



The New York City Department of Education



Quality Review Report

School of Math, Science and Technology

Middle School 349

**35 Starr Street
Brooklyn
NY 11221**

Principal: Rogelis Parris

Dates of Review: June 3 - 4, 2008

Lead Reviewer: Daniel J. Purus

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Part 1: The school context

Information about the school

The School of Math Science and Technology is a middle school with 536 students from grade 6 through grade 8. The school population comprises 14% Black, 83% Hispanic, 1% White, and 1% Asian students. The student body includes 20% English language learners and 11% special education students. Boys account for 60% of the students enrolled and girls account for 40%. The average attendance rate for the school year 2006-2007 was 91%. The school is in receipt of Title 1 funding with 89% eligibility.

The school shares a building and campus with one other school.

Part 2: Overview

What the school does well

- The principal is a dynamic leader who is revered by students, staff and parents.
- The principal and all school leaders have created an environment where students are nurtured, safe, respected and held to high social and academic expectations.
- Scheduling maximizes common planning time for teachers to work with coaches and lead teachers to analyze the myriad of school assessment data.
- Members of the school community are familiar with the school's progress and past performance, and reflect continually on this data for future goal setting.
- All teachers are keenly aware of students targeted as those in most need and focus on addressing their needs in many academic areas.
- Professional development is ongoing and strategically selected to ensure professional growth is aligned with instructional needs.
- Teachers and school leaders are effective with tracking student performance and making modifications to address needs that will improve student outcomes.
- Collaborations with outside partners are strong support and provide intervention, enrichment and extra-curricular activities.

What the school needs to improve

- Assist students in better constructing subject goals that are based on the latest available progress data.
- Ensure that parents and students are fully involved in specific individual student goals and progress in each of the content areas.
- Further develop differentiation of instruction for all students driven by data and goals addressing individual student needs in all academic areas.

Part 3: Main Findings

Progress made since the last review

The school has made good progress in addressing the issues identified in the previous Quality Review report.

Overall Evaluation

This school is well developed.

Administrators and teachers speak with one voice. As a result, students receive consistent encouragement and respect and in turn give respect back to all charged with their education. The principal and one of the assistant principals greet students each morning at the front entrance as they enter proudly in their uniform shirts. The school is organized in an effective and meaningful way, holding all to high expectations from the moment they enter the building. Administrators, coaches, lead teachers and support staff serve as valuable educational and professional resources to raise student performance. Teachers work in collaborative teams and use data consistently to inform planning. However, the school is looking to use individual student data better to meet the needs of all students through greater consistency in differentiation of instruction. Similarly, it is discussing ways to ensure that parents are fully aware of specific individual student goals and progress in each of the content areas.

The school has made good progress in address the issues identified for improvement in the previous Quality Review. The principal has increased staffing, purchased high interest classroom libraries, grouped students into clusters for better differentiation of instruction and purchased a web-based intervention program. The school purchased additional hands-on materials for science and math to increase student engagement and capitalize on their good behavior. Attendance and tardiness are high priorities with a robust system in place to contact homes of students when a child is absent. As staff know the over-age student population clearly through data, they carefully address their strengths and weaknesses. Effective extended day, Saturday programs and academic intervention services support these targeted students well.

Boys in general, with a concentration of African American boys, have lagged slightly in scores in English language arts. The lower test scores are attributed to a lack of interest. The school has purchased numerous high-interest materials written for boys by African American authors to address this concern. As an action to improve learning, grouping English language learners in clusters within classrooms facilitates both the push-in and pullout intervention models. The school has hired additional teaching staff and English language learners use "Achieve 3000." This web-based, individualized program is scientifically proven to accelerate reading comprehension, vocabulary, writing proficiency and performance on high stakes tests.

The inquiry team has made significant progress meeting the needs of the targeted students. Based on available results from the 2008 English language arts standardized test, twenty-two students were identified, nineteen have made at least one year's progress and seven students have moved from performance level 2 to performance level 3.

How well the school meets New York City's evaluation criteria

Quality Statement 1 – Gather Data: School leaders and faculty consistently gather data and use it to understand what each student knows and is able to do and to monitor the student's progress over time.

