

Problems with Using “Data” to Fix Our Schools

Or, “Garbage In, Garbage Out”

When keeping your job or earning a bonus depends on favorable changes in student test scores, there are powerful incentives for educators to cheat. Articles in the Atlanta Journal-Constitution and in USA Today, as well as reports from CTB McGraw-Hill, demonstrate conclusively that hundreds of teachers and administrators erased and corrected student answers over a period of many years in DC, Atlanta, and several other cities.

Honest teachers are at a huge disadvantage. If they inherit a class of students with fraudulently high scores, and they are evaluated in large part by an extremely complicated value-added method algorithm (VAM), they are at serious risk of losing their jobs unless they cheat, also. (Of course, almost no-one actually understands the details of VAM. John Ewing of the AMS and MfA calls it “mathematical intimidation”.)

Bill Turque of the Washington Post has noted that as reports of cheating in DCPS have gone down, so have test scores.

One of the key speakers at this conference, Michelle Rhee, is not exactly a shining example of honesty. Her resume – the one that got her the job of Chancellor – made utterly astonishing claims of raising her student’s scores in Baltimore. To quote her: **“Over a two-year period, moved students scoring on average at the 13th percentile on national standardized tests to 90% of students scoring at the 90th percentile or higher.”** Those claims evaporate when you look at the real data, which do not show any class rising to the 90th percentile or over. Those claims look even more suspicious when you notice that the number of students with scores of “1” – scores so low that they are not counted – was the highest ever AT HER SCHOOL and IN HER GRADE for the entire group of studied schools. She now admits she shouldn’t have made those claims. But it’s too late for students and teachers in DCPS, a school system where she has replaced about half of the teachers and perhaps a greater fraction of the administrators. (See below for analysis of whether all that workforce turnover worked or not.)

Rhee also made claims in that resume of favorable coverage in the Wall Street Journal during the time she taught in Baltimore. Her name does not appear in the WSJ during that entire decade.

Rhee also promoted, with great acclaim, the very DCPS principal with the most reprehensible record of mass erasures and cheating on the DC NCLB test. Later, after the USA Today articles came out, this same administrator was quietly allowed (encouraged?) by Rhee’s successor to resign, with no reason given out in public. But one can figure it out...

Rhee and her successor, Kaya Henderson, continue to stonewall all requests for real, honest, outside investigations. Hiring Caveon to whitewash the cheating allegations, or having a single in-house investigator conduct a total of eight interviews, is the same thing as sweeping the entire thing under the rug. As far as I can tell, the US Department of Education investigation into the DCPS cheating scandal has gone nowhere, either. CTB McGraw-Hill have a number of forensic investigation “packages” that DC could purchase and use to confirm or deny suspicions of cheating, but so far, DC has refused to pay for any of them.

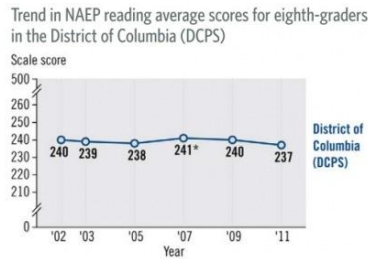
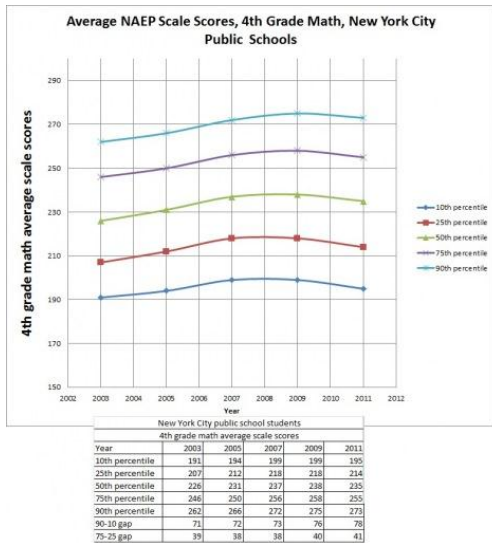
Garbage In, Garbage Out

From my own personal experience with standardized and interim assessments that are supposed to inform instruction, as they currently stand, those tests are worse than useless. The correlation with the curriculum itself is spotty at best. Many of the questions are poorly written and as a result, the tests themselves give lots of false negative and false positive conclusions as output. In fact, just about every time my department got word that our students had done extremely poorly on a particular topic, when I went and looked at the test questions that supposedly tested that topic, I would find that the question was ambiguous, had two or three right answers, or none right answers at all. So, in other words, we teachers were getting all upset about our students doing poorly, when it was the test writers who had done poorly.

