



The New York City Department of Education



Quality Review Report

**The High School for Medical Science
and Dr. Mary E. Walker Medical Science Academy**

**Middle School/High School 413
240 East 172 Street, 3rd floor
Bronx
NY 10457**

Principal: William Quintana

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Part 1: The school context

Information about the school

The High School for Medical Science is located in the Morrisania area of the South Bronx. Enrolled are 501 students from grade 6 through grade 12. The percentage of Hispanic and Black students is about equal, at 46% and 45% respectively. Asian students comprise 7%, American Indian students 1.4 % and White students 0.6%. Approximately 77% are eligible for Title I funding, a figure higher than similar schools and New York City schools in general. The school's population of English language learners is at 7.7%. Less than 1% are special education students. The school's attendance rate of 88% is much higher than the averages of similar schools or City schools.

In 2005, the high school accepted the first group of students in grade 6. They are on the same floor as the high school, in a section known as the Dr. Mary E. Walker Medical Science Academy, and are served by the same principal. The initial group of students is now in grade 7, and new students entered for grade 6. The expectation is that once students complete grade 8, many will remain to enter the High School for Medical Science for grade 9, thereby truly converting the school to a grade 6 through 12 institution.

Part 2: Overview

What the school does well

- The staff thrive on a collaborative culture resulting in a true professional learning community.
- Staff, students and parents hold the principal in high regard, appreciating the culture of respect and high expectations that he has established.
- Well-developed partnerships with external organizations provide students with experiences enhancing their academic performance while contributing to their self-esteem and future aspirations.
- The school constantly seeks ways to refine its practices regarding data collection and analysis.
- The teachers' instructional methods support critical thinking and foster student awareness that learning is an individual and a collective process.
- The school's calm, orderly climate is conducive to teaching and learning.
- Satisfied parents and alumni help the school advocate for itself and promote a positive future.
- Creative scheduling provides the opportunity for teachers to meet daily for professional development and the informal sharing of information and successful strategies.
- Students feel special attending a school designed to support exploration in the fields of medicine and science.
- The school does a good job of supplementing traditional high school coursework with course content relative to its medical focus.

What the school needs to improve

- Further develop the analysis of performance by sub-groups, to ensure that all groups of students achieve equally well.
- Use data more consistently to differentiate instruction to the level of individual students' developmental areas.
- Build on existing good practice to provide more stimulating lessons that capture students' interest.
- Ensure that all staff have the technological expertise to use data entry and retrieval systems.
- Continue to work aggressively towards reducing the percentage of students graduating with local diplomas and increasing the percentage of students graduating with Regents diplomas.

Part 3: Main findings

Overall Evaluation

This is a well developed school.

The High School for Medical Science does an excellent job of motivating students for success beyond high school by adhering to its medical theme and exposing students to related career options. Students wear hospital “scrubs” as their school uniforms, and they are referred to as “doctors” by the principal and other staff. Another unique feature of the school is that it has an accelerated program, affording students an opportunity to take college level classes while in high school and to graduate in three years.

Since the school is small, a family like atmosphere prevails. Students help each other with difficult work and develop close bonds. There are opportunities such as after-school programs and Saturday school for students to receive help when needed, and Advanced Placement courses for those students who seek additional academic stimulation.

The founding principal is proud of the school’s development and selects staff carefully to ensure that they are capable of helping to preserve the mission and goals that led to the school’s creation while working proactively for on-going improvements.

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 student progress over time.

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

The school uses all available data provided by the district to assess students’ learning needs. It also generates ample data of its own through on-going daily assessments of student progress, end-of-unit and chapter tests and interim departmental examinations given at the end of each marking period. Additionally, teachers incorporate opportunities for students to self-assess and track their progress over time into their teaching.

An analysis of data from grade 8 determines the level of support for English language learners and special education students. English language learners receive up to a triple period of English as a second language instruction. For special education students, the school monitors progress according to the specifications of each student’s individual education plan and makes adjustments to the scope of services accordingly. Such practices are yielding desired results, for the school prides itself on the fact that all of the current special education students have met the graduation requirements. Since the school has a 3:1 ratio of females to males, it has identified gender as a special category of interest for future data analysis.

