



NYCDOE

Quality Review: Final Report

The New York City Department of Education



Quality Review Report

Bronx Center for Science and Math

High School 260

**1363 Fulton Avenue
Bronx
NY 10456**

Principal: Edward Tom

Dates of review: March 5 - 6, 2008

Lead Reviewer: Michael Clifford

Content of the report

Part 1: The School Context

Information about the school

Part 2: Overview

What the school does well

What the school needs to improve

Part 3: Main Findings

Progress made since the last review

Overall evaluation

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

Part 4: School Quality Criteria Summary

Part 1: The school context

Information about the school

The Bronx Center for Science and Mathematics is a high school with 335 students from grade 9 through grade 11. The school population comprises 28% Black 65% Hispanic, 2% White, and 5% Asian students. The student body includes 5% English language learners and 6% special education students. Boys account for 46% of the students enrolled and girls account for 54%. The average attendance rate for the school year 2006-2007 was 92.9%. The school is in receipt of Title 1 funding with 81% eligibility.

The school is partnered with New Visions for Public Schools that provide administrative, operational, professional development and political support. This school is a replication model of a highly successful high school in East Harlem and has an on-going association with them as well as another school. With the anticipated addition of grade 12 for the next school year, the school will provide a full grade 9-12 program with an anticipated student population of 430 students. The school shares its facilities with another school.

Part 2: Overview

What the school does well

- A pervasive communication of high expectations by school leaders and staff leads to improved results on Regents exams, attendance and graduation requirements.
- Data collection, dissemination, and analysis are comprehensive and systematic providing a thorough picture of overall progress at the individual student, subgroup, grade, department, and school level.
- Teachers make choices among a wide range of professional development opportunities to extend expertise according to specific needs and experience.
- Parents are well informed about their children's progress and are appreciative of efforts and challenge made by school leaders and staff.
- The principal is a dynamic and innovative leader whose well-articulated vision for the school is shared effectively which leads to continuous improvement.
- A multi-faceted approach to assisting new teachers including customized professional development and collegial support allows them to thrive.
- School leaders make budgetary decisions in a strategic and well-considered manner that enables essential student support services to be effective.
- The school has developed productive partnerships that serve to broaden student horizons and have a significant impact on their personal growth.
- The school focuses on supporting every aspect of a student's development within a respectful, well-disciplined and caring atmosphere.
- The challenging curriculum and engaging instruction is effectively enhanced by after school remedial and enrichment opportunities as well as through athletics and the arts.

What the school needs to improve

- Broaden the inclusion by teachers in all stages of the workshop approach and increase the planning and practice of opportunities for differentiation.
- Further expand the practice of giving constructive feedback to students as well as the consistent use of rubrics on class assignments.
- Provide opportunities for additional inter-departmental and grade level meetings to allow teachers to discuss students' needs and progress including using anecdotal information and data from Power School.

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.

The school's motto of "Whatever it Takes" is powerfully expressed in every aspect of the school's culture. Created as a way to keep talented students in their home borough by offering a challenging, comprehensive and vibrant choice, the principal and his staff have helped replicate a successful school. Evidence of the rapid progress made in less than three years is shown through the school's oversubscription.

The school is well organized and run in an efficient manner. The school environment is welcoming and the students conduct themselves in a well-disciplined and respectful fashion. Students wear uniforms, movement through the halls between classes is orderly, and school leaders make their presence felt to ensure that policies and procedures are followed. The entire school community takes the seven core values that serve as the basis for school wide character seriously.

While there is a range of instructional styles demonstrated by the staff, the common thread characteristic of all classes is one of high standards, student engagement, high-level thinking and discussion. Although there are examples of good differentiation, practice is not completely consistent throughout the school.

The school provides a balance of strong core academics, exposure to the arts, after school programs and athletics. The emphasis, however, is clearly on scholastic excellence. No after school activities begin until tutoring sessions have concluded at the end of the school day and the school's policy for sports eligibility is stringent.

The school's inquiry team works in a purposeful and effective manner and has identified a target population with whom to work. After designing and administering a combination of surveys and skills assessments to all students, careful data analysis determined a group of fifteen students at each grade level who were struggling academically across all content areas. These students are provided with additional support such as participation in the 10:1 after school tutoring program. With the involvement of teachers, advisors, and guidance counselor steady progress is being made as shown by the most recent grade assessments.

The school has done an excellent job addressing the issues raised by the last Quality Review. In particular, steps have been taken to expand the notion of what it means to be an involved parent and a number of improvements are in place to increase participation. There has been a 50% increase in attendance at parent meetings, the parent coordinator has focused on providing meaningful workshops that target requests of parents including college readiness, the use of Power School software, parent stress and teenagers and sex. The school is planning its expansion to a full grades 9-12 program with careful attention to preparation for college, testing, recruitment of new teachers, the addition of advanced placement courses, and dealing with space constraints.

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 school, under the direction of a visionary principal recognizes the importance of collecting comprehensive and detailed data on each student. Organized in a systematic and clear way, data notebooks allow school leaders to utilize this information about individual students, subgroups, grades, departments, and whole school categories very efficiently to understand student progress. Connected to the wealth of information available by using Power School software, information is communicated quickly and easily to all school constituencies.

