Colorado School Grades is Wrong Again: Wheat Ridge is an A+ High School

Colorado School Grades recently released its letter ratings of our state's public schools. Their methodology is straightforward: they simply convert schools' numerical score on the Colorado Department of Education (CDE) School Performance Framework (SPF) to an A through F letter grade. So to understand those letter grades, we have to understand the SPF methodology.

Let me first start with a brief piece of background. All rankings are derived using a variant of this approach:

- Determine the comparison criteria you will use;
- Then rate the candidates against these criteria;
- And then weight the criteria ratings to determine your final ranking.

At least two, and often all three of these process steps are inherently subjective, to varying degrees. So anybody who produces a ranking better have thick skin.

Let's now turn to CDE's School Performance Framework methodology.

For High Schools, the SPF assigns a 15% weight to Academic Achievement, 35% to Academic Growth, 15% to Academic Growth Gaps, and 35% to College and Career Readiness.

Are these reasonable criteria and weights? Let's start with the two most important goals that most districts seek to achieve: all students will meet Colorado Academic Standards each year, and graduate college and career ready. When you translate those goals into metrics and ratings, they basically mean (a) students should score proficient or advanced on the Grade 3 through Grade 10 TCAP (or CMAS) tests and (b) meet or exceed the college and career ready benchmarks on the Grade 11 ACT test. Note that both of these are absolute standards, and that meeting them reflects a mix of student socio-economic circumstances and school value added. At the District level, the management challenge is to devise and execute a strategy that, for any given level of resources (i.e., budget size), maximizes the number of students who meet these goals.

So where does Growth come in, or, more specifically, Median Growth Percentile? Let's first briefly review the metric: in the TCAP framework, growth is a relative measure -- i.e., it compares the absolute increase in a student's "scale score" from his or her score the year before, and then converts these into percentiles. The "Median Growth Percentile" (MGP) is just the mid-point growth percentile in any grouping of students.

The MGP approach has both strengths and weaknesses. Its strength is that, because it is a relative measure, it doesn't favor students, teachers, and schools who come from favorable socioeconomic circumstances, or penalize those who don't. For example, it is entirely possible for Evergreen and Jefferson High Schools to have the same MGP in Grade 9 math, even though their absolute starting and ending TCAP math scale scores were very different. The SB 191 framework for evaluating teacher performance correctly, I think, focuses on teachers' MGPs because they can't control the starting point (in the TCAP score sense) of the students who walk into their classroom or school each year. All they can try to do is maximize their rate of growth from wherever they start. In our work on the Wheat Ridge High School Accountability Committee, we use a rolling three-year average Median Growth Percentile to reduce the impact of turnover in students and teachers, and enable us to get a better picture of school performance.

On the other hand, MGP's weakness as a metric is that it can provide a false sense of security, if the grade to grade increase in scale score at the 50th (median) growth percentile is LESS than the grade to grade increase in the minimum “cut” score for proficiency.

Unfortunately, when you dig into the TCAP data, you find this is often the case -- which is the answer to this frequently posed question (or riddle): “Why isn't our percentage of students who are proficient or advanced increasing if we consistently have MGPs above the 50th percentile?” Hence, giving too much weight to MGP can be a real problem at the District level, where we are rightfully more concerned with the overall system's performance in meeting two absolute goals: every student meets state standards every year, and graduates career and college ready.

I should also say something about Academic Growth Gaps. CDE defines an Academic Growth Gap as follows: "Academic growth gaps are a performance indicator that reflects the academic progress of students in the following disaggregated groups: students eligible for free/reduced lunch, minority students, students with disabilities, English language learners and low-proficiency students. A growth gap for any of the above disaggregated groups is defined as the difference between the median growth percentile and the median adequate growth percentile for that group."

So what is the Median Adequate Growth Percentile? Again, here is CDE's definition: "The growth (student growth percentile) sufficient for the typical (median) student in a district, school, or other group of interest to reach an achievement level of Proficient or Advanced, in a subject area (reading, writing or math), within three years or by 10th grade; whichever comes first. Each student, in a school, will be assigned an adequate growth percentile. How that adequate growth percentile is calculated depends on if the student is below Proficient in the prior year (needing to catch-up) or if the student is Proficient or better in the prior

year (needing to keep up). If you take the median of all these numbers, you get the growth level that would enable the typical student to either catch up or keep up; whichever they need to do."

Personally, I strongly dislike this metric. Why? Because the research shows that catching up is very hard, and it becomes non-linearly more difficult the further you fall behind. Let me give an example that is near and dear to me as the chair of Wheat Ridge High School's Accountability Committee. Too many of the students who walk in the door at WRHS every August have Grade 8 TCAP scores that are a long way from the minimum cut score for proficiency.

Once they arrive, the team at Wheat Ridge does an outstanding job of increasing their level of achievement. For example, for students eligible for free and reduced lunch, who do not have Advanced Learning or Individualized Education Plans (i.e, are in neither the gifted nor special education program), Wheat Ridge's Median Growth Percentiles in math and reading over the 2012 – 2014 period ranked third in Jeffco, while writing ranked fifth – and all the schools that outranked us have far lower percentages of free and reduced eligible students. When we compared Wheat Ridge's MGPs for these students to MGPs at eight demographically similar high schools in Boulder Valley, Cherry Creek, and Jeffco, WRHS ranked number one in math and writing, and number two in reading (and no other school had as large an increase in the percentage of free and reduced eligible students over the past three years as WRHS).

However, under CDE's School Performance Framework, if these superb MGPs aren't high enough to close an achievement gap that has built up over the previous nine years (K – 8), WRHS gets penalized. And then it gets further penalized when, despite the efforts of Wheat Ridge High School's teachers, not all students are able to meet the career and college ready standard on the national ACT test that every eleventh grader in Colorado must take. I can't say this often enough: the percent of students meeting the career and college ready standard on the ACT is indeed a critical metric; however, it is a measure of a District's cumulative performance, and not a relevant metric for measuring a high school's performance.

My analogy is that using the Achievement Gap and Career and College Readiness results to criticize a high school is like complaining that the last runner in a 4 x 400 relay race did not run a humanly impossible twenty second anchor lap to make up for all the time lost by the previous three runners. This simply makes no sense – yet the SPF puts a combined 50% weight on a high school's Academic Growth Gaps and College and Career Readiness results.

From my perspective, the best measure of the academic achievement performance of the Wheat Ridge High School team is the Median Growth Percentiles they produce. These have been superb, and not just for students eligible for free and reduced lunch.

For students who are not FRL eligible, and do not have ALPs or IEPs, WRHS' three year MGP rank compared to all the other district run and option high schools in Jeffco was fourth in math (behind Ralston Valley, Evergreen, and D'Evelyn); third in reading (behind D'Evelyn and Standley Lake); and first in writing.

For students with Advanced Learning Plans (i.e., GT), Wheat Ridge's MGPs ranked first in Jeffco in math, reading, and writing – a clean sweep.

These data tell a very clear story: When it comes to growing academic achievement -- for all students -- Griff Wirth and his team at Wheat Ridge High School are all-stars. Colorado School Grades was dead wrong when it gave Wheat Ridge High School just a "C." If ever a school deserved an "A plus" grade, it is the Farmers.

Tom Coyne chairs the Wheat Ridge High School Accountability Committee, and in January 2014 joined Jeffco's District Accountability Committee. He has worked on corporate performance improvement issues for more than 30 years