

Quality Review Report 2012-2013

School of Math, Science and Technology

Middle School K349

**35 Starr Street
Brooklyn
NY 11221**

Principal: Rogelio Parris

**Dates of review: June 4 - 5 , 2013
Lead Reviewer: Lillian Druck**

Part 1: The school context

Information about the school

The School of Math, Science and Technology is a middle school with 467 students from grade 6 through grade 8. The school population comprises 12% Black, 85% Hispanic, 1% White, 1% Asian and 1% other students. The student body includes 24% English language learners and 9% special education students. Boys account for 52% of the students enrolled and girls account for 48%. The average attendance rate for the school year 2011 - 2012 was 93.4%.

Overall Evaluation

This school is developing.

Part 2: Overview

What the school does well

- The school provides a safe and respectful environment that fosters the positive development of students' academic and personal skills. 1.4
 - The dean, guidance counselor and assistant principals engage in a team effort to establish a positive school culture that promotes learning for students and adults. Parents are contacted as soon as behavior issues arise with students and action plans and contracts are immediately created that students and parents sign for daily follow up on behavior in school. As a result there are fewer recidivist cases and a negligible number of suspensions reported this year. In partnership with Sears, grade 8 students worked in teams to design senior year tee shirts and the cover for their yearbook. The Leading Ladies is an organized group of female students that help at exit and entry points during arrival and dismissal times. The Mouse Squad is a team of students that work with the computer teacher to trouble-shoot technology problems in classrooms and in the computer lab. Therefore, students expressed that their ideas contribute to the improvement of the school and that their voices, talents and services to the school are valued.
 - The Graduate, Prepare, Succeed (GPS) program supports the school's efforts in working with students who experience attendance problems. GPS staff members collaborate with the school to provide target students with guidance, counseling and academic services to improve attendance and student learning outcomes. Each student is known well by one or more adults through the advisory program. Teachers contact parents in a timely manner to discuss academic and social challenges. The guidance counselor refers students to outside agencies for increased social emotional learning support. The school's attendance committee established a controlled system to monitor punctuality and ensure accurate reporting of attendance. As a result, the average attendance rate reflects an improvement from 93.4% to 95% current average attendance.
- The school organizes resources, partnerships and time effectively to support instructional goals in order to achieve success in meeting students' needs. 1.3
 - The increased number of incoming new arrivals and students with interrupted formal education (SIFE) prompted the organization of a grade 6 and grade 7/8 bridge bilingual Spanish class. A partnership with The City University of New York (CUNY) assists the school with the implementation of initiatives to improve instruction and learning outcomes for bilingual students. A Saturday Academy provides academic support for English language learners (ELLs) and includes English as a second language (ESL) classes for students and families to improve their English language skills. The Saturday Academy also supports newcomers and their families in their transition to the school system. The Achieve 3000 program provides differentiated online reading instruction for students in the school's bottom third and for English language learners. The Achieve

3000 assessment component provides information on students' progress toward meeting benchmarks. As a result, the school received above average scores on the most recent ELA Acuity assessments which show that 54% of the students in grade 6, 58% in grade 7 and 66% in grade 8 made significant achievement as compared to pre-assessment results.

- School programming includes time for teacher teams to meet regularly to collaboratively look at student work and plan academic tasks to improve student achievement. For example, the ESL/bilingual teacher team composed of content area and bilingual teachers surfaced learning gaps of ELL students, including newcomers and SIFE, related to the use of academic vocabulary, comprehension of nonfiction texts and citing textual evidence in writing. During meeting times, the teacher team selected high interest nonfiction articles, provided outlines to organize writing and planned lessons to teach annotation skills, vocabulary strategies, context clues and chunking of information to increase comprehension and enhance students' language acquisition skills. The team also identified academic interventions and extended day activities for target students in the bilingual grade 6 and grade 7/8 bridge classes. Consequently, the literacy skills of students in the bilingual program improved as noted in increased writing volume and use of academic vocabulary in writing artifacts compiled in work folders and posted on bulletin boards.
- School leaders use evaluation tools to assess classroom practice with a focus on improving professional growth. 4.1
 - Supervisors use the Danielson Framework as a tool to provide teachers with clear expectations for classroom practice as well as feedback and next steps following formal and informal visits to classes. Observation reports and supervisory artifacts from cycles of class visits provide timely feedback to teachers and refer to the elements of the teaching framework. Strengths, challenges and next steps for improvement focus on designing coherent instruction, establishing a culture for learning and using effective questioning and discussion instructional strategies. The principal states that the process to enhance teacher development is emerging with the recent support that the school has received from external consultants and the network's academic achievement coaches. Teachers confirm that the teaching framework provides them with clear guidance to improve their teaching skills. As a result, written feedback to teachers regarding their practice reflects a positive progression from developing toward effective ratings as measured by the teaching framework used by supervisors during class visits, thereby improving instructional practice and learning outcomes.

