



Quality Review Report 2013-2014

Math, Science and Technology Institute

Middle School 267

**800 Gates Avenue
Brooklyn
NY 11221**

Principal: Patricia King

Dates of review: May 28-29, 2014

Lead Reviewer: Evelyn Santiago

Part 1: The school context

Information about the school

The Math, Science and Technology Institute is a middle school with 315 students from 6 through grade 8. The school population comprises 74% Black, 18% Hispanic, 1% White, 2% Asian students and 4% American Indian/Alaskan Native students. The student body includes 5% English language learners and 28% special education students. Boys account for 57% of the students enrolled and girls account for 43%. The average attendance rate for the school year 2012 - 2013 was 90%.

Overall Evaluation

This school is proficient.

Part 2: Overview

What the school does well

- Relationships across the school are warm, supportive and inclusive of students, teachers and families who feel valued in having a voice in the school community. (1.4)
 - In keeping with the school's philosophy, "Respect for all", the principal and staff maintain an "open door" policy and the highly effective practice of greeting students and parents by name to ensure that they feel welcomed and valued at school. The school also continues the school wide ritual of holding Town Hall meetings monthly, with members of the student government writing the agendas for the meetings. At the meetings students have opportunities to voice their opinions on matters affecting the school. For example, students expressed that although they have experiences with the arts from the Sports and Arts Foundation (SASF) and the dance club, they would like to have more arts programs at school. As a result, the school is planning to include more visual and performing arts programs next year. Additionally, the Town Hall meetings serve as one of the venues to motivate positive behavior and good citizenship and celebrate students' social and academic accomplishments to reinforce high levels of performance. The school's attendance committee meets every two weeks to discuss individual student's attendance concerns and has established structures to improve the record. These include daily phone calls home for students who are absent and family outreach for students with excessive absences. Subsequently, the school has noted an increase in student attendance over last year. The school's School Based Support Team (SBST) comprised of the principal, teachers and guidance personnel convenes every two weeks to discuss and address the needs of students referred for additional support. Parents of students discussed are invited to attend the meetings for their input and to keep them informed of the interventions planned for their children. On one occasion the team met to discuss a student that was not demonstrating progress in school and was having difficulty socializing with other students. After careful consideration of data gathered, the team decided to provide additional academic support from the English language arts (ELA) teacher during after-school and Saturday school programs. These interventions have led to the student improving his study skills and class grades in ELA and math. On another occasion, an English language learner (ELL) student was not making progress due to the student's limited English proficiency. The team decided to provide the student intensive support in English from the English as a second language teacher (ESL) and subject area teachers. This has resulted in the student improving her communication skills, meeting promotional criteria and becoming a student leader in the school. In efforts to promote college and career readiness, the school took eighth grade students on trips to New York University, Columbia University and Medgar Evers College. Consequently, several eighth grade students applied and were accepted into specialized high schools. Additionally, these experiences have contributed to fewer recorded incidents so far this year over last year and have resulted in parents

expressing that the school is like a “family” and students stating, “We are nurtured and well taken care of.”

- The school aligns the curriculum to the Common Core Learning Standards (CCLS) in order to promote rigorous instruction and academic achievement for all students. (1.1)
 - The school elected to use ‘Code X’ for English Language Arts (ELA) and ‘CMP3’ for math. The school continues to refine the curriculum to further align to Common Core Learning Standards (CCLS) in ELA, math and content areas during teacher team meetings weekly. Teachers have created curriculum maps to ensure coherence and integrate the citywide instructional shifts with a focus on higher order questioning, supporting a position with evidence from text and increasing writing in all content areas. The alignment is evident in what is taught in the classrooms. For example, in a science, class the students discussed how genetic traits are inherited as a result of dominant or recessive “alleles” from parents to offspring. Students worked in partnerships and used a “Punnett Square” to record predictions of traits resulting from specific genetic crossings. In a math class, the students worked on demonstrating proof of the Pythagorean Theorem. The teacher modeled the concept using visuals and students discussed and explained in partnerships how the theorem works. In an ELA class, students collaborated in groups to determine the tone in the selection, ‘The Beautiful Forever’, by analyzing the author’s word choices. Students cited evidence from the text to substantiate claims and English language learners (ELLs) used iPads to translate words they didn’t know. As a result, all students, including students with disabilities and English language learners, participate in more challenging and creative activities that require thinking, conversation and engagement to enrich learning experiences and accelerate progress.

