October 19, 2016

Dear Members of the Jeffco Board of Education,

The posted agenda for your meeting this Thursday evening says that you will be discussing Jeffco's student achievement results. Your comments at the School Accountability Chair training meeting on September 28th and at the board's recent public forums indicate that you believe the district's achievement results are excellent.

You have also claimed that taxpayers are receiving a high return on the billion dollars we give to the district each year to prepare our children for the very challenging economy they will face after high school.

Your claims are both delusional and dangerous.

I'll begin with some comments on the evidence you cited at the SAC meeting and the forums to support your claims.

You began by noting that on the 2016 CMAS/PARCC tests, Jeffco outperformed the state of Colorado. Since Jeffco has a lower percentage of free and reduced eligible students than the state, this is exactly the result we should expect and not evidence of excellent performance. I'll also point out that if a prospective employee has poor reading, writing, or math skills, they aren't going to get the job, regardless of whether Jeffco outperformed the state.

Your next claim was that because "over \$80 million in scholarships were offered to 2016 graduating seniors" this somehow indicated excellent district student achievement performance. Yet you failed to state either the number of students who received these offers or how the \$80 million was divided between scholarships based on academic merit, athletic or artistic talent, and financial need. Given the stagnation of real household incomes and continuing real increases in the cost of college, common sense should tell you that greater financial need is the most likely reason an increasing amount of scholarships were offered to Jeffco graduates.

You then went on to claim that US News and World Report's high school rankings somehow reflect excellent achievement performance by Jeffco schools. Apparently you did not dig very deeply into the ranking criteria used by USNWR. If you had, you would have discovered that the percentage of students scoring a 3 or higher on AP tests received a heavy weighting. You might also have noticed the very strong negative relationship between the

percent of students meeting this standard and the percent of free and reduced eligible students at different Jeffco high schools. In fact, the negative correlation is greater than .80.

So let's be clear – the USNWR awards primarily reflect these high schools' favorable student demographics and not substantial value added by Jeffco schools. You are making the same mistake that Barry Switzer pointed out years ago: "Some people are born on third base and go through life thinking they hit a triple."

Finally, you claim that because Jeffco had 22 National Merit Scholarship semi-finalists last year student achievement performance in the district is excellent. Other evidence painfully contradicts your claim.

Colorado is one of many states that has used the national ACT test to measure the college and career readiness of every 11th grade student. This serves two purposes: It expands access to college for students who might otherwise not take the test, and it provides policymakers, parents, and taxpayers with their last comprehensive measure of the cumulative result of our investment in twelve years of schooling (K-11).

The results on the ACT are not only very important for college admissions, but are also highly correlated with scores on the ASVAB test taken by students who want to serve in the military and with scores on preemployment screening tests like Work Keys.

Since 2008, over 27,000 Jeffco 11th graders have failed to meet the ACT college and career ready standard in reading, over 28,000 have failed to meet the math standard, and over 33,000 have failed to meet the science standard.

I have heard some members of your board cavalierly blame these results on poverty. While convenient, that excuse hides a far more painful truth.

On the 2015 ACT test (the latest data I have received from CDE) only 50% of Jeffco students <u>NOT</u> eligible for free and reduced lunch met the college and career ready standard in reading, only 53% in math, and only 48% in science. The results for our free and reduced eligible students were much worse.

Moreover, Jeffco students who are not free and reduced eligible underperformed their peers in many other affluent suburban districts, as you can see in the following table:

2015 Grade 11 ACT Percent C&C Ready

Students NOT Eligible for Free & Reduced Lunch

| | Reading | Math | Science |
|-------------------|---------|------|---------|
| Lewis Palmer | 69% | 65% | 58% |
| Douglas County | 47% | 51% | 46% |
| Academy | 56% | 54% | 51% |
| Cheyenne Mountain | 63% | 71% | 58% |
| Littleton | 58% | 61% | 55% |
| Boulder Valley | 66% | 66% | 62% |
| Cherry Creek | 52% | 54% | 50% |
| Poudre | 61% | 59% | 56% |
| Jefferson County | 50% | 53% | 48% |
| St. Vrain | 47% | 47% | 46% |
| | | | |
| Average | 57% | 58% | 53% |

Depressingly, the 2016 CMAS/PARCC results provide no cause for optimism that this situation is going to substantially improve in the future without much more fundamental change than we have thus far seen in Jeffco.

On the 2016 CMAS English Language Arts test, 18,924 Jeffco students in grades 3 through 8 failed to meet Colorado grade level standards. In math, 20,965 students failed to meet them.

Once again, you can't just blame these poor results on poverty. In 2016, at the district's 16 most affluent elementary and middle schools – those that have fewer than one in eight students eligible for free and reduced lunch – 2,202 children failed to meet Colorado ELA standards, and 2,340 children failed to meet state math standards.

Here is why these results are critical. Research by the ACT Organization ("Catching Up to College and Career Readiness") has found that only 29% of 8th graders who are less than one standard deviation below the state proficiency standard in reading (i.e., a score between 713 and 750 on the English Language Arts CMAS test) will meet the College and Career Ready benchmark on the 11th grade ACT; students scoring more than one standard deviation below (i.e., below 713) have just a 10% chance. For math, the comparable percentages are 19% (the one standard deviation range is 715 to 750) and 3% (below 715).

Every year a child is below state standards makes it more difficult to catch

up and graduate college and career ready. In Jeffco, we are losing far too many kids before they get to high school.

So how does all this evidence stack up against your 22 National Merit semifinalists?

Let's start with the Jeffco students who, since 2008, have failed to meet the college and career ready standard on the ACT math assessment, and add to them all the students in grades 3 through 8 who in 2016 failed to meet state math standards. And then let's have each of these students invite two adults who love them and deeply care about their future. How many people do you think we'd have?

Enough to fill Mile High Stadium...and Coors Field...and the Pepsi Center...with more than 2,000 people still waiting in line outside.

That's a crowd of almost 150,000 people.

If you had to speak to them, what would you say? Would you repeat your claim that Jeffco has excellent student achievement performance, and that they should all be proud because the district outperforms the state? Would you tell them that Jeffco had nothing to do with their failure and that they really got great value for their tax dollars?

Let's now move on from why your claims are delusional to why they are dangerous.

I'll start with an essential point on which I hope we can all agree: the forces of globalization and the rapidly improving capability of multiple technologies are dramatically changing the world in which our children will have to survive in the future.

These changes aren't likely to slow down anytime soon. The disruption produced by the last great economic transition – from agriculture to industrialization around the turn of the twentieth century – lasted for at least forty years. Arguably, the current transition from an industrial to a digital economy only began around the turn of the 21st century, when information, communication, and technology ("ICT") investment surpassed thirty percent of total non-residential investment in the United States, and China's exports as a percent of its GDP began to rapidly increase.

Goldin and Katz highlight the implications of these trends for our schools in their book, "The Race Between Education and Technology" (similar points are made in "Racing Against the Machine" by Brynjolfsson and McAfee, and "Beyond Automation" by Davenport and Kirby). Students who master the skills needed to complement rapidly advancing technology will earn high compensation in the future, while those who do not will increasingly find themselves in jobs with much lower pay.

Unfortunately, results from a wide range of international studies, from the OECD's PISA assessments of 15 year olds' academic knowledge to its PIAAC assessments of adult skills, consistently find that too many people in the United States lack the knowledge and skills they will need to thrive in the future.

As a recent bipartisan report from the National Conference of State Legislators bluntly noted, "We cannot ignore the reality that most state education systems are falling dangerously behind the world, leaving the United States overwhelmingly unprepared to succeed in the 21st century economy" ("No Time to Lose", August 2016).

Closer to home, researchers have found that in our knowledge driven economy substantially improving Colorado's K12 education results could increase the size of our state GDP by over 200% ("It Pays to Improve School Quality" by Hanushek, Ruhose, and Woessmann). And faster economic growth would make it much easier to meet many of the budget challenges facing Colorado, including rising cost pressures from social safety net programs, infrastructure needs, and our deeply underfunded public sector pension plans.

If at Thursday's meeting you once again hype and spin Jeffco's achievement results, you will not only be misleading parents and taxpayers, but will also be sending a very clear and dangerous message to district staff: Everything is fine and you don't need to change.

If every school district takes the same approach, then neither student achievement nor the state's long term economic growth will improve. Over time, that will only increase the number of Colorado taxpayers who are either unable or unwilling to pay higher and higher taxes to fund our rapidly growing teacher pension deficit. Jeffco's share of that deficit is currently \$1.5 billion – three times the amount of district debt outstanding – or about \$3,340 for every Jeffco adult. And this amount is likely understated by almost half because of the high discount rate PERA uses in its calculations.

As the economist Herbert Stein famously said, "If something cannot go on forever, it will stop."

One last point: Please don't claim that Jeffco's poor achievement results are due to a lack of resources.

Jeffco's total revenue grew from \$826 million in 2006/2007 to \$957 million in 2015/2016 — an increase of \$131 million dollars. Because the district's total student enrollment remained essentially unchanged over this period, total revenue per student increased by about \$1,500. Yet achievement results have continued to stagnate. In other words, the value received by taxpayers in return for the billion dollars we spend each year on Jeffco schools has been getting worse, not better.

Try as you may, you cannot spin away all these painful facts. As P.T. Barnum liked to say, "you can't fool all of the people all of the time." Jeffco has very serious and deeply rooted problems, and thousands more children and their families will likely pay a life-long penalty because your board is unwilling or perhaps afraid to face them.

Tom Coyne Golden, CO