

Quality Review Report 2010-2011

School of Math, Science and Technology

Middle School K349

**35 Starr Street
Brooklyn
NY 11221**

Principal: Rogelio Parris

Dates of review: March 1 - 2, 2011

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 518 students from grade 6 through grade 8. The school population comprises 13% Black, 84% Hispanic, and 3% other students. The student body includes 28% English language learners and 5% special education students. Boys account for 51% of the students enrolled and girls account for 49%. The average attendance rate for the school year 2009 - 2010 was 90.0%.

Overall Evaluation

This school is developing.

Part 2: Overview

What the school does well

- The school sets goals that focus on improving academic achievement so that there is a shared commitment that positively impacts student learning outcomes.
 - The school's overarching goals and action plans focus on improving the performance of students in English language arts and math. School goals pay particular attention to improving learning outcomes and enhancing the social emotional development of English language learners (ELL), students with disabilities and students who are over age. Goal setting is informed by data from quarterly grades, State test results, classroom exams and periodic assessment data. The school sets specific goals for students who are failing one or more major subjects based on quarterly grades. As a follow up, the school recommends participation in Saturday programs, tutorials and other supplementary services to enhance learning outcomes as evident in higher test grades on unit tests and improved reading comprehension.
- School leaders and teachers use a range of relevant data to gain a good understanding of the performance of students so that school decisions address identified strengths and challenges.
 - Data binders in the principal's office capture pertinent information from various sources such as ARIS, summative and periodic assessment data, attendance, incident reports and core subject grades. The administration uses the information to create an overall understanding of the school's strengths and challenges. Therefore, school leaders and staff use the information to evaluate the effectiveness of decisions which result in increased attendance rates and greater participation in Saturday programs and academic support activities.
- Students greatly appreciate the school's secure learning environment that is conducive to ongoing learning and supports their needs.
 - The school offers an advisory program that promotes a respectful and safe learning environment. Homeroom teachers meet with their students twice a week to support them socially and emotionally. In addition to the school guidance counselor, students benefit from two additional AIDP (Attendance Intervention Dropout Program) counselors who focus on improving attendance and small group counseling. As a result, students feel they have one or more adults they can turn to in the school for support and guidance. As one student stated, "There is always someone I can talk to in school when I have a problem."
- The school effectively supports students' personal development and academic growth so that they succeed in meeting their learning goals.
 - The school dean and guidance counselor provide staff development on conflict resolution and strategies that promote optimal learning for adolescent students. The school also provides training on strategies to

address discipline in the classroom. As a result, the staff is gaining confidence in addressing academic and behavioral issues through the use of varied alternative approaches, including the use of functional behavioral intervention plans. Consequently, behavior has improved and teachers have taken greater ownership in managing potential conflicts resulting in a decrease in classroom infractions and suspensions.

- The school sustains an effective relationship with the Bushwick Ridgewood Program. This external organization offers students authentic learning opportunities and provides youth development services, which fully support the school's goals to improve students' personal and academic skills. As a result, students' self esteem issues are effectively addressed and constructive behavior is fostered, leading to successful school experiences that promote their personal growth.
- The school conveys clear expectations to students and parents which lead to a collaborative effort toward improving academic achievement.
 - Parents value the school's efforts in communicating consistent expectations for students' academic, attendance and personal success. Students and families participate in meetings that provide important information regarding promotion, course requirements, State assessments and leadership opportunities. For example, the school held a special meeting for parents of students with poor attendance to discuss the impact of attendance on student achievement. As a result, students and parents understand their roles and responsibilities in meeting the school's clear expectations, leading to a joint endeavor to improve student learning.
 - A core group of parents participate on the school leadership team and are proud of their active role in the school's decision-making process. They contribute ideas for extra-curricular activities and eagerly support school-wide activities such as the annual fashion show and various community celebrations. Consequently, parents appreciate the opportunities the school offers for their involvement and constantly support the school's efforts in expanding meaningful family engagement.

What the school needs to improve

- Utilize the observation process and align staff development protocols to improve instructional practice and promote professional growth and reflection.
 - Classroom observations lack a common instructional focus and reflect little evidence of consistent feedback to support coherency and alignment of classroom instruction across the school. Consequently, key practices are not continually monitored and the quality of instruction varies widely across classrooms.
 - The school does not have a formalized professional development plan to fully support the development of teaching skills and drive practice to improve instruction. Most staff development activities are generic and opportunities are limited to infrequent sessions for selected staff. As a

result, the school does not offer sufficient support to improve content knowledge and teacher practice to impact student learning.