This area of the school's work is well developed.

The principal has a thorough knowledge of school and student progress through rigorous examination of a full range of data. The school uses a computerized program successfully to challenge, assess and produce data throughout the year. In addition, it makes good use of the gathered information that informs instruction. A constantly updated picture of student progress and achievement results from its comparison, discussion and interrogation of data for special education students, English language learners and each gender. This informs decisions about instructional strategies and their effectiveness, and indicates allocation of funds, by measuring student progress over time. As a result of these excellent practices, students' progress is considerably enhanced. Leaders are very responsive to the outcomes of data. For instance, after considering the slow progress of English language learners the school hired an additional teacher to meet the needs of these students more closely.

Teachers consistently use data from standardized tests, report card grades and ongoing information from Acuity to identify student achievement and progress in English language arts and math. In addition, teachers of science and social studies use data indicating the reading skills students need to improve so that they can adjust lessons accordingly.

K349 is justifiably proud of the achievement of students, based on its analysis of past progress of students, classes and the school as a whole, as well as its comparisons to similar and local schools. Because the whole school is now familiar with gender and ethnic disparities, resulting action means that these gaps are closing each year while the overall scores continue to improve.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use data to understand each student's next learning steps and to set suitably high goals for accelerating each student's learning.

This area of the school's work is well developed.

The school successfully uses the Comprehensive Educational Plan, the principal's performance review goals and other recent data to set annual school, subject and student goals and projections. During a collaborative process, leadership constructs and then shares goals effectively with the school leadership team, parent teacher association, staff, general parent population and the community at large. The school newsletter is a successful integral part of getting the information out to parents and others.

Teachers spend valuable time co-planning to address reading skills identified as "in need of improvement." Students in greatest need of improvement are set high goals to accelerate learning. For instance, the school has set goals for a number of low-performing students including African American boys, students enrolled in the bilingual program, students scoring at the lowest one-third on the State English language arts and math exams and ongoing groups of students that do not show progress on periodic assessments. These selected groups are effective choices as data shows the school has made progress with these identified groups through its targeted actions.

The school makes its high expectations for students evident through communication with both parents and students. As one student put it, "They are always pushing us to do better and work harder – but in a good way." Teachers maintain close contact with parents as students progress through their classes. They keep them in the loop effectively through phone calls, written notices or requests for meetings. Parents regularly meet with teachers during scheduled parent teacher conferences, open school night and open school week. Parents indicate that they feel welcome at the school and may drop in at any time for a visit or teacher conference. The school is discussing rigorous ways to inform all parents of specific individual student goals and progress in each of the content areas with consistency.

Quality Statement 3 – Align Instructional Strategy to Goals: The school aligns its academic work, strategic decisions and resources, and effectively engages students around its plans and goals for accelerating student learning.

This area of the school’s work is well developed.

Every decision made in the school aligns with the over-arching goal of improving student outcomes. The principal makes effective staffing decisions based on data to provide additional services for identified at-risk groups that have demonstrated weak performance. The school follows the New York City core curriculum carefully and uses "Impact Math" rigorously. It skillfully supplements classroom instruction with worthwhile field trips and cultural outings linked with the "Million" program for student rewards. The core curriculum aligns with performance indicators so that classroom instruction is challenging.

Assistant principals and the principal hold teachers fully accountable for lesson structure, content, students’ engagement and improved students’ performance. Classroom environments are clean, safe and conducive to learning. Coaches productively ensure compliance and that teachers maintain best practices. Student behavior and respect between staff and students is exemplary. Students are treated with respect and are respectful in return. This sets a friendly, supportive tone in the halls and classrooms and aids student achievement.

Teachers customize lessons based on soft and hard data. This ensures that most daily lessons highlight and address the needs of targeted students. Not all teachers suitably use individualized planning for all students to increase overall student achievement. Classroom teachers do not consistently group students with a purpose and address all individual needs, with associated lesson plans. Successful procedures are in place for contacting student homes when they are absent or there is a problem. Based on the current attendance rate the principal has raised the bar, setting a 95% goal for next year, in line with the administration’s high expectations.