What the school needs to improve

- Improve the use of formative data and assessment results to evaluate student progress and inform curricular and instructional adjustments to meet the needs of all students. 2.2
 - Teachers use Acuity assessments that are aligned to the Common Core and a variety of rubrics, including performance tasks adopted from the Common Core Library, to assess student performance. Assessment data

is collected and used to determine student mastery of identified skills based on the item analysis of baseline data and periodic assessments. However, assessment data is not consistently used across classrooms to inform revisions to lessons and curriculum with the purpose of improving students' learning deficits. Additionally, the use of student self-assessments are not common practices across the school and checks for understanding were not observed during visits to most classrooms. Consequently, adjustments to academic tasks, lessons and instruction are not adjusted to meet the needs of all students and feedback to students is generic with limited guidance for improvement. Therefore, the school does not consistently provide tailored support or detailed next steps that are clearly understood by students to improve their learning, thereby hindering opportunities to increase their learning potential.

- Strengthen the alignment of curricula to State standards and increase rigor in academic tasks so that lessons promote high levels of thinking and cognitive engagement for all students. 1.1
 - The principal enlists the support of the network's achievement coach and access the Common Core library to guide their work in designing units of study aligned to the Common Core Learning Standards (CCLS). Curriculum maps and scope and sequence documents list essential questions, tiered activities, and supports for differentiation and extensions such as teacher conferencing, small groups, reports and graphic organizers. However, during some class visits students were assigned similar tasks involving the use of literacy or content area textbooks to respond to questions in notebooks and worksheets, copying information from texts on templates provided by teachers and working on activities that required a basic application of skills or routine procedure. Therefore, assigned tasks and delivery of lessons do not consistently promote rigorous habits to engage all students, specifically English language learners and students with disabilities. As such, this limits students' potential to meaningfully participate in learning activities that promote critical thinking skills and accelerate their learning.
- Promote consistency in the use of instructional strategies and ensure that lessons include multiple entry points so that they fully challenge thinking to improve student learning. 1.2

The Danielson teaching framework provides clear expectations for classroom practice and guides the school in refining their practices and beliefs about how students learn best. The school's literacy program offers a range of strategies for students at various levels and recommends a variety of resources to build on learning, activate thinking and differentiate instruction for diverse student groups. However, during class visits we did not observe the consistent use of multiple entry points including adequate scaffolds, interactive activities and adaptations to learning resources that challenge and push the thinking of high needs students, including students with disabilities and English language learners. Additionally, in some classrooms, although students were assigned to work in groups, we observed some students working independently on the assigned group tasks or one or two students dominating group work. As a result, some students are not always motivated to fully participate in learning activities or discussions that

foster higher levels of thinking and maximize their learning. This limits the range of learning opportunities that would enable these students to work to their full potential to generate high quality work products that meet the demands of the CCLS.

Part 3: School Quality Criteria 2012-2013

School name: School of Math, Science and Technology	UD	D	P	WD			
Overall QR Score		X					
Instructional Core							
<i>To what extent does the school regularly...</i>	UD	D	P	WD			
1.1 Design engaging, rigorous, and coherent curricula, including the arts, physical and health education, for a variety of learners and aligned to key State standards?		X					
1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best that is informed by a research-based, common teaching framework and is aligned to curricula, engaging and meets the needs of all learners so that all students produce meaningful work products?		X					
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?		X					
School Culture							
<i>To what extent does the school ...</i>	UD	D	P	WD			
1.4 Maintain a culture of mutual trust and positive attitudes that support the academic and personal growth of students and adults?			X				
3.4 Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve them?		X					
Systems for Improvement							
<i>To what extent does the school ...</i>	UD	D	P	WD			
1.3 Make strategic organizational decisions to support the school's instructional goals and meet students' learning needs as evidenced by meaningful student work products?		X					
3.1 Establish a coherent vision of school improvement that is reflected in a short list of focused, data-based goals that are tracked for progress and are understood and supported by the entire school community?		X					
4.1 Use the observation of classroom teaching with a research-based, common teaching framework and the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection, with a special focus on new teachers?		X					
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning?		X					
5.1 Evaluate the quality of school- level decisions, making adjustments as needed to increase the coherence of policies and practices across the school, with particular attention to the CCLS?		X					
Quality Review Scoring Key							
UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed