



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

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

# **Quality Review Report**

## **2014-2015**

**The School of Math, Science & Technology**

**Middle School K349**

**35 Starr Street  
Brooklyn  
NY 11221**

**Principal: Rogelio Parris**

**Date of review: February 5, 2015  
Lead Reviewer: Roxan Marks**

## The School Context

The School of Math, Science & Technology is an intermediate school with 355 students from grade six through grade eight. The school population comprises 6% Black, 93% Hispanic, 0% White, and 1% Asian students. The student body includes 25% English language learners and 4% special education students. Boys account for 45% of the students enrolled and girls account for 55%. The average attendance rate for the school year 2013-2014 was 93.0%.

## 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>Additional Findings</b>	<b>Developing</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 Framework for Teaching, aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products	<b>Focus</b>	<b>Developing</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>Developing</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>Celebration</b>	<b>Developing</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>Additional Findings</b>	<b>Developing</b>

## Area of Celebration

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

School leaders consistently communicate high expectations to the staff connected to the Danielson Framework for Teaching and partners with organizations to support the development of teachers.

### Impact

The school is developing training and systems of accountability to provide meaningful feedback to families about progress of students towards goals.

### Supporting Evidence

- School leaders communicate high expectations through the staff handbook and memos providing advisement and guidelines to staff. A partnership with City University of New York (CUNY) Translanguaging program supports the development of pedagogy that works with English Language Learners (ELLs) and Students with Interrupted Formal Education (SIFE). One of the goals was to enhance the ecology of school as evidenced by a welcoming team to support newcomers and all public spaces reflect labels and signs in both English and Spanish. Partnership provides professional development for teachers of ELLs and this year is beginning to incorporate training for content area teachers.
- Teachers' skills are beginning to be developed in facilitative leadership. Participation in the Teacher Leadership Program and Teacher Incentive Fund is intended to support peer coaching through modeling and discussions. Although these supports for pedagogy are evident in the school, the absence of a professional development plan to develop teacher pedagogy results in lack of focus and cohesion across the school.
- The school provides support for families and students in understanding expectations connected to college and career readiness. Advisory lessons provide students with social and emotional lessons intended to develop skills needed to be successful in college and careers. Students shared that they do not have a student council to enable them to have a voice in decisions at the school.
- Teachers indicated that they contact parents to discuss academic and social difficulties and utilize the Tuesday time to meet with families. The school is developing a progress report that will provide feedback to families regarding the progress of students in meeting state standards.

## Area of Focus

**Quality Indicator:**

**1.2 Pedagogy**

**Rating:**

**Developing**

### Findings

Across classrooms teaching strategies inconsistently provide multiple entry points and scaffolds for students. Student work products and discussions demonstrate uneven level of thinking and participation.

### Impact

Instructional practices in most classrooms limit the opportunities for students to think deeply, engage in discussions and produce meaningful work products.

### Supporting Evidence

- In a grade 7 and 8 special education class, students were sitting in three groups analyzing the judgment made by the prosecutor and the impact on the main character. The teacher posed questions to students, what did the prosecutor call him? Teacher proceeded to say, he called a name? She was representing the blank? Did the prosecutor violate his human rights? In most classrooms, some questions were leading in nature thereby limiting students' abilities to make connections, as well as the use of more closed ended literal questions that limited student engagement and did not allow students to think deeply or engage in discourse.
- During a grade 8 social studies lesson, students were exploring whether the open door policy best served the interest of the United States or China. The teacher asked a series of questions that allowed a few students to fully engage in the discussion and students were beginning to use accountable talk stems. Students were prompted to work with their groups reading and responding to questions. The group task activity used four different worksheets based on their level. School leader explained that the key instructional strategy they are working on is discussion in classrooms.
- In an English as a second language classroom, students were divided in two groups consisting of beginners and intermediate with advanced level students. The objective was to be able to identify opinion clue words in a text and then determine if the statement is a fact or opinion. Spanish language was used to support students, along with charts in the room providing examples of opinion words, photographs and sentence starters provided entry points for students. In this classroom, the task was differentiated based on data and students worked with adequate support planned by the teacher. This level of discourse and engagement with task was not consistently seen in most classrooms. Flexible grouping and tier assignments provided access for students in the ESL lesson. However, in most classrooms visited, challenging tasks and students who led discourse were not evident.

## Additional Findings

<b>Quality Indicator:</b>	<b>1.1 Curriculum</b>	<b>Rating:</b>	<b>Developing</b>
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### Findings

The school curricula are in the process of being aligned to the Common Core Learning Standards and units are being developed by teachers. Higher order thinking skills are inconsistently found in curricula and academic tasks.

### Impact

The school has not integrated the instructional shifts and tasks created do not fully provide access for English language learners, students with disabilities or at risk students.

### Supporting Evidence

- The school recently purchased Core Curriculum resources for grade 7 and 8. The CodeX program is being adjusted to include more writing and a consultant is supporting this area of the work. Common planning time allows for English language arts and social studies teachers to enable them to infuse writing in the content areas. The use of Depth of Knowledge (DOK) by teachers is intended to transition from whole group lessons to more tailored plans for groups of students.
- During the classroom visits most teachers provided a lesson plan, however the vast majority of rooms did not have a unit plan for the content they were teaching. The principal provided a comprehensive pacing calendar for all core subject areas including foreign language that displays weekly schedule for the lessons. This document lists the standards addressed and the overall topic for the unit. However, unit assessment, academic vocabulary, interdisciplinary connections and college readiness are not evident in the outline document.
- Teacher shared that they are addressing the shifts through their instructional focus and working with students to cite text evidence, close reading activities and annotating of texts. Review of lesson plans reveal that some teachers plan for groups and differentiation during the lessons, however, most plans had vague descriptors such as for ELLs, students who have a good understanding of the book, or students who are struggling. Most lessons resulted in the tasks not being scaffolded or clearly modified to promote access for students. The use of vague terms as teachers plan for differentiation does not address misconceptions in students, provide support for students to access content and thereby resulting in missed opportunities by teachers to provide meaningful and purposeful support for at risk and struggling learners.
- During the interview with teacher teams, it was stated that some aspects of the CodeX program is difficult which resulted in omitting sections of the book. Decisions around curriculum units are made without the use of data or collaborative decisions at the team level, which results in the arbitrary skipping of content and units.

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

Across classrooms teachers use and create assessments and grading policies that are aligned to the curricula and data is not consistently utilized to inform instruction and curriculum decisions. Teachers' assessment practices reflect inconsistent use of checks for understanding.

### **Impact**

Teachers are limited in evaluating student outcomes and the overall effectiveness of curricula and instructional decisions including students groups, feedback and checks for understanding.

### **Supporting Evidence**

- New York State assessment data is analyzed showing percent correct for each question by class and includes disaggregated data for students with disabilities. However, the analysis did not specify standards associated with each question and as a result, the school does not focus on priority standards that will drive curriculum decisions in order to increase student achievement.
- Student work products in classrooms and on bulletin boards reflect various final grading formats. For example, some grades are drilled down to a performance level, but there were percentages on other work products and also ratio scoring. The varying ways of representing grades to students does not provide consistency and hinders the ability of students to understand how they are doing in some classes.
- Students shared that some teachers use exit tickets on a regular basis to assess understanding prior to lessons. During classroom visits, teachers were inconsistent in checking for understanding during and after lessons. Teachers were not taking notes as they observed students working in groups and there was little evidence collected to demonstrate ongoing use of formative assessments used by teachers to inform instruction.
- The school uses rubrics to provide feedback on work that was displayed in the school. Some work products also included next steps in the comment section of the rubric to support students with clear next steps for learning while others write a general comment. There was one example on a bulletin board of peer assessment, however this was not consistently seen in the majority of classrooms and feedback was mostly provided by the teacher.

<b>Quality Indicator:</b>	<b>4.2 Teacher teams and leadership development</b>	<b>Rating:</b>	<b>Developing</b>
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**Findings**

Teacher teams meet to look at student work, data and share strategies. Distributive leadership structures are being developed to support teacher leadership and voice in key decisions.

**Impact**

The work of teams does not typically result in progress towards goals for groups of students or improved students outcomes.

**Supporting Evidence**

- School leaders have developed a cycle for teams to meet representing vertical meetings for three sessions in the month and an entire staff meeting on the last session. During the whole staff session opportunities are available for teams to share their findings, strategies, or challenges. Teams use the other portion of the time to develop team building strategies, management and leadership skills. The school shared a list of teachers that participate in the Professional development team, MOSL, Attendance and other school based committees.
- During the teacher team observation, teachers were discussing the results of the mid-term assessments to look for patterns. The agenda consisted of various items including motivating students, current issues and helping students completing tasks and a section for questions and answers. There were many items listed which limits the ability of the team to look deeply into any specific topic given the time constraints. Evidence of prior agendas or artifacts for teacher team work was limited.
- School leader articulated that teachers are collaborating more and working on establishing a common language in order to increase their instructional capacity. Distributive leadership structures allow teachers to work on committees. However, teachers' voices in key decisions were not evident. For example, the instructional focus lacked involvement of teachers and resulted in the unpacking of the language and teachers attempting to fully understand how to proceed in working collaboratively towards that goal. As a result, there was limited ownership and buy in demonstrated by the staff.
- During the teacher team interview, it was stated that because scores are low after assessments are analyzed, individual or group goals are not created for students. Decisions around curriculum units are made without the use of data for collaborative decisions at the team level, which results in the arbitrary avoidance of specific content.