Quality Statement 4 - Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school’s collaboratively established goals for accelerating the learning of each student.

This area of the school’s work is well developed.

Professional development, coaching and mentoring provide valuable and ongoing support for both experienced and new teachers. Such sessions drive the use of the teacher assessment notebook, lesson planning, and action plans. The principal also offers extra professional and instructional support for all teachers through purchased services from the learning support organization. Teachers appreciate formal and informal classroom

observations and regular “walkthroughs” as tools to refine instruction. The valuable, constructive feedback helps them to maintain a focus on improving the craft of teaching and raise student outcomes. Teachers use common planning time to share data involving big ideas and develop plans accordingly.

The principal scrupulously reviews deans’ logs for a comprehensive understanding of student difficulties whether related to social issues or classroom behavior. He uses assemblies periods effectively to address matters that he or other administrators deem necessary to discuss as they relate to building operations, student recognition or student discipline.

First-rate partnerships are maintained with organizations, such as Ridgewood Bushwick, Catholic Charities and the United Way. A successful rewards program, before school assistance, after school tutoring, academic intervention and supplementary educational services successfully support students academically and socially. Due to the coordinated efforts and target tracking by the data specialist, coaches, lead teachers and service providers some students particularly benefit instructionally who are involved in more than one additional service.

The “Million” reward program provides all students with a free cell phone. By reaching personal and academic goals, students earn minutes on their phone. This has proven to be a wonderfully motivational and successful program, where students are evaluated during a two-week period on five performance criteria.

Quality Statement 5 - Monitor and Revise: The school has structures for evaluating each student’s progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.

This area of the school’s work is well developed.

Administration has formed an effective leadership team. Coaches and lead teachers regularly monitor assessment and analyze data. This process provides them with a thorough understanding of students’ learning from a school and grade-wide subject perspective. The team demonstrates strength in identifying school, grade and content area goals, while monitoring progress and working with teachers in adjusting content areas of curriculum that are highlighted as concerns. This process is effectively used for large scale and targeted student assistance and is being refined for the average and high achieving students. After each review of the periodic assessments, actions plans address groups or individual student needs. The principal proactive plans end of year and summer professional development to assist teachers in setting goals with their students. Currently teachers establish individual goals after conferring with students and reviewing formative assessments. Planning for an accelerated eighth grade math course is another example of the school's flexibility and immediate responsiveness to the academic needs of a segment of the student population. The school loops teachers with students as another very successful means to improving scores.

The school has continuously improved scores as a result of making immediate modifications to address identified areas of weakness. Once new data is available, and after a collaborative process, the administrative team makes decisions that have proven to have positive results on student outcomes. The school has been particularly effective in using this type of formative data to improve school-wide student achievement.

Part 4: School Quality Criteria Summary

SCHOOL NAME: The School of Math, Science and Technology	Δ	▷	✓	+	◇
Quality Score				X	

Quality Statement 1 – Gather Data: School leaders and faculty consistently gather and generate data and use it to understand what each student knows and is able to do and to monitor the students progress over time.

To what extent do school leaders and faculty provide . . .	Δ	▷	✓	+	◇
1.1 an objective, constantly updated understanding of the performance and progress of each student, classroom, grade level?				X	
1.2 an objective, constantly updated understanding of the performance and progress of special education students?				X	
1.3 an objective, constantly updated understanding of the performance and progress of English language learners?				X	
1.4 an objective, constantly updated understanding of the performance and progress of ethnic groups, gender groups and all other categories of interest to the school?				X	
1.5 a measurement of performance and progress based on the school's own past performance, and among students, classrooms, grades and subject areas?				X	
1.6 a measurement of performance and progress based on comparisons with similar schools?				X	
1.7 training, management systems and structures that support teachers in the use of school data to inform planning and instruction and to track the progress of students?				X	
Overall score for Quality Statement 1				X	

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use data to understand each student's next learning steps and to set suitably high goals for accelerating each students learning.

