



**Department of  
Education**  
*Carmen Fariña, Chancellor*

**Office of School Quality  
Division of Teaching and Learning**

# **Quality Review Report**

## **2015-2016**

**M.S. 267 Math, Science & Technology**

**Middle School K267**

**800 Gates Avenue  
Brooklyn  
NY 11221**

**Principal: Patricia King**

**Date of review: January 14, 2016  
Lead Reviewer: Rod Bowen**

## The School Context

M.S. 267 Math, Science & Technology is a middle school with 178 students from grade 6 through grade 8. In 2015-2016, the school population comprises 2% Asian, 62% Black, 25% Hispanic, and 3% White students. The student body includes 11% English Language Learners and 32% students with disabilities. Boys account for 55% of the students enrolled and girls account for 45%. The average attendance rate for the school year 2014-2015 was 86.4%.

## School Quality Criteria

<b>Instructional Core</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
1.1 Ensure engaging, rigorous, and coherent curricula in all subjects, accessible for a variety of learners and aligned to Common Core Learning Standards and/or content standards	<b>Celebration</b>	<b>Well Developed</b>
1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best that is informed by the instructional shifts and Danielson <i>Framework for Teaching</i> , aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products	<b>Additional Findings</b>	<b>Proficient</b>
2.2 Align assessments to curricula, use on-going assessment and grading practices, and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom levels	<b>Additional Findings</b>	<b>Proficient</b>
<b>School Culture</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations	<b>Additional Findings</b>	<b>Proficient</b>
<b>Systems for Improvement</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning	<b>Focus</b>	<b>Proficient</b>

## Area of Celebration

**Quality Indicator:**

**1.1 Curriculum**

**Rating:**

**Well Developed**

### Findings

School staff ensures that curricula are aligned to Common Core Learning Standards and strategically integrate instructional shifts. Rigorous habits and higher order skills are embedded in a coherent way in curricula and academic tasks across grades and subjects.

### Impact

Curricula and learning tasks across grades and subject areas are coherent and promote college and career readiness for all students, including English Language Learners and students with disabilities, as they require them to demonstrate their thinking.

### Supporting Evidence

- English Language Arts (ELA), social studies and science curricular documents required students to identify and use text based answers either in writing or discussion. A science task contained the prompt: Explain why the particles would be arranged like this. Use evidence from the article in order to support your reasoning. In the guided practice section of an ELA lesson plan, the 'we do' question was: What other textual evidence can I give to support my response of the solution being controversial?
- Annotation was cited as a close reading strategy across text based learning activities. An ELA plan required students to re-read their annotation of a text in order to formulate a claim. A mini lesson described a reading activity where students would annotate various articles about matter to learn more about particles. Another plan presented how a teacher would model how to annotate to determine the central idea.
- A science lesson plan culminated in a discussion informed by groups of students predicting inherited genetic disorders.
- A math plan noted that students would have to share their new thinking after having been introduced to another way of answering a problem.
- In addition to daily lesson plans, across all subjects and grade levels, curricula are presented in Week at a Glance (WAG) documents which show weekly progressions of Common Core Learning Standards, teaching points, learning objectives, learning targets, misconceptions, vocabulary, homework, essential questions, differentiation and exit ticket practices.

## Area of Focus

<b>Quality Indicator:</b>	<b>4.2 Teacher teams and leadership development</b>	<b>Rating:</b>	<b>Proficient</b>
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### Findings

The majority of teachers are engaged in structured, inquiry-based professional collaborations that promote the achievement of school goals and the implementation of Common Core Learning Standards. Though teacher teams are systematically analyzing key elements of assessment data and student work, teacher classroom practice is not analyzed as effectively across teams.

### Impact

The instructional capacity of teachers has strengthened as has the implementation of Common Core Learning standards, however, the school is still working toward school-wide instructional coherence and increased student achievement for all learners.

### Supporting Evidence

- During a math team meeting, a teacher presented the outcomes from her implementation of strategies suggested in a prior team meeting. The recommended strategy of requiring that students justify their steps proved effective based on student work shared. A student work sample showed, "First I converted 15% into a decimal by moving the decimal two spaces to the left to make .15. Next I..." The meeting then shifted to a new teacher presenting her problem of practice. While following a looking at student work protocol, teachers spent time reviewing the work followed by a round of positive comments and then noted student misunderstanding. Then the team shared instructional recommendations to address the misunderstandings. Next steps identified for the presenting teacher included: do a brief lesson on combining like terms versus focusing on solving equations; and tease out the basic concepts embedded in the problem and move from there.
- A science team agenda showed a focus on discussing strategies such as citing textual evidence, envisioning, turn and talk, checking for understanding and Common Core Learning Standards in each room. However, it was not clear what specific instructional next steps resulted from the discussion.
- Interim assessment data is disaggregated across content areas. Analysis forms contained headings such as: Common Core State Standards, most incorrect option choice, misconceptions, how to reteach and lowest ten students' names. Specific instructional next steps listed based on the analysis of math data were: explain what tally means and how to count them and create a fraction and use visuals and tiles.
- Science assessment analysis forms track student growth over time by comparing initial assessment data to data from retests which assess the same skills.

## Additional Findings

**Quality Indicator:**

**1.2 Pedagogy**

**Rating:**

**Proficient**

### Findings

Across classrooms, teachers consistently implement strategies that reflect the belief that students learn best when they collaborate and discuss with each other.

### Impact

Teachers effectively use Danielson *Framework for Teaching* informed practices that support and promote student discussions that reflect high levels of thinking and participation.

### Supporting Evidence

- Groups of students were observed discussing the distinctions between solids, liquids and gases. A student referred to annotated text and shared that he learned that gas has no defined space. He then asked others in his group if they would like to agree or disagree. He called on a peer who agreed by stating, "I'd like to add on to what he said. Gas takes the shape of the container it is in."
- In a math class students were overheard grappling with the concept of slope. In one group a student explained to a peer that his error was that the y was over the x, instead of the x being over the y. At another table a student said, "I would like to elaborate on what she's saying. When you plot the line, for example (-2, 10), the run is going horizontally and the rise is going vertically."
- Students in a social studies class actively discussed Islamophobia based on reading they had done. "I think Muslims were scared of being harassed by other people." A classmate responded, "I disagree with them being scared. The harassment made them feel insecure about who they were." The conversation continued with students discussing what they would do if in the same situation, as well as what the author's intent was in writing the article.

<b>Quality Indicator:</b>	<b>2.2 Assessment</b>	<b>Rating:</b>	<b>Proficient</b>
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### **Findings**

Across classrooms, assessment practices are aligned to the school's curricula and reflect the use of ongoing checks for understanding and student self-assessment.

### **Impact**

Students and teachers receive actionable feedback regarding student achievement which results in effective adjustments that meet all students' learning needs.

### **Supporting Evidence**

- Units of study contain diagnostic, mid-unit and end of unit assessments. In addition, interim assessments are administered every five weeks in ELA and math. Identified student misconceptions from such assessments include not understanding the concept of variable, and the skill of inferencing.
- In referencing a math task, a student noted that she did not explain her work well or use mathematical vocabulary. Another student discussed feedback on a social studies essay by asserting, "I had a strong thesis to back up my claim, but I can make the essay better by using more additional information from other places than the text."
- Comments on a student's work included the glow: you maintained good focus, controlled your idea, and your writing is organized. The grow stated: work on incorporating more content specific vocabulary.
- Across classrooms, teachers consistently used check lists during instruction to track student engagement and proficiency. One such check list which lists all students in the class had the categories: Do Now, Skill Share, Practice, Exit Slip and Homework. Notes, which informed next steps for the teacher included: Check-in, revisit and pull out.
- During an ELA class, after referring to a checklist, a teacher gathered the class's attention and asked, "How does this exercise impact your understanding of the text? Think. Now talk amongst yourselves." He then continued circulating to monitor student conversation regarding his strategic prompt.

<b>Quality Indicator:</b>	<b>3.4 High Expectations</b>	<b>Rating:</b>	<b>Proficient</b>
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### Findings

The principal consistently communicates her expectation that teachers implement purposeful questioning and discussion techniques during instruction. Teacher teams and staff consistently communicate high expectations and offer ongoing feedback and supports to students.

### Impact

Teachers receive training and are held accountable for implementing effective questioning and discussion practices. Students engage in experiences that prepare them for the next level.

### Supporting Evidence

- Teacher professional goal setting documents showed specific plans to: design questions about misconceptions using Webb's *Depth of Knowledge* that align to *Code X* curriculum; encourage students to create questions among themselves, with the questions not addressed to the teacher, but rather to their peers; and have students formulate and write questions for the work other students in the class have presented.
- Continuous training in questioning and discussion techniques occurs via cycles of teacher inter-visitations which take place every three weeks. During these peer observations, teachers look for use of student-led discussion prompts that were created collaboratively by teachers and are posted in classrooms.
- Students spoke of words that they are given weekly by teachers across subject areas that help them write argumentative essays. "We have to use them in our writing at times during that week." "Sometimes the words are in the articles we read and we use them in discussions and debates." Without referencing notebooks or other material, they shared that the week's "word gen" words included: conception, range, genetic and circumstances.
- In referencing a college trip, a student stated that she learned that college is hectic, you choose your own schedule, and professors don't hold your hand. Another student added to the last point by saying that when they don't understand a concept, teachers encourage them to do research on line and go to their peers for help. Teachers themselves are the last resort. "You have to figure out answers on your own, and only go to the teacher if you really need help, just like in college."