

## **Interview with High School Math Teacher at an Urban Charter School October 2009**

**Note on this interview:** These bullet points are summarized versions of the comments made by the math teacher (and head of the math department) at the urban charter school.

### **Q: Do you think the MCAS adequately measures what students know?**

- It only measures a limited scope of content, and it only uses a portion of the questions it could.
- By Tenth Grade, it's been a long time since students learned the material, as it could be material they learned in Eighth Grade or even as far back as Sixth Grade.
- In terms of linear questions and order of operations questions—it's been a long time since they originally learned the content.
- At this urban charter school, the teachers do not commonly use multiple choice formats in math class, so at teachers have tried to integrate multiple choice into the regular curriculum. However, on the MCAS, students don't get partial credit on constructed response but students are used to getting partial credit during their regular math classes.
- Students receive coaching to the test.
- The teachers try to integrate explaining math problems within math class.

### **Q: How has pedagogy/instruction/curriculum/teaching changed since NCLB?**

- It's good to set a goal for what is reasonable for students to know, but it's so differential across states, as they each create their own frameworks and standards. There is a lot of variation across states because there is no consensus what "proficient" means.
- Yes, students need to learn things before they graduate, and we need to assess that, but there needs to be consensus among states.
- If there are clear expectations that form the pedagogy, that is fine, but there is a thin line between that and teaching to the test.
- [This urban charter school] tries to prepare students to the content and the format of the MCAS, as they try to align their math curriculum to the MCAS. Before NCLB, it seemed that teachers were given a textbook and told to teach chapters one to twelve; now we think about the end result and work backwards.

### **Q: What does [this urban charter school] do to help students pass the MCAS?**

- In 9<sup>th</sup> and 10<sup>th</sup> grade, students take math for 7 hours a week. In 9<sup>th</sup> grade, they take geometry and in 10<sup>th</sup> they take Algebra 2; thus, they have covered all the material that is on the MCAS before they have taken it.
- They take a Mock-MCAS each November. Teachers look at those results and put the weakest performers in afterschool class that meets one hour per week for 6-8 weeks. Content is reviewed and test-taking strategies are given.
- The week before the MCAS, regular math class time is devoted to gearing up for the MCAS. They do MCAS prep, review content, review the data material like box and whisker plots, mean, median, mode, and reinforce strategies for taking it.
- Throughout the two years, they integrate MCAS problems in homework sets especially since they don't typically use multiple choice in class.

- There are two projects each quarter that build the foundation for doing better and learning more.
  - 1- Large problem that they have likely never seen anything like and they have to solve the problem and explain how and why they did things.
  - 2.) Portfolio: explain in writing
    - skill: explain algorithm or procedure you have learned, how and why you do each step
    - unit question: large conceptual question: what is slope and explain?

**Q: Being at a charter schools, do you feel increased pressure to get students to pass the MCAS?**

- When this teacher worked at another school, that school pushed kids through the first MCAS and dealt with failures and triaged after the fact. The school was not successful at meeting AYP, so they had to “show” that they were trying to do better, but in reality the efforts were not helpful or good for anyone.
- She had to teach the “failure class,” and her job was to boost kids who only got 8 questions right to getting kids to answer 23 items correctly. She had no idea how to get them to pass.
- That school did not look at whole scope in terms of the question: are we preparing kids for what they need? But at [this charter school] there are strong MCAS math scores. Here, the students perform really strong in math because the school has a longer perspective; they want to make sure kids are prepared.
- However, the Grade 9 and Grade 10 math programs are much stronger than Grade 11 and 12, because there is more of a focus on Grade 9 and 10, because that is what the MCAS tests. Because this school is concerned about achievement gap, they want to boost Grade 11-12 achievement. The achievement gap is also easily seen by examining the students’ SAT scores. Additionally, students aren’t doing very well when they go to college; they are not even placing into classes they should, thus, illustrating they might not have mastered the material. As a result, this school is trying to improve the Grade 11-12 departments.

**Q: Do you think NCLB has left fewer children behind?**

- NCLB provides pressure to make sure kids are provided with a good education (esp. since they are a charter), but it is sad that there has to be a threat. It is morally upsetting that people have such low expectations and it is pathetic that we need NCLB to motivate people to provide kids with a quality education. People won’t rise to high caliber unless there is a threat or pressure...just like with theories of human motivation in general.

**Q: How does NCLB complicate your job or add more burdens?**

- Has to manage Mock MCAS
- Has to deal with item analysis of the MCAS and decide what is done well and not-so-well
- Goal for upcoming year: 80% advanced and 20% proficient
- It’s not good enough for them just to pass.
- I’m glad there is standard test to guide instruction, and because there is not one for Grade 11 and 12, this school is struggling. They can’t measure how much the kids are learning.
- MCAS provides helpful info and data to work with.