

## SCHOOL COMMITTEE

(Official Report)

### Roundtable Meeting

November 14, 2017

Called for 6:00 p.m. on Tuesday, November 14, 2017, in the Henrietta S. Attles Meeting Room, Cambridge Rindge and Latin School, 459 Broadway, Cambridge, for the purpose of discussing Upper School Math.

Members Present: Ms. Bowman, Ms. Dexter, Mr. Fantini, Mr. Harding (~~ABSENT~~), Ms. Kelly, Ms. Nolan, and Mayor Simmons

Also present: Dr. Kenneth Salim, Superintendent of Schools  
 Dr. Carolyn Turk, Deputy Superintendent  
 Dr. Anda Adams, Asst. Superintendent for Curriculum and Instruction  
 Mr. James Maloney, Chief Operating Officer  
 Ms. Claire Spinner, Chief Financial Officer  
 Mr. Tony Clark, Educational Liaison to Mayor  
 Mr. Dan Monahan, CEA President

Ms. Julie Ward, Math Coordinator K-12  
 Mr. Damon Smith, Principal, CRLS  
 Mr. Jeff Gaglione, Dean of Curriculum and Programs for CRLS Math Department  
 Mr. Daniel Coplton-Newfield, Head of Vassal Upper School  
 Ms. Julie Craven, Head of Rindge Avenue Upper Campus  
 Mr. Mirko Chardin, Head of Putnam Avenue Upper School  
 Ms. Sarah B. Marrero, Principal Amigos School  
 Mr. Manuel Fernandez, Head of Cambridge Street Upper School

Mayor Simmons in the Chair.

A quorum of the School Committee being present, the Chair called the meeting to order at 6:00 p.m. Mayor Simmons read the call of the meeting and then turned the meeting over to the Superintendent for introductory remarks. Dr. Salim stated that last year a series of Roundtables were set up and this meeting represents the Upper School Mathematics section of the series.

The Superintendent explained that they intend to go over a couple of the specific strategic objectives of the district plan frameworks, and talk about providing engaging learning for students and staff. Dr. Salim stated that some of the outcomes of this evening will focus on commitment around equity, access, a gateway to college and career readiness. The Superintendent stated that half way through this presentation they will pause for a discussion and then finish the second half of the presentation. The Upper School Heads will speak about what is happening at the schools across the district and plans to enhance our Upper School math program.

Ms. Ward began with an overview of the presentation:

#### Gateway of College & Career Readiness

Key MA DESE Framework – Math Shifts in 2011, 2017

- Making Sense of Mathematical concepts
- Performing Mathematical Procedures Fluently
- Using Mathematical Concepts in Problem Solving Applications

#### Shifts 2011, 2017

- Shifts previously taught in Algebra 1 now begin in grade 8
- 50% of the traditional Algebra 1 course linear functions and equations, systems of linear equations is now included in 8<sup>th</sup> grade content standards, along with serious work in statistics and geometry
- The other half of the Algebra 1 topics e.g., polynomials, quadratic equation are in the high school content standards

#### Overview of Current Data

- ✓ Grade 6 Math MCAS Results by subgroup
- ✓ Grade 7 Math MCAS Results by subgroup
- ✓ Grade 8 Math MCAS Results by subgroup

#### Summary of 2017 MCAS Results

Average performance of some subgroups is below the state and comparison district averages

- Students with Disabilities
- English language Learners
- Economically Disadvantaged
- African American/Black

Differences get larger from grade 6 to grade 8

#### Current Work

Professional Learning and Educator Support

- Unpacking standards & revising curriculum maps using Understanding by Design
- Math coaching focused on Number Talks
- Revising interim assessments to monitor progress during the year
- Building teacher capacity to use formative measures to improve instruction
- US math department meetings
- US + HS Teacher collaboration & alignment

#### Student Support

- ❖ Growth mindset embedded into instruction
- ❖ Summer math programs designed to review and accelerate
- ❖ Expanded WIN (What Individuals Need) blocks
- ❖ Individual student support structures

#### Piloting New Models

- ✓ Professional learning for educators
- ✓ Changing school culture re: math practice
- ✓ Use of special educators and math interventionists
- ✓ Student support through math intervention
- ✓ Student enrichment through math team
- ✓ Focus on growth mindset
- ✓ Family math nights

Mr. Fernandez explained that students have struggled through the programs. Ms. Bowman asked when the pilots started, it was answered that they began in July.

Dr. Adams stated that we are now at the 10 minute pause. She wants to explore investigation and long-term discussion; what do you notice, what do you wonder.

Ms. Bowman asked about what would be identified as success, how does success look in the first year and what do you want to expand on. Mr. Fernandez answered that black and brown students are looking at themselves differently, more positively. White students are also looking at black and brown students differently; they are beginning to see them as equals. He added that the next level of success would be to see ALL students walk into the classroom overly excited about learning math.

Ms. Nolan stated that she is excited about the pilot. She wants to know what we have learned about the students coming up through the ranks, and asked if they are adequately prepared for the work that they will be facing in the upper grades? Julie Cravens answered that they are very engaged with the middle grades but not ignoring the K-5 grades. The intention is to focus on middle schools first and then concentrate on the elementary schools.

Mr. Harding joined the meeting at 6:35 p.m.

Mr. Fantini indicated that the MCAS 2.0 is a very rigorous exam and he has the sense that our staff are working very hard at it, acknowledging that it is very difficult work. He wonders about the response to intervention, and also wonders if we are periodically benchmarking where students are so we know where help is needed? Julie Craven responded that they have a new specialist and data analyst who has created a lot of accessible data for the teachers, coaches and interventionists to have access to the needed data required to determine students progress. Each school is approaching the data in the way that makes the most sense for their school.

Ms. Kelly stated that she is reminded of the competitive traditional way we used to approach math. She stated that Mr. Fernandez is doing something different and better, by creating a different culture by which students are learning math. She commented her observations are that math is for special bright students. We make all students learn how to read and should do the same for math. The movement toward the universality of math is a good thing along with eliminating labels.

Ms. Dexter asked if there are big differences in the tests that are taken on computer and on paper. The response was that 8<sup>th</sup> grade was required to take the test on computers across the State; the 6<sup>th</sup> and 7<sup>th</sup> graders took it on paper. They are different tests. She is curious what the 8<sup>th</sup> graders tests look like.

Returning to the presentation, Dr. Adams turned attention to the upper school heads. She began with the Pathways in Upper School Current Two-Tiered Structure. Course enrollment was examined. It is a very complex issue; no data source tells the whole story or solves all issues. This is only one part of the data. It increases in complexity by grade level rather than demographics. African American students that are enrolled in AMP are not meeting expectations. When talking about equity and access, we are not where we should be. Mr. Harding asked what multi race means and stated that there needs to be clarification on Black and African American, they are not the same. There are many races. They are all lumped into one category; it depends on how they report themselves.

#### Guidance from MA DESE on Math Pathways

As we examine possible pathways, we want them to:

- Prepare ALL students to graduate from high school ready for college and career mathematics.
- Include options for students to accelerate in high school in order to complete an AP course.

#### Acceleration Considerations

- Clarifying our goal: is our goal “enrollment in Algebra I in Grade 8 or the completion of college readiness”?
- Acceleration at any time requires compacting the curriculum (e.g. 3 yrs. of math content in 2 yrs.), not skipping content. That compaction looks different in MS than HS
- Unintended consequences for students

### Current CRLS Math Pathway

Support and acceleration opportunities build into our high school schedule/program:

- 4x4 block schedule allows for doubling up
- Math Move Up enables students to move from College Prep math to Honors math during the school year
- Summer Math Preview Program provides underrepresented students exposure to content before taking class.

Ms. Kelly asked about the rigor of the math courses. Ms. Cravens responded that K-8 sets for clear levels. In high school it gets complicated.

Mr. Harding asked if it was on the student and family to decide which pathway to take? Gaglione stated that there is student, family, teacher and guidance input. It is a joint decision between all and it is possible for all families that want it. When students are choosing their courses, they are shown all of the pathways and there are joint decisions.

The high school students visit the 8<sup>th</sup> graders to give information about what the high school will look like. There are some concerns from the Mayor and Mr. Harding about how do we know for sure that the parents know about this journey with their children, if they are not on board, they won't be able to take advantage of this.

Mr. Harding stated that the students in the know always get whatever they need. His concern is for the students whose parents don't know. Consulting parents and giving them options is not really good enough. If you are a parent that knows how to navigate around this system, all is good, if not, students are left behind.

Mr. Fantini in the Chair at 7:10 p.m.

Ms. Bowman stated she appreciates the conversation, but is also concerned about the students that are not proficient. We need to raise the expectations. The one category that is way too low and needs to be dealt with more strongly.

Ms. Simmons in the Chair at 7:15 pm.

