| 6) | New Jersey | \$60,631 | 32) | Kentucky | \$42,886 |
| 7) | District of Columbia | \$59,977 | 33) | Iowa | \$42,332 |
| 8) | Rhode Island | \$57,989 | 34) | Tennessee | \$42,302 |
| 9) | California | \$56,757 | 35) | Idaho | \$42,225 |
| 10) | Delaware | \$56,699 | 36) | South Carolina | \$41,818 |
| 11) | Maryland | \$56,431 | 37) | North Carolina | \$41,077 |
| 12) | Oregon | \$56,168 | 38) | Wyoming | \$41,052 |
| 13) | Massachusetts | \$55,615 | 39) | Alabama | \$40,990 |
| 14) | Wisconsin | \$53,784 | 40) | Nebraska | \$40,443 |
| 15) | Indiana | \$53,531 | 41) | Missouri | \$40,158 |
| 16) | Illinois | \$52,690 | 42) | Arizona | \$39,745 |
| 17) | Hawaii | \$51,118 | 43) | Arkansas | \$38,985 |
| 18) | Washington | \$50,046 | 44) | Montana | \$38,734 |
| 19) | Ohio | \$49,082 | 45) | Texas | \$38,570 |
| 20) | Minnesota | \$48,566 | 46) | Louisiana | \$38,214 |
| 21) | Georgia | \$47,788 | 47) | Oklahoma | \$38,212 |
| 22) | Nevada | \$47,370 | 48) | New Mexico | \$37,660 |
| 23) | West Virginia | \$46,522 | 49) | North Dakota | \$35,711 |
| 24) | Virginia | \$46,477 | 50) | Mississippi | \$35,549 |
| 25) | Maine | \$45,993 | 51) | South Dakota | \$33,356 |
| 26) | Florida | \$45,817 | | | |

Table 14. State rankings, per-teacher spending rate, 1997-98 school year.

All in all, education spending is largely a measure of labor costs, particularly those of teachers. I began by placing per-pupil spending and teacher salaries side-by-side. I will finish by combining them to form a companion measure to per-pupil spending: per-teacher spending.

Here's how it works. Table 14 ranks the 50 states and the District of Columbia by taking each state's per-pupil spending for 1997-98 (current expenditures divided by average daily attendance) and dividing it into each state's cost per teacher (average salary plus average benefits, as computed above). A simple example will illustrate. Suppose State X spends \$6,000 per-pupil and \$42,000 on the average teacher's salary and benefits. State X's per-teacher rate would then be 7.0. In other words, it takes the full per-pupil allotment of seven students to compensate the teacher in that state. The average per-teacher rate for the entire U.S. in 1997-98 was 7.44.

States that appear at the top of the rankings are those with relatively low per-pupil spending *and* relatively high teacher compensation packages. They spend little, but devote most of it to teachers. Conversely, states at the bottom of the rankings spend relatively more, but devote a greater percentage of it to other areas - perhaps books, supplies, or non-teaching employees.

These rankings also alter the usual view of teacher compensation. New Jersey teachers find themselves perennially at the top of the national salary rankings, but Table 14 suggests that New Jersey taxpayers are getting a bargain in their teachers, relative to the state's total payment to public education. Conversely, Utah is more devoted to its teachers than it is given credit for. If the average New Jersey teacher were compensated at the same per-teacher rate as his or her counterpart in Utah, the New Jersey teacher's total compensation package would be worth \$105,195.24.

Table 14. State rankings, per-teacher spending rate, 1997-98 school year
 (Derived from Tables 3 and 13 –
 Tribute for a Light, Education Intelligence Agency, May 2001)

| U.S. 7.44 | | | | | |
|-----------|----------------|-------|-----|----------------------|------|
| 1) | Utah | 10.28 | 27) | Alaska | 7.14 |
| 2) | California | 9.79 | 28) | Delaware | 7.12 |
| 3) | Idaho | 8.42 | 29) | Oklahoma | 7.09 |
| 4) | Nevada | 8.23 | 30) | Wisconsin | 7.00 |
| 5) | Michigan | 8.16 | 31) | Kentucky | 7.00 |
| 6) | Georgia | 8.04 | 32) | West Virginia | 6.86 |
| 7) | Tennessee | 8.02 | 33) | New Hampshire | 6.82 |
| 8) | Hawaii | 7.98 | 34) | Connecticut | 6.80 |
| 9) | Alabama | 7.93 | 35) | Kansas | 6.78 |
| 10) | Indiana | 7.89 | 36) | Louisiana | 6.77 |
| 11) | Pennsylvania | 7.84 | 37) | Iowa | 6.72 |
| 12) | Virginia | 7.83 | 38) | Rhode Island | 6.72 |
| 13) | Arkansas | 7.80 | 39) | Massachusetts | 6.70 |
| 14) | Mississippi | 7.77 | 40) | North Dakota | 6.67 |
| 15) | Arizona | 7.76 | 41) | Missouri | 6.59 |
| 16) | Illinois | 7.68 | 42) | Texas | 6.53 |
| 17) | Washington | 7.66 | 43) | District of Columbia | 6.50 |
| 18) | Oregon | 7.64 | 44) | Maine | 6.35 |
| 19) | New Mexico | 7.56 | 45) | South Dakota | 6.32 |
| 20) | Florida | 7.41 | 46) | New York | 6.20 |
| 21) | South Carolina | 7.41 | 47) | Nebraska | 6.14 |
| 22) | North Carolina | 7.25 | 48) | Wyoming | 6.11 |
| 23) | Colorado | 7.24 | 49) | Montana | 6.01 |
| 24) | Maryland | 7.22 | 50) | Vermont | 6.00 |
| 25) | Ohio | 7.21 | 51) | New Jersey | 5.93 |
| 26) | Minnesota | 7.15 | | | |