- Under the leadership of the principal, the school effectively uses resources and scheduling to create a coherent, committed learning community aligned to its instructional goals, which promotes continuous student growth. (1.3)
 - In efforts to address the school’s priority goals to improve instruction and increase student performance in literacy and math, the school has maintained the scheduled ninety minute blocks in the mornings for ELA and math to continue providing extended instructional time for all students. The school has also budgeted funds to provide after-school programs in ELA, math, dance, basketball and art during the week, and on Saturdays for additional academic support and enrichment. To increase the use of technology as a tool for teaching, research and learning, the school has maintained the computer lab, SMARTboards and computers in every classroom and purchased additional laptops and iPads for use with ELL students. In addition, the school purchased ‘Achieve 3000’ and ‘iReady’ to customize instruction in ELA and math for increased progress. To facilitate professional collaborations, the Peer Instructional Coach works closely with teachers to improve teaching practices and the principal has allocated common planning time three times weekly for teachers to work in teams to continue to align curriculum, analyze assessments, review student work and plan instruction for target population students. Teachers also use this time to share best practices

to improve instruction. In one team meeting teachers analyzed and discussed student results on a benchmark assessment and agreed to offer students who didn't master the concepts additional scaffolds that included visuals, teaching in small groups and peer tutoring. These efforts have resulted in increased student achievement as evidenced in ELA and math unit and benchmark assessment results.

- Teacher collaborations promote shared leadership and ensure a direct focus on examining student work to plan together to improve teacher practice and student outcomes. (4.2)
 - All teachers participate in teacher teams that meet weekly and are organized by content area. The teams focus on planning lessons that align to the CCLS, improving instructional practices and analyzing student work to meet the needs of all students, especially students with disabilities, ELLs and students performing at the bottom third percent of the school in ELA and math. Teachers share instructional strategies to deepen student thinking and learning. For example, teachers in the ELA team reviewed the writing of a student who was identified at a previous meeting to need assistance with presenting counter claims and rebuttals in her essays. Teachers noted that although the student included counter claims in her most recent writing sample, she still needed additional support in strengthening her arguments. This led to the teachers suggesting re-teaching through modeling and “tucking” counter claims in the introduction. Teachers in the math team discussed a student that was experiencing social and emotional challenges that interfered with her learning in class. This resulted in one of the teachers volunteering to tutor the student before and after-school to ensure that the student does not fall behind in her math class. This level of teacher planning and collaboration has improved instructional capacity and accelerated progress made by students, especially student subgroups, as evidenced by improvement in their work products and interim assessment results.
 - The school principal supports providing opportunities to develop and promote teacher leadership. Teachers have been assigned as team leaders working in a leadership role with their colleagues. Selected teachers also participate in the leadership cabinet and provide input on decisions affecting the school. Teachers attend workshops and receive ongoing training from network specialists and consultants. Staff members who attend workshops at outside venues share the information with colleagues and conduct turn-key training. Additionally, teacher teams are given autonomy in the development of units of study and are encouraged to develop and use instructional strategies that result in student learning. These structures promote and enhance teachers’ decision-making capacity to plan instruction and improve classroom practices to increase student progress and achievement.

What the school needs to improve

- Extend classroom supports so that all students are engaged at high levels to maximize learning and achievement. (1.2)

- School leaders use the Danielson Framework across the grades and subscribe to the belief that children learn best through higher order tasks that deepen the levels of thinking and discussions and address individual student needs using a variety of entry points. This was evidenced in the majority of classrooms through lesson activities, collaborative interactions among students, questioning and student reflections. In addition, in most classrooms there were visuals and materials matched to students' reading levels and paraprofessionals worked with students with disabilities to guide the learning. In one classroom the ESL teacher sat and worked with a group of ELL students and at the end of the lesson activity students volunteered, during whole group share out, to verbally summarize their work on the digestive system and how food can be used to maintain homeostasis. This strengthens oral language development and usage and reinforces the lesson objective for all students. Furthermore, student work products displayed on hall bulletin boards reflected differentiated student needs and thinking at high levels in all content areas. However, in a few classrooms lessons were delivered in whole group settings thus, reducing individual student accommodations and student exchanges. This lessens opportunities to promote higher order thinking and skill development to ensure academic growth for all students.
- Enhance assessment analysis to inform and adjust instruction to maximize student learning. (2.2)
 - Teachers gather a variety of data that includes rubrics, content area unit tests, summative and formative assessments, Achieve 3000 and interim assessments based on benchmark CCLS standards. Teachers also used information from baseline Measures of Student Learning (MOSL) at the beginning of the year to inform curricular and instructional needs. Teachers receive input from students on their own learning through exit slips and student questioning. Analysis of some of the assessments has led teachers school-wide to focus on higher order questioning and academic vocabulary to deepen thinking and discussion and increase skills in writing. Teachers provide feedback to students on post it notes with teacher comments that include next steps for continued learning and during individual conferences with teachers to establish goals based on assessment results. However, the analysis of student data does not fully include information for English language learners such as levels of proficiency in English and Individual Education Plans (IEP) for students with disabilities when planning lessons thus, teachers have not yet maximized their professional knowledge to adjust the teaching for all students.

Part 3: School Quality Criteria 2013-2014

School name: Math, Science and Technology Institute					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 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?							X	
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?							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 supports 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 those expectations?							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 student 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 Observe teachers using the Danielson Framework for Teaching along with the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection?							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	