To enhance current procedures for analyzing Regents examinations data in particular, the school is investigating a new data entry and retrieval system that will help teachers know which subset of skills a student must master to be more successful. The school has identified 358 key ideas from the Regents that will help inform how instructional content might need to be altered to support higher passing rates. The school is aware that staff

training in the use of the technology will be critical if data are to be used consistently. Since the percentage of students receiving a local diploma is a category of special concern, the availability of data relative to Regents questions is invaluable as the school works towards its goal of increasing the percentage of students graduating with a Regents diploma, rather than a local diploma.

The school measures its progress against itself from year to year to make alterations for continuous improvement. In addition, the school reviews data relative to the five other schools on the campus, primarily to establish benchmarks for itself. At present, the analysis of data by sub-group receives less emphasis.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use available data to understand each student’s next learning step. Through collaborative planning and student and parent engagement, they set high goals for improving teaching practice and accelerating each student’s learning.

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

A common daily planning period for staff facilitates dialog relative to data and school improvement. The staff review individual student and cohort progress, viewing each new cohort of ninth graders as an opportunity to build on successful past practices. Entering students are placed according to their prior scores until an initial assessment is done. Then teachers collaborate to review data to decide who needs remediation and interventions, and who qualifies for accelerated programs.

The school especially focuses on students in need of academic intervention services, primarily those students scoring at levels 1 and 2 or who have not reached passing scores on segments of the Regents examinations. To help meet its Regents goal, the school offers programs before and after school and on Saturdays. Such programs are yielding desired results, as the June 2007 class of prospective graduates is the first group of students in the school’s three year history to have students graduate with Advanced Regents diplomas.

Students are aware of the high expectations that staff have of them. They like being referred to as “doctor” by the principal and other staff. They complete the chant that they are “winners” when asked who they are. They feel privileged to be able to go on science-related trips and to work at challenging internships. Parents state that the culture of high expectations is a determining factor in school selection.

Quality Statement 3 – Align Instruction: The school aligns its instructional activity and resources, and student engagement around its focused plans for accelerating learning for each student.

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

The school uses the district’s mandated curriculum. In addition, it includes materials from the medical profession to reinforce the school’s medical theme. Modern science labs support hands-on exploration characteristic of rigorous anatomy and forensic courses, popular subjects at the school. The success of the science program is evident. Students score higher on the Regents exams in chemistry and living environment than at similar schools and New York City public schools in general.

While students are on task in most classrooms, the instructional methodology across classrooms is often routine. There is not enough differentiation within classes to accommodate individual students' learning styles or achievement levels. This similarity of approaches indicates that available data is not routinely used to determine the most appropriate techniques for reaching a diverse range of students. Students state that hands-on activities in classrooms keep them engaged, with science experiments, dissections, and other medically related projects generating enthusiastic responses. The open-ended questions used as an instructional technique in most classrooms reinforce student inquiry. For challenging work, students work with their seat partners.

Decisions regarding budgeting, staffing and scheduling are all data-driven. For example, the school looks at the data relative to each new cohort of incoming students to ascertain whether or not modifications will be necessary in the hiring and allocation of staff or whether or not specific purchases will be necessary. Achievement data drive decisions about how to spend money for academic intervention services and the professional development that will be needed to help teachers address students' needs. The school used data about promotion rates to decide upon its current block scheduling and self-contained model of instruction, since data highlighted the degree to which sustained instructional blocks and fewer transitions contributed to higher levels of achievement and fewer incidents of behavioral infractions.

There is a deep, reciprocal sense of respect in the school, with students, teachers, and parents expressing positive sentiment about the extent to which they feel they know and trust each other. Students are strong in their feelings of close connections with staff members they can confide in and rely on for academic and emotional support.

The school prides itself on its yearly increases in attendance, from 84% to its current level of 90%. Its target is to reach or exceed the regional expectation of 92%. During its first year of existence, the school secured a special grant involving the New York City Pops and other community partners, designed to boost attendance. This grant has contributed to positive gains. Common practices for monitoring absences are notes, phone calls home and visits from attendance workers.