Mr. Gaglione mentioned the block schedule stating that the majority of the math classes are semester based except entry level geometry, algebra and calculus classes. No matter where a student begins their journey in high school they can get to calculus. He explained the math Move Up Program, as having students that are in college prep algebra 1 and college prep geometry classes. The teachers are asked who they feel should be in honors and those students are moved up. It has been successful. There is also the summer math preview program, it is a relatively new program. The students are allowed to preview the material over the summer before they actually take the course in the fall; the preliminary data is very encouraging.

Ms. Marrero spoke about what weighs heavily on her conscience as it relates to unintended consequences. The current curriculum perpetuates the myth that black and brown students cannot be successful in math. She does not want her students marginalized. Teachers need to believe in their students if they expect their students to believe in themselves.

The following issues, concerns and questions were discussed:

- How the students label themselves
- Having diversity in the classroom benefits all students
- Inequity in classrooms.

- Students ask why try to do well, teachers don't think we are smart
- Our students shut down and don't try. One thing that is learned is that these comments don't come up in 6<sup>th</sup> grade math. It all starts in the 7<sup>th</sup> grade
- Student voice, if our goal is to create the ability of our students to think out loud, we need to change how our students talk about math and learn from each other
- Parents are worried about how their children are doing in math
- The math pathways create limited factors in learning
- The lack of understanding math spirals into the family
- Student voice in the classroom is vital
- Parent perception

Mr. Coplon-Newfield stated that some unintended consequences are that there is not enough flexibility in our core classes. There are some factors in terms of staffing; i.e. classes that have over 50 students, the math interventionist is spending time teaching class and not doing the small group intervention that is needed. Another important issue that is not related to academics is the social emotional learners. Some parents don't want their children in classes where the students don't want to try or cannot learn.

Ms. Kelly commented on how much the overall school culture is affected. Labeling of self and others is rampant.

Ms. Dexter wants to know what a heterogeneous model looks like and asked if they have enough resources.

Mayor Simmons stated this is a lot of information to take in. She suggested a Saturday all day roundtable. She appreciates launching it, and in another 2 months, we have this conversation again.

Mr. Fantini appreciates the honesty from the upper school heads. He asked if we are spending more time on math than we do with other disciplines.

Dr. Adams responded that there is a sense of that happening across the districts. Some districts do spend more time on math than we do and they also have longer school days.

Mr. Harding thanked the heads of the upper schools for their honesty. He offered we need to think about what can be done, both long and short term. Is there a quick kind of fix that can be done? We need to look at the budget implications that may be needed. We can look at this in the same way we looked at leveling up. This is where we are with math. This is not new; these numbers have been bad for quite some time. What should we do? We need to identify how to solve the problem, not just keep seeing that there is a problem, and believes we need to start at the budget process.

Ms. Nolan stated that this presentation is a lot to react to. It is disturbing. Math is foundational. We need to get this right. Poor kids and girls are told they cannot succeed and they live up to it. She suggested we consider our breakthrough students. Are we sure that program is working? Miss Nolan also suggested that The Young Peoples Project may have some understanding of what it takes to bring students up to where they need to be. It is imperative that we move forward.

Ms. Bowman stated this is a lot of information to process and go through. She would like to have action oriented conversations to be sure we get to next steps. We need to see evidence through our framework and how we are going to leverage that framework to hold ourselves accountable to the district. The cultural racial component is fascinating. We either look directly at it or dance around it. Ms. Bowman mentioned growing up in the south without the assumption that a classroom full of black students is a sub-standard classroom. The assumption is perpetuated more here. We need to stop causing harm in our district. Lastly, we need professional development on how math is being taught in class.

Mayor Simmons thanked Dr. Salim, Dr. Turk Heads of Schools and others for this presentation. We have been having the same conversation for a long time. She wants to know how we are going to be

responsible to our students? We are resource rich and need to compare ourselves to other districts. She also has a hard time with the categories allowing students to self identify may not be a good idea.

Dr. Salim made closing remarks, thanking everyone. The information in the presentation will be shared with the School Committee. It is only the beginning of a series of conversations.

On a motion by Mr. Harding, seconded by Ms Bowman, the meeting was adjourned at 8:00 pm.

Dosha Beard  
Interim Executive Secretary  
to the School Committee

**Distributed Back-up Documents** (copy on file in the School Committee office):

PowerPoint presentation

**E-mail communications received:**

- ✓ Bill Boehm re Upper School Math Equity
- ✓ Andrew Richman re Roundtable be videotaped and broadcast
- ✓ Kelly Dolan re Roundtable be videotaped and broadcast
- ✓ Pamela Blau re Roundtable be videotaped and broadcast