CONCLUSION

Examining all these aspects of public education financing may be fine way to while away the hours, but what does it all mean? How should these tables and statistics affect public policy? People involved in public education are often accused of being obsessed with inputs and careless of outputs. Our spending suggests we may all be careless of inputs as well.

Economic times have been good, and the public schools are at the top of the national agenda, so the question of whether we should spend more on education has disappeared in favor of the question: How much more should we spend? The arguments can be bitter, but no one is suggesting we spend less on education. Instead, many people ask: Does more equal better? Will we get our money's worth?

If you were to ask someone what it is we are buying with our investment in public education, you would get a host of different answers. Almost all of them would mention student achievement or preparing children to become well-rounded citizens for America's future. All well and good, but you can't buy student achievement. What you can buy are those things you believe will bring about student achievement, and the breakdown of America's education spending suggests we have made a grand determination as to what that is.

When all the figures are taken into account, the basic assumption is that the vast majority of public spending on education is to ensure and maximize *teacher quality*. That's hardly an earth-shattering conclusion, but we don't usually analyze our education spending in terms of quality, even though we do it in most other aspects of all lives. If your accountant messes up your taxes, or your physician prescribes the wrong medication, your first reaction is not to go to a more expensive accountant or doctor, but to a better one.

The most highly touted education reform today is class-size reduction. Without delving too deeply into this particular debate, the essence is the belief that students benefit from the reduced disruptions and increased teacher attention in smaller classes. So we answer the question "Shall we reduce class size?" based on the assumption that it will bring about desired outputs.

But if public education were a business, the question wouldn't be "Shall we reduce class size?" it would be "Shall we hire more people?" Will hiring more people increase student achievement?

Perhaps it will, but suddenly we find ourselves in an entirely different line of questioning. Can we afford more people? Can we train them properly? Can we even find more people capable of doing the job?

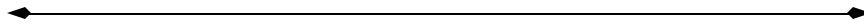
Well, if you can't, you run into the second most popular education reform: increasing teacher salaries. Why? To attract the best and the brightest. That's a desirable outcome, so we increase teacher salaries.

But 99 percent of the salary structures for public school teachers in America allow pay differentials for only two reasons: years of experience and graduate credits. Reports from all over the country tell us we have a shortage of math, science and special education teachers. But you can't raise the starting salaries of math, science and special education teachers without also raising the salaries of kindergarten and English composition teachers. That's a minor problem compared to the one of quality.

Higher salaries do indeed attract more of the best and the brightest. Unfortunately, higher salaries also attract the worst and the dimmest. If you can't tell the difference between the two, you are wasting the public's money. Besides, the enormous expense of higher teacher salaries is not due to 200,000 or so new teachers we will need to hire every year - it's due to the 4 million or so teachers who already work in public education.

So the key question in terms of spending is really "Shall we give the people we have a raise?" Employers face this question every day. Often the answer is yes, but rarely is it answered without some determination about the fiscal health of the company, the competition, and the quality of individual job performance. How many teachers would support higher pay if it meant they would lose their job to one of the "best and brightest?"

As Cloten suggested in Shakespeare's *Cymbeline*, even tribute is supposed to bring about a desired result. If our children are in the dark, we need quality teachers to bring them a light. The \$300 billion we spend on public education annually is our tribute. It's time we evaluated public education spending on what we are actually getting, instead of what we hope we will be getting. No light, no tribute.



ABOUT THE AUTHOR

Mike Antonucci is the sole proprietor of the Education Intelligence Agency, a private research firm dedicated to public education analysis and investigations. He has been widely published on education and labor issues. His work has appeared in *The Wall Street Journal*, *Forbes*, *Investor's Business Daily*, *The American Enterprise* and many other newspapers and periodicals. *Left at the Altar*, his report on the attempted merger between the National Education Association and the American Federation of Teachers, was published by the Thomas B. Fordham Foundation in October 1998.

Since June 1997, Mike has produced the *EIA Communiqué*, a weekly e-mail bulletin of inside news and information about public education and the teachers' unions. The communiqué is available to anyone, free of charge, by sending a request to EducIntel@aol.com.