Teachers collect diagnostic and anecdotal data on their students and regularly adapt the focus and pace of their lessons as a result of the information gathered. As the effectiveness and functionality of the Power School software becomes more readily apparent to all staff, opportunities for additional inter-departmental and inter-grade meetings to focus on sharing information about student needs and progress can be provided.

The school takes full advantage of working with schools with similar programs, and as a result, is able to profit from their experience and expertise. Additionally the school carefully examines past performance and uses the analysis to predict future progress.

The practice of examining and analyzing student work is part of common planning sessions and as a result, teachers understand what material needs to be reinforced better. While there is evidence that teachers use rubrics to assess this work, the practice is not universal and constructive written feedback is not always provided to define for students the components necessary for exemplary work.

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.

Goals are set for the school in a forward thinking and collaborative manner. There is an expectation on the part of the principal, which is transferred to the entire staff, that all students can be successful and that everyone can aspire to pass Regents exams at an advanced level.

Students receive extensive and effective support to help them strengthen skills and content knowledge as they prepare to take exams. The school recognizes that it is essential not just to have high expectations, but also to back them up with a safety net of services and extra help. These measures address the needs of students who have been identified through the efforts of the inquiry team as being most at-risk.

Parents express an appreciation for how well all school staff know the particular needs of their children, how well they have expanded future possibilities for them, and how they are supported to excel. They stress that the school communicates with them in a highly effective and extensive way so they are well informed about their child's progress.

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.

Teachers at the school are highly knowledgeable about their subject matter and strive to convey this to students in a compelling and challenging way. Because of a willingness on the part of teachers to be self-reflective, to take risks, and make adjustments when necessary to improve their practice, student engagement is high. The principal, who during one lesson gave a stirring speech taking on the role of Mussolini, powerfully brought to life the point of the teacher's multi-media presentation and served as a springboard for student discussion. Many teachers use a workshop approach, which combines guided instruction, differentiated instruction, small group hands-on activities, and a wrap-up. However, due to a limited understanding of differentiated instruction in all its forms whether through content, process or product variations, this good practice is not consistent across the school. This results in some work not being appropriately matched to student need.

In spite of built-in constraints relating to school size and the need to share facilities with another school, this small school provides an extensive range of curricular offerings. These not only include core subject areas, but also athletics, the arts, opportunities for remediation and preparation for tests and Regents exams, student governance and other organizations, and an ever-increasing number of advanced placement courses and electives.

Decisions relating to budget and staffing have been made with careful attention to meeting identified needs. Recently, additional staff including a dean of discipline, a parent coordinator and college counselor have been added to strengthen pupil personnel services. These positions have already had an effect through an immediate attention to behavioral issues, increased and more broadly defined parent involvement, and a proactive and expanded response to college preparation.

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.

The principal combines formal observations with frequent walkthroughs to get a clear picture of teacher practice. His feedback is constructive and purposeful with an eye toward determining targeting approaches for improvement. Rather than mandating common professional development among all staff members, there is a menu of choices which teachers and other staff prioritize according to individual needs. By so doing, the principal fosters ownership in the process. School leaders support staff to make inter-

class observations by teaching their classes allowing them to observe more experienced teachers. As a result, sharing effective strategies has increased.

New teachers are given an extraordinary level of support. In addition to the usual practice of providing orientation days, policy and practice handbooks, and a mentoring program, the principal has instituted a process of videotaping classroom lessons. His subsequent discussions with teachers about the tapes make a powerful impression connecting theory and actual practice that he says has a direct and positive effect on their teaching.

Partnerships that the school has established are well conceived and substantive and not only provide it with increased professional development resources but give students some extraordinary opportunities. The school's connection with Dartmouth College has allowed a number of students, selected from schools nationally, to take college level courses and to be introduced to summer enrichment and college preparatory experiences. The support provided by New Visions for Public Schools, Lehman College, Kaplan, College Summit, and the Horace Mann School has enhanced the work of the school through curriculum expansion and college readiness initiatives.

The school fosters the development of each student in a well-balanced and holistic way. Staff take care to address not only academic but also personal and social growth by emphasizing core values and establishing an environment that is respectful and orderly.

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.

The principal's enthusiasm and passionate belief in the school is widely shared throughout the entire school community. This allows his vision to be internalized by staff, students and parents.

School leaders have established a highly collaborative process for the development and monitoring of school wide goals. The process lasts throughout the school year and involves a series of retreats at which key school constituencies are represented. This collaborative and comprehensive self-assessment is indicative of the willingness of the school to make adjustments to ensure continuous improvement when necessary. As a result of this wide-ranging participation, the entire school community has a sense of ownership of the school goals and a joint responsibility for achieving them.

In addition to broadly monitoring school wide goals, the school regularly checks the progress of individual students, subgroups, grades and departments at staff meetings and during advisories through academic check-ins.

Part 4: School Quality Criteria Summary

SCHOOL NAME: Bronx Center for Science and Mathematics	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