Quality Statement 4 - Build and Align Capacity: The development of instructional leadership, staff, and capacity are aligned around 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 and his leadership team are very intentional in selecting staff capable of supporting the school's goals. They have successfully recruited a high caliber of staff who can demonstrate expertise in multiple areas.

Data drives decisions regarding professional development topics. For instance, when data revealed that reading and writing deficits were preventing students from reaching higher level of achievements in mathematics and the sciences, the school decided on a professional development focus on literacy across all content areas. The staff have received assistance in interpreting data from mock tests and have gleaned information relative not only to course content, but also to procedural aspects of test-taking, such as the need to remind students to finish the entire examination for maximum points.

In addition to formal observations, the principal frequents classrooms, often providing teachers with brief, handwritten memos. Teachers visit each other's classrooms and rely

upon their close professional ties to gain on-going peer feedback. They have successfully developed a learning community where collegial support is sought and appreciated.

Common planning time is used for team inquiry on teaching practices, lesson design and data analysis. For example, in one successful team meeting, a group of English teachers were collaboratively planning a unit on Shakespeare. They were sharing strategies for introducing Shakespearean language and were reinforcing the confidence of more novice teachers to tackle challenging content.

Parents, students and staff express utmost confidence in the principal's ability to move the school forward. He was referred to as "supportive," "visionary," and "fair." Teachers feel that the principal will do whatever he can to get what is best for students. The climate of respect and high expectations contributes to the school running smoothly. Since the school is highly desirable, particularly by staff who have taught elsewhere and have a sound basis for a comparative judgment, people are committed to "going the extra mile" to do what is necessary to preserve a smooth-running school.

Partnerships with outside agencies provide unique opportunities for students to broaden their exposure to other areas of the city and to participate in internships and trips relative to the medical focus. Students express great pride and appreciation for the partners' support. These successful partnerships support not only academic achievement and attendance, but also the social and emotional well-being of students by contributing to students' self esteem and sense of accomplishment.

Quality Statement 5 - Monitor and Revise: The school has built-in structures for evaluating each student's progress throughout the year, recognizing weaknesses in its improvement plans and teaching practices, and flexibly adapting plans and practices to meet its goals for accelerated learning.

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

The school is very effective at monitoring its progress and making revisions as necessary, viewing occasions such as the interim assessments at the end of marking periods as a time to stop, analyze and re-prioritize if data indicate that changes are warranted. For instance, results on the Regents exams have been the catalyst for the various supports, such as the allocation of time beyond the regular school day for providing assistance to students. Each time the school receives Regents data, staff review it to determine whether or not midcourse corrections are necessary. Grade cohorts serve as the basis of comparison within the school, with the data of each entering class used as the benchmark for the next entering class.

The outcomes of all programs that are introduced are used to shape the scope and sequence of other programs that are being considered. For instance, with the successful introduction of its first Advanced Placement course, the school is now prioritizing the order in which to add additional Advanced Placement courses over the next few years. The Comprehensive Educational Plan has clearly stated priorities showing how current data trends are contributing to long-range planning, and how the use of community partners will be instrumental in helping the school meet its goals.

Part 4: School Quality Criteria Summary

SCHOOL NAME: High School for Medical Science (MS/HS 413)	∅	✓	+
Quality Score			X

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 student progress over time.	∅	✓	+
1.1 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> each student, classroom, grade level, 			X
1.2 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> ethnic groups, English language learners, special education students* 			X
1.3 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> all other categories of interest to the school* 			X
1.4 Performance and progress are measured based on comparisons with similar schools, with the school's own past performance, and among students, classrooms, grade levels, academic subject areas, ethnic groups, and other groupings of interest within the school.		X	
Overall score for Quality Statement 1			X