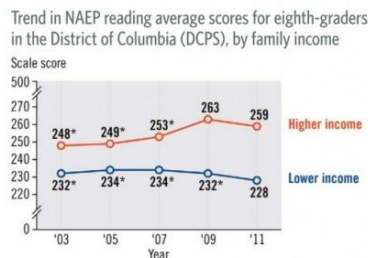
What's more, Roland Fryer has done major experiments in NY, DC, and several other cities to see if paying teachers or students for good results would work. His results were uniformly negative. I quote: "Providing incentives to teachers based on school's performance on metrics involving student achievement, improvement, and the learning environment did not increase student achievement in any statistically meaningful way. If anything, student achievement declined."

Finland has recently been in the news for having an outstanding school system. The Finnish schools employ NONE of the supposedly data-driven methods that members of DQC claim are supposed to be guiding American schools. Finland has only have one national exam - a test at the end of secondary school. And they do not pay the teachers for getting their students to pass the test.

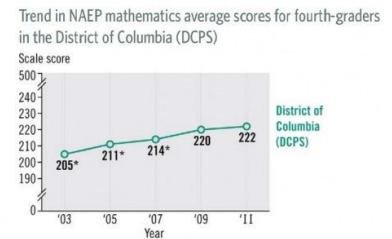
Though I've been quite critical of him in the past, I definitely concur with Fryer's results here when I look at NAEP test results in DC and in New York City. In both cases, larger and larger emphases on test data (including dangling cash prizes in front of teachers) during the past 2-4 years seem to go hand in hand with lower or stagnant test scores, reversing generally rising trends that had occurred beforehand. Or else, these "reforms" have not made much difference at all. They certainly have not produced any of the promised miracles. Instead, they seem to be widening the gap between the "haves" and the "have-nots". To their credit, a large proportion of DCPS teachers who were found to be eligible for bonuses, turned them down.



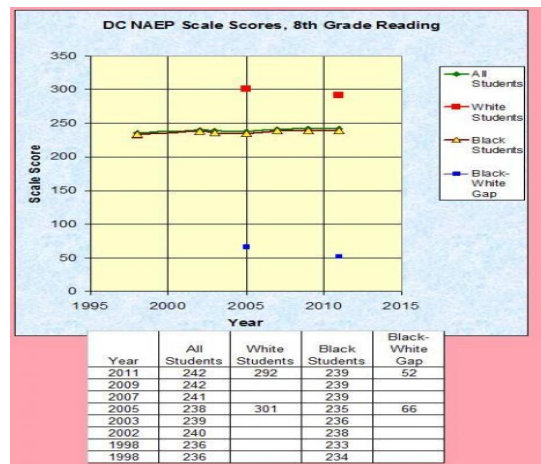
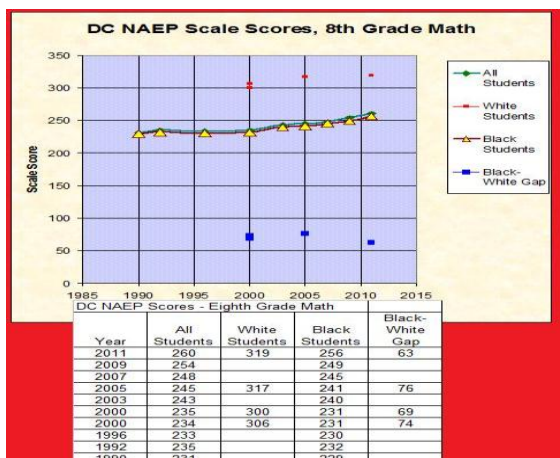
* Significantly different ($p < .05$) from 2011.
NOTE: DCPS = District of Columbia Public Schools.



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NOTE: In NAEP, lower-income students are students identified as eligible for the National School Lunch Program (NSLP). Higher-income students are not eligible for NSLP. DCPS = District of Columbia Public Schools.



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This leaflet was written by GFBrandenburg, a retired DCPS mathematics teacher. You can find the sources for all this data at gfbrandenburg.wordpress.com