2015 AP Chemistry Results Commentary (7/7/2015)

I hope that each of you are enjoying your summer! By now I also hope you have received your AP Chem score. Let me try to give some perspective.  
  
Something’s up with the College Board. First, have a look at some **global** scoring data and facts:  
  
 5 4 3 2 1  
2015  8.40%  15.20%  28.10%  25.50%  22.80%

2014  10.10%  16.60%  25.70%  25.80%  21.80%

2013  18.20%  21.30%  19.00%  15.10%  26.40%

2012  15.30%  19.10%  20.20%  15.00%  30.40%

The 8.4% of students receiving 5’s this year represented about 12,600 students worldwide vs. 15,000 for the 10.1% receiving 5's in 2014. The total number of students taking the exam continues to increase significantly each year.  
  
The historic “cutoff” prior to 2014 (the "legacy exams") to achieve a “5” on the exam had been in the 63-66% range. In 2014 (the first year of the new exam), the “cutoff” increased to 72%. We do not know the cutoff for 2015, but I suspect it will be at or higher than 72%. This is a really important watershed moment because the new exam was chosen to set a new norm for scores, and therefore a new distribution of grades. For whatever reason (*and this is the crux of the matter*), the College Board decided that an unusually high bar should be set in order to get a 4 or 5. They coupled that decision with some new policies regarding the way questions would be presented, and what would constitute a ‘correct’ answer. That of course, is *their* business and they can do whatever they choose to, but the question is; Why have the number of 4's and 5’s been cut so much from the previous exam? What’s going on?

There are a number of potential answers that might be considered.

1. *The AP exam was too easy up to 2013*. Well, it’s certainly true that the AP exam became easier throughout the 00’s when compared to the 60’s, 70’s, 80’s and 90’s, but it is still considered by many as one of the more difficult exams.

2. *With the growing number of students taking the exam, the % of poorly prepared students is weighing unfavorably on the entire distribution of scores.* I suspect this is also true.

3. *There is pressure from colleges, that are finding that students with high scores are still unprepared for college chemistry (see #1)*. Perhaps.

4. *The College Board wants to justify the massive expense of re-designing the new curriculum by pointing to statistics that prove there has been some dramatic, ‘change for the better’*. This seems also likely, but the bottom line is this;

**The CHEMISTRY didn’t get any harder in 2014 or 2015 than it was on the previous legacy exams. Really it didn’t!**

Any experienced AP chemistry teacher will suggest the same. As teachers, we did not find either of the new exams (2014 or 2015) any more difficult **IN TERMS OF THE CHEMISTRY**than any of the prior, legacy exams – this is the crucial point. As a result, three students with the same intellectual capacity *in terms of their chemistry*, and the same performance on the exams in 2013, 2014 and 2015, could easily have received, in order, 5, 4 and 3 as their scores. That makes no logical sense. However, it *does* ‘make sense’ when we consider things were newly-normed in 2014. However, all that does is bring us back to questioning the logic of the new-norming decision, when the chemistry did not change to any significant degree.

So what *did* change significantly?

Firstly the questions are being asked in a much more wordy, esoteric and odd manner, with a leaning toward ‘real world’ applications and forced ‘context’. Ironically of course, forcing those things is exactly the *opposite* of the same. Secondly, the College Board is now requiring very specific, (in some cases) non-chemistry related jargon and language, in order to score credit in answers.

So in a nutshell one’s ability to decipher the *chemistry* on the AP chemistry exam, could appear to be of increasingly **diminishing** importance when it comes to scoring highly on the same. There's a significant debate right now as to whether this is the right direction to be following or not.

How about Nordonia?   
  
As in prior years, you, as Nordonia students, stood out from the crowd in 2015! Your scores continued to be skewed well above a "3", considered the passing score. While the global results reveal 20-30% of students receiving a score of "1", no Nordonia student, to my knowledge, has ever received a "1". I hope that as you reflect on your score, you keep in mind the difficulty of the exam, and the global distribution of scores. Hold your head high, and also remember that you are all champions in my eye. You will all be rewarded in college and your careers from having taken the course and the exam.  
  
Mr. Arbuckle