To what extent do school leaders and faculty . . .	Δ	▷	✓	+	◇
2.1 engage in collaborative processes to set rigorous, objectively measurable goals for improvement, and to develop plans and timeframes for reaching those goals?				X	
2.2 focus on each student, classroom, grade level, academic subject and group of students whose performance or progress has been identified by the school as a particular focus area?				X	
2.3 identify and improve the performance and progress of those students in greatest need of improvement?				X	
2.4 share whole school goals with all members of the school community to rigorously improve the performance and progress of students?				X	
2.5 convey consistently high expectations to students and their parents/caregivers?				X	
2.6 regularly provide students and their parents/caregivers with information about the goals set for each student, and about each student's progress and performance, and how they can improve?			X		
2.7 invite and enable parents/caregivers to provide useful information to teachers and the school about the learning needs and capacities of their children?				X	
Overall score for Quality Statement 2				X	

Quality Statement 3 – Align Instructional Strategy to Goals: The school aligns its academic work, strategic decisions and resources, and effectively engages students around its plans and goals for accelerating student learning.

To what extent does the school . . .	Δ	▷	✓	+	◇
3.1 select core curricular approaches that facilitate and provide meaningful interim data about progress towards goals and focus on raising the achievement of students?				X	
3.2 provide a broad and engaging curriculum, including the arts, to enhance learning both within and outside the school day?				X	
3.3 hold teachers accountable for the progress and learning of the students in their charge, for making instruction interesting and compelling, and for creating a positive safe and inclusive learning environment?				X	
3.4 ensure that teachers use school, class and student data to plan for and provide differentiated instruction that meets the specific needs of all the students in their charge?			X		
3.5 make budgeting, staffing and scheduling decisions strategically, based on data, to meet the school's academic goals for all students?				X	
3.6 ensure that there is an environment of mutual trust and respect between all staff and students to support personal and academic development?				X	
3.7 ensure that there are effective and consistently applied procedures to encourage and monitor student attendance and tardiness?				X	
Overall score for Quality Statement 3				X	

Quality Statement 4 – Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school’s collaboratively established goals for accelerating the learning of each student.					
To what extent does the school . . .	Δ	➤	✓	+	◇
4.1 use frequent observations of classroom teaching by the principal and other available information to develop a differentiated strategy for improving the quality of each teacher’s instruction?				X	
4.2 make professional development decisions strategically, based on data, to help meet the improvement goals of students and teachers?				X	
4.3 provide frequent opportunities for teachers to observe each other’s classroom instruction and to meet together in teams to plan, share effective practices, and evaluate one another’s instruction in an open and reflective professional environment?				X	
4.4 develop effective procedures for the induction and support of teachers who are new to the profession or the school?				X	
4.5 align youth development, guidance/advising and other student support services around stated academic and personal development goals?				X	
4.6 consistently implement clear procedures that enable the school to run smoothly and encourage effective student learning, and effectively address discipline related incidents?				X	
4.7 create effective partnerships with outside entities that support the academic and personal growth of the students?				X	
Overall score for Quality Statement 4					X

Quality Statement 5 – Monitor and Revise: The school has structures for evaluating each student’s progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.					
To what extent do . . .	Δ	➤	✓	+	◇
5.1 the school’s plans for improving student outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?				X	
5.2 the school’s plans for improving teacher outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?				X	
5.3 teachers and faculty use periodic assessments and other diagnostic tools to measure the effectiveness of plans and interventions for individual and groups of students in key areas?				X	
5.4 teachers and faculty use the information generated by periodic assessments and other progress measures and comparisons to revise plans immediately in order to reach stated goals?				X	
5.5 school leaders track the outcomes of periodic assessments and other diagnostic measures and use the results to makes strategic decisions to modify practices to improve student outcomes?				X	
5.6 school leaders and staff use each plan’s interim and final outcomes to drive the next stage of goal setting and improvement planning?				X	
5.7 the principal and school community have a clear vision for the future development of the school and implement procedures and systems to effect change?				X	
Overall score for Quality Statement 5					X

◇	Outstanding
+	Well Developed
✓	Proficient
➤	Underdeveloped with Proficient Features
Δ	Underdeveloped