* These criteria are partially aspirational as of now because schools do not have routine access to all of this data. The NYC DOE plans to provide schools with enhanced access to the necessary data in 2007.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use available data to understand each student's next learning step. Through collaborative planning and student and parent engagement, they set high goals for improving teaching practice and accelerating each student's learning.	∅	✓	+
2.1 Using data, school leaders and faculty engage in a collaborative process to set demanding, objectively measurable goals for immediate and long-range improvement, and to develop plans and timeframes for reaching those goals.			X
2.2 Goals and plans focus on the school as a whole and 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 Particular attention is given to improving the performance and progress of students in greatest need of improvement.			X
2.4 High expectations are conveyed to students and parents/caregivers. Students and their parents/caregivers are regularly invited to provide information about each student's performance and how to improve. This information is central to setting challenging goals and developing, evaluating, and revising plans.			X
2.5 Goals and plans for improving student performance and progress drive the activity of all members of the school community: leaders, staff, students, parents, and other partners.			X
Overall score for Quality Statement 2			X

Quality Statement 3 – Align Instruction: The school aligns its instructional activity, resources, and student engagement around its focused plans for accelerating learning for each student.	∅	✓	+
3.1 The school selects the curriculum based on how well it aligns with or implements the mandated curriculum and on the curriculum's capacity to generate meaningful interim data about progress towards goals and to support the school's high expectations and improvement plans.			X
3.2 Teachers are accountable for improving instruction and student outcomes. They plan and differentiate their instruction based on the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.		X	
3.3 Budgeting decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.			X
3.4 Staffing decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.			X
3.5 Scheduling decisions about the use of teacher and student time are guided by the needs that emerge from examining student data and by the focused plan the school develops to improve student outcomes.			X
3.6 Instructional programs actively engage students.		X	
3.7 Staff know and respect students and respond to their academic needs, as well as their personal needs that affect academic performance. Each student knows and trusts an adult on the staff who is concerned about him or her.			X
3.8 Student attendance and engagement are high priorities. High rates and patterns of absences trigger immediate intervention.			X
Overall score for Quality Statement 3			X
Quality Statement 4 – Build and Align Capacity: The development of instructional leadership, staff, and capacity are aligned around the school's collaboratively established goals for accelerating the learning of each student.	∅	✓	+
4.1 Leaders, faculty, and staff are selected based on their high expectations for student performance and progress and based on their commitment and capacity to use data, compare outcomes within and across classrooms and schools and develop and revise plans and methods to improve performance and progress.			X
4.2 Professional development decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes. Professional development is designed to help leaders, faculty, and staff use data, self- and peer-assessments, and collaboration with peers to achieve goals for improved school and student outcomes. Professional development and self- and peer-evaluation are aligned and overlap.			X
4.3 The principal frequently observes classroom teaching and has a considered strategy for improving the quality of each teacher's instruction. Teachers frequently observe and support each other's classroom instruction with the goal of improving student outcomes.			X
4.4 Planning, evaluation of results, and revision of plans takes place in teams. Leaders and faculty inform each other of their goals and results, candidly evaluate themselves and each other, and use what is learned to drive improvement.			X
4.5 The principal is respected and has capacity to effect change.			X
4.6 The school runs smoothly. Procedures are clear, communicated to all, and are generally followed.			X
4.7 The school aligns youth development and support services around stated academic goals. Partnerships with outside bodies are routinely used to achieve academic goals.			X
Overall score for Quality Statement 4			X
Quality Statement 5 – Monitor and Revise: The school has built-in structures for evaluating each student's progress throughout the year, recognizing weaknesses in its improvement plans and teaching practices, and flexibly adapting plans and practices to meet its goals for accelerating learning.	∅	✓	+
5.1 All school plans and other interventions include frequent interim goals and diagnostic assessments of progress designed to reveal in objectively measurable ways whether the plan is being effectively implemented and reaching stated goals.			X
5.2 Comparisons of student progress within and across classrooms and schools are used in making interim diagnostic assessments and measuring the progress of plans and interventions.			X
5.3 Information generated by periodic assessments and diagnostic measures of progress and comparisons is used to revise plans immediately in order to reach stated goals. Interim and final goals are modified when data objectively demonstrate that revision is required.			X
5.4 Each plan's interim and final outcomes drive successive phases of goal setting and improvement planning, and each successive phase is characterized by agile and flexible realignment of practices and resources to improve student academic outcomes.			X
Overall score for Quality Statement 5			X