- Establish a more rigorous and coherent curriculum so that all students are challenged in their thinking and make progress in their learning.
 - The school uses curriculum maps and subject area scope and sequence pacing calendars to plan and implement standards-based lessons. However, curricular plans lack modifications to meet the needs of the school's subgroups, particularly ELLs and students with disabilities. Consequently, lessons and academic tasks do not consistently incorporate rigorous habits and critical thinking skills to challenge and engage all students. This limits the achievement as evidenced in low level tasks and basic assignments that do not generate thoughtful discussion among students.
- Increase consistency in classroom practice and the use of differentiated instructional strategies across grades and subjects to meet the needs of all students and improve learning outcomes.
 - The school adopted a new reading program that includes leveled texts and various resources to address the needs of students. However, teaching practices and instructional strategies do not reflect a consistent approach that supports differentiated instruction. For example, some lessons lack steady scaffolds and tiered activities to ensure the success of high needs students. In most classes, students copy from charts, SMART boards or from textbooks. This results in uneven levels of engagement and thinking across subjects as evident in generic student work products and limited opportunities for students to engage in group discussions that prompt higher order thinking skills.
- Develop a strategic plan to ensure that resources and staffing decisions are fully aligned to accelerate student learning and support the school's goals.
 - The school conducts a Saturday program which includes academic intervention classes, English as a second language (ESL) programs and science activities to improve student achievement. However, the use of resources are not aligned to fully support the school's instructional goals focusing on improving learning outcomes for English language learners. Without enough support staff with specialized training in language acquisition strategies, a lack of targeted interventions to meet the needs of English language learners limits the school's potential to maximize student learning.
- Increase the purposeful alignment of formative assessments to key standards and the curriculum so that data analysis positively influences instruction for all students.
 - Teacher teams and individual teachers use ELA and math item analysis information and interim assessment results to supplement summative data and identify student performance levels. However, teachers do not consistently use ongoing formative assessment data in their daily practice. This limits their ability to pinpoint the special needs of subgroups in order to determine targeted differentiated interventions that

accelerate student learning. As a result, instructional strategies and learning tasks are not always strategically matched to meet the needs of all students so that they succeed in their learning.

Part 3: School Quality Criteria 2010-2011

School name: School of Math, Science and Technology	UD	D	P	WD
Overall QR Score		X		
Quality Statement 1 – Instructional and Organizational Coherence: The school has a coherent strategy to support student learning that aligns curriculum, instruction and organizational decisions.				
<i>To what extent does the school regularly...</i>	UD	D	P	WD
1.1 Design engaging, rigorous and coherent curricula, including the Arts, 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, and ensure that it is: aligned to the curriculum, engaging, and differentiated to enable all students to produce meaningful work products?		X		
1.3 Make strategic organizational decisions to support the school's instructional goals and meet student learning needs?		X		
1.4 Maintain a culture of mutual trust and positive attitudes toward learning that support the academic and personal growth of students and adults?			X	
Quality Statement 2 – Gather and Analyze Data: School leaders and faculty consistently gather, analyze and share information on student learning outcomes to understand school and student progress over time.				
<i>To what extent does the school ...</i>	UD	D	P	WD
2.1 Gather and analyze information on student learning outcomes to identify trends, strengths, and areas of need at the school level?			X	
2.2 Align assessments to curriculum and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom level?		X		
2.3 Use or develop tools to enable school leaders and teachers to organize, aggregate, and analyze student performance trends?		X		
2.4 Engage in an open exchange of information with students and families regarding students' learning needs and outcomes?		X		

Quality Statement 3 – Plan and Set Goals: School leaders and faculty consistently engage the school community and use data to set and track suitably high goals for accelerating student learning.							
<i>To what extent does the school ...</i>	UD	D	P	WD			
3.1 Establish a coherent vision of future development that is reflected in a short list of focused, data-based goals that are understood and supported by the entire school community?			X				
3.2 Use collaborative and data informed processes to set measurable and differentiated learning goals for student subgroups, and students in need of additional support?		X					
3.3 Ensure the achievement of learning goals by tracking progress at the school, teacher team and classroom level?		X					
3.4 Communicate high expectations to students and families, engage them in decision-making, and promote active involvement in the school community?		X					
Quality Statement 4 – Align Capacity Building: The school aligns its leadership development and structured professional collaboration around meeting the school’s goals and student learning and emotional needs.							
<i>To what extent does the school...</i>	UD	D	P	WD			
4.1 Use the observation of classroom teaching 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					
4.3 Provide professional development that promotes independent and shared reflection, opportunities for leadership growth, and enables teachers to continuously evaluate and revise their classroom practices to improve learning outcomes?		X					
4.4 Integrate child/youth development, support services and partnerships with families and outside organizations with the school-wide goals to accelerate the academic and personal growth of students?			X				
Quality Statement 5 – Monitor and Revise: The school has structures for monitoring and evaluating progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.							
<i>To what extent does the school...</i>	UD	D	P	WD			
5.1 Evaluate the quality of curricular, instructional and organizational decisions, making adjustments as needed to increase the coherence of policies and practices across the school?		X					
5.2 Evaluate systems for assessing students, organizing data, and sharing information with student and families, making adjustments as needed to increase the coherence of policies and practices across the school?		X					
5.3 Establish and sustain a transparent, collaborative system for measuring progress towards interim and long term goals and making adjustments during the year and over time?		X					
5.4 Use data to regularly evaluate the effectiveness of structured professional collaboration, capacity building and leadership development strategies?		X					
Quality Review Scoring Key							
UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed