

More Money = Better Outcomes?

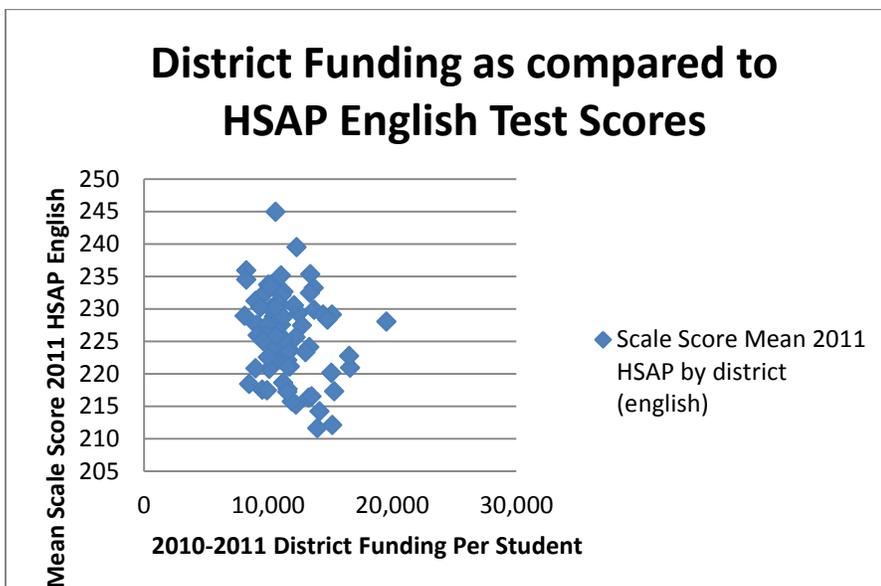
Before lawmakers try to “equalize” education funding among school districts, they’d better examine the premises of their plan.

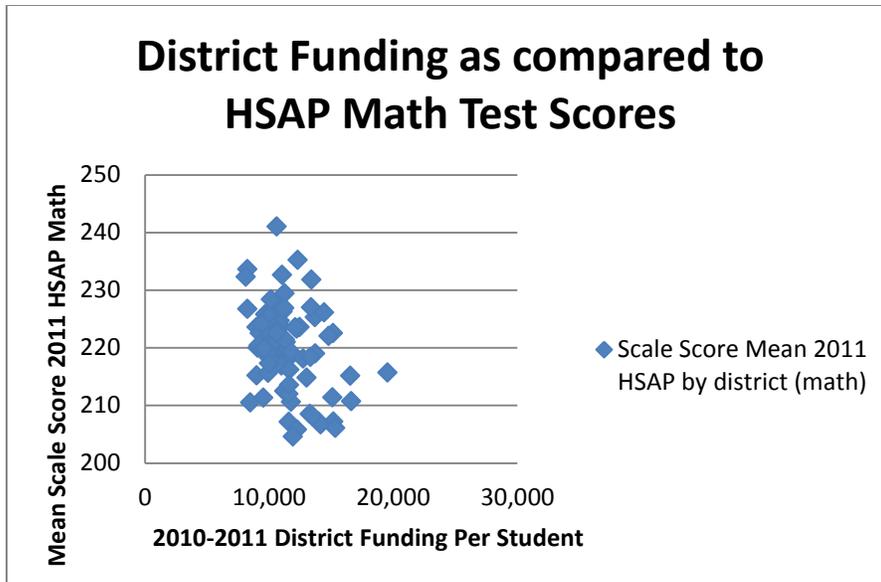
The South Carolina School Boards Association has recently released a new education funding plan that would cost nearly \$1 billion in new education spending each year. Specifically, the South Carolina Education Finance Restructuring Act would attempt to equalize education spending across South Carolina.

This goal would be achieved by imposing a statewide tax rate on personal property and distributing the revenues generated from the tax equally among the state’s school districts. The plan also leaves open the possibility for localities to pass additional local taxes to further fund their local school districts.

This program rests on a heavy assumption, namely that higher funding equals better educational outcomes. While this assumption seems intuitive and seems to be often invoked in education debates – at least implicitly – it rarely comes with data to back it up. In order to test this assumption, we’ve compared the total (local, state, and federal) proposed funding for South Carolina school districts, as given in the 2010-2011 state budget, with several different measures of the performance of schools and students.

First we took a look at the High School Assessment Program (HSAP) test scores for both English and math. The resulting graphs comparing district funding levels per student to mean HSAP English and math scores are below.

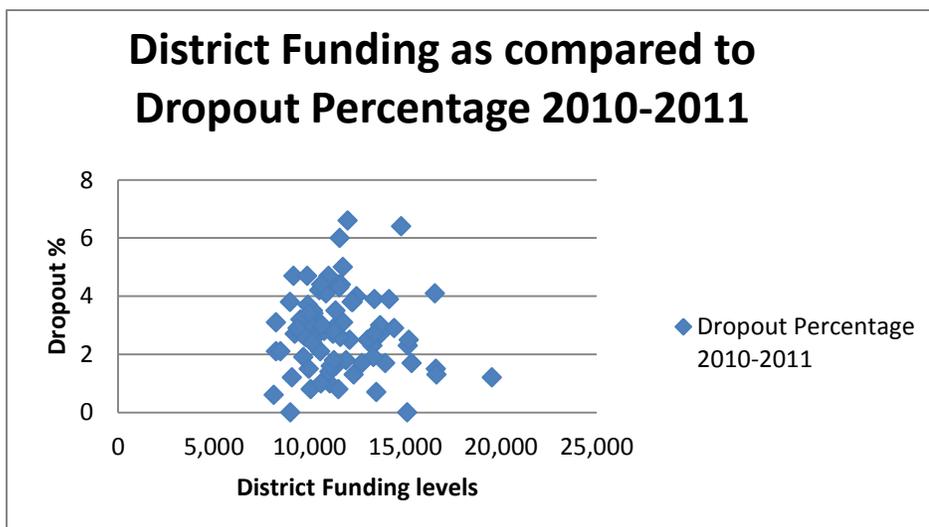




*Note: these graphs don't include the Dillon, Marion, and Sumter districts because the state Department of Education (SCDOE) website, which gives the HSAP score data, only gives this data for school districts as they exist currently, while the districts in these counties were arranged differently from 2010-2011.

These graphs hardly show a clear linear trend of test scores increasing along with district funding. In fact, close examination seems to reveal that the trend is actually the opposite with the data points sloping down as they move to the right. Running a statistical correlation on the data sets revealed what the graphs seems to suggest. The results showed school district funding actually has a negative correlation with both mean HSAP English (-0.245931813) and math (-0.350834505) scores. In other words as school district funding levels went up mean HSAP scores actually went down.

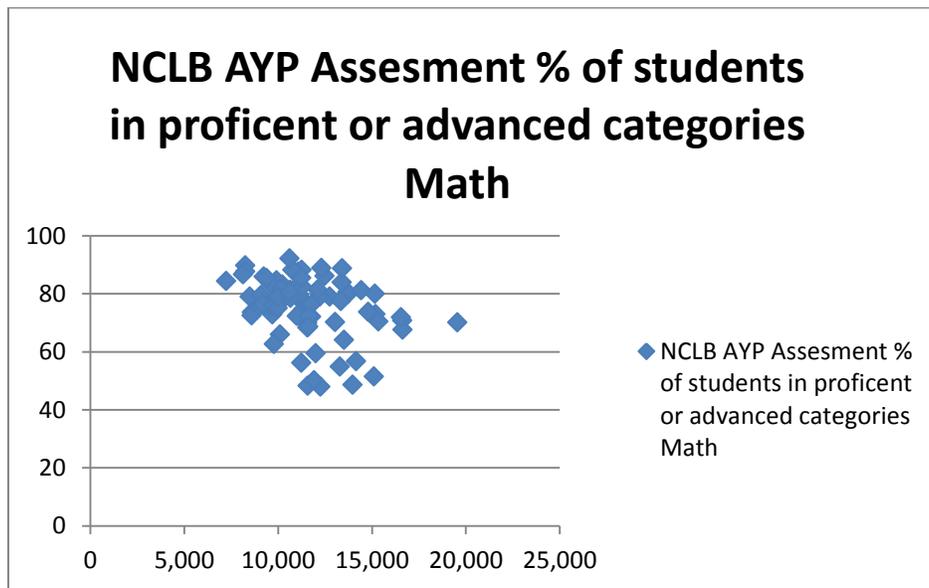
Of course this is only one measure, so we also examined school district per student funding levels as compared to high school dropout percentage by district. The graph examining this relationship is directly below.

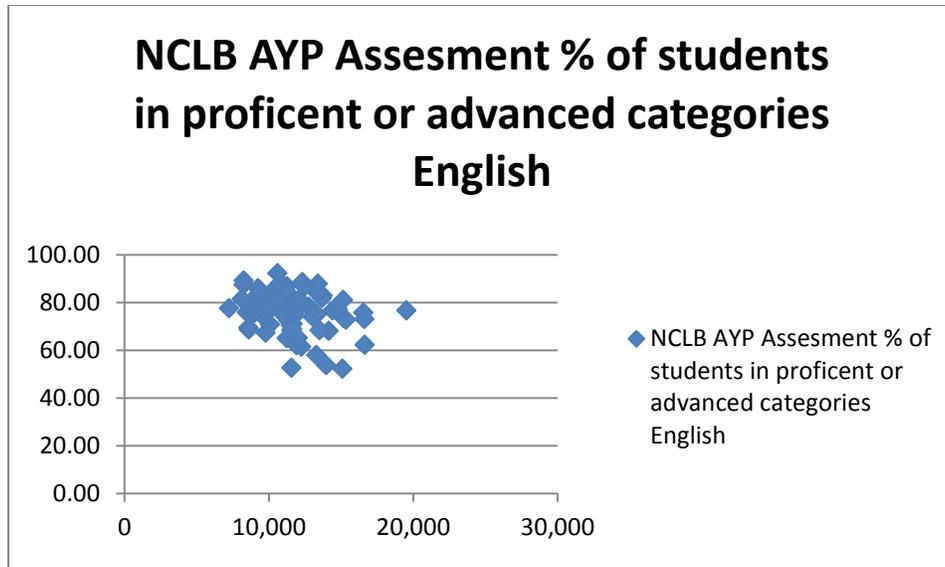


*Due to some missing data on the SCDOE website, this graph doesn't contain dropout percentage data for Dillon and Sumter school districts.

Again the data points in this graph appear largely random. Yet on close inspection there appears to be a slight trend of the points sloping down as they move to the right. Running a statistical correlation on the data sets used in this graph also showed a negative correlation (-0.066787353). In this case the correlation shows that percentage of dropouts per school district actually falls as district funding increases, although it isn't a significant statistical relationship.

Finally, we compared school district funding levels per student with the No Child Left Behind program's Adequate Yearly Progress evaluations for both English and math. The metric we're looking at here is the percent of students who were evaluated as being as either proficient or advanced in math or English. The graphs for both the math and English NCLB AYP as compared with district funding levels per student are below.





Again we notice a slight downward trend as the data points move to the right. Funding levels also showed a negative correlation with the percentage of students who were evaluated as either being proficient or advanced in math (-0.34906) and in English (-0.30404). Again, this correlation is important because it fails once again to show a link between higher funding and improved education outcomes.

After analyzing several different variables, and using the public education sector’s own standards, we can find no proof that increased funding improves educational outcomes. While we don’t believe lowering funding will actually improve results, the fact that a statistically significant positive correlation could not be found between school district funding and any of other variables suggests that raising funding will not automatically improve educational results either. Before South Carolina policymakers rush headlong into a new plan to equalize funding for all school districts, they may wish to check the plan’s premises.