



The New York City Department of Education



Quality Review Report

Stuyvesant High School

High School 475

**345 Chambers Street
New York
NY 10282**

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Reviewer: Mike Sutton

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Part 1: The school context

Information about the school

Stuyvesant High School is a co-educational high school specializing in mathematics and science. There are 3,012 students enrolled. The school admits students into 9th and 10th grade from all five New York boroughs, through competitive examination. The proportion of male students admitted is greater than for female students. There is a wide range of ethnic groups represented at the school with the main ones being Asian at around 55% and White groups at around 38%. Black and Hispanic students make up the remainder. A large range of languages is spoken but virtually all students are fluent English speakers. A small number of special education students are educated at the school. The proportion of Title 1 students is comparable to that in similar schools but much lower than in City schools overall. Attendance is high at 97%.

Part 2: Overview

What the school does well

- It achieves exceptionally high examination results for the overwhelming majority of students.
- It prepares students very well for college and university, enabling many to gain scholarships and access the most sought after placements.
- The staff is tightly focused on maintaining high student achievement.
- The school provides a very wide and varied academic curriculum.
- It offers a huge range of extra curricular enrichment activities.
- The school is extremely well supported by parents and previous graduates.
- The school has exceptional resources.
- It provides a wide range of opportunities for students to work in other institutions and work places as part of extended challenging projects.
- It provides good support for students who have particular difficulties.
- It runs smoothly on a day to day basis and routine organizational matters are effective.

What the school needs to improve

- Continue to improve communication with parents and students, and gather their views more systematically.
- Improvement plans at cabinet and department level need more precision and focus to identify and monitor the professional development required to further develop teaching and learning.
- Ensure that department leaders have greater accountability for analysis of examination and assessment results, in determining how best to further raise the students' overall achievements.
- Continue to work with faculty, students and parents to reduce levels of stress amongst some students.

Part 3: Main findings

Overall Evaluation

This is a proficient school with some well developed features.

Stuyvesant High School takes a large number of the City's most talented students. After four years these students develop substantially both academically and socially. The school achieves exceptionally high examination and scholarship results. The curriculum is wide ranging and many different and varied opportunities exist for students to learn new skills and knowledge. The school makes good use of its many contacts with other establishments and previous members of the school community who give freely of their time for its benefit. The range of extra curricular activities is enormous. Students have access to a wide, eclectic mix of sports, arts, academic and general interest groups. They gain great success in many competitive arenas. This range of activities would not be possible without the huge commitment of the parents' association and the many staff involved. Teaching is always intensively focused on improving students' knowledge. The staff employs a wide range of measures to gauge progress and understanding. Informal and formal tests, quizzes, extended essays and tasks abound. The students are highly motivated and self driven. The parents also have high expectations for their children. The consequent pressure on students to maintain and improve upon previous achievement is intense and for some it is a significant issue. The school knows that these pressures are there and wants to reduce them. It has put in place a restructured and much larger counseling team but also needs to work more closely with students and parents to explore other avenues to reduce the levels of stress which some students feel. The depth of subject knowledge amongst pedagogic staff is immense and fundamental to the standards the school achieves but the quality of teaching varies significantly. Much is of the highest quality and the school has worked effectively in recent years to reduce the small amount of weak teaching. Department leaders do not see this task through with sufficient rigor or build on the examples of good practice emerging in parts of the school. The cabinet needs a stronger, overarching strategic role in school development. The school runs well on a day-to-day basis but not enough is done to gather the views of parents and students as part of its improvement planning. The school web site is being revamped but communication generally with stakeholders is not as good as it should be. Movement of large numbers of people around a multi-story building is efficient and very little teaching time is lost. Office staff, the parent coordinator and other support staff contribute strongly to this. The school is well run by the principal who knows accurately the institution's strengths and areas for improvement.

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 proficient.

The school gathers large amounts of data. It analyses these to give a broad view of its performance across grades, classes and subjects. It understands how well different gender and ethnicity groups achieve overall. It uses assessments to determine strengths and weaknesses in mathematics and English amongst new cohorts of students when they

first arrive. It explores some facets of group differences such as differential performance of males and female students in physics but has not gone further as for example in looking at how different ethnic gender groups perform or how such group performances might be changing over time. Teachers use tests and assignments to check and monitor progress of classes and individuals. The number, frequency, and time demands of such assessments varies enormously both across the school and at different times of the year. This is a significant contributor to stress levels for some students who, because of particular combinations of subjects, might find themselves at times inundated with tests or tasks. Some teachers are making use of quick problem solving activities within lessons to check understanding of new concepts or knowledge. Where used, this affords an approach to assessment with 'reduced stakes' for students while still giving the teachers a good overview of their progress. The school knows how its performance compares with other similar schools and there is a constant drive to maintain and further improve the already very high standards. There is decreasing 'headroom' for improvement in most subjects. The school does not take sufficient account of the views of students however, in planning further improvements.

The data on other key aspects of the school's work such as quality of teaching is less robust. Department leaders are best placed to work with their teams in gathering and refining such information but their role is undeveloped in this respect. There are pockets of initiative such as in English where several marking systems have been harmonized and in computer science where some teachers are now asking students for feedback on lessons.

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 proficient with some well developed features.

The school cabinet sets targets for general improvement in formal examination results which are demanding and measurable. But these targets are not precisely tuned to subjects or grades, largely because the school has not drilled down sufficiently deeply into the data which it already gathers. For example, without knowing more about the achievements of different ethnic and gender groups in different subjects, it is difficult for the school to know accurately, where or how most improvement might be made in a school where standards are already very high. The school provides well for students that have particular needs identified on admission or during the course of their studies. It readily brings to bear all the agencies that would make most impact in helping such students, carefully evaluating the impact of the different strategies used. The small number of special education students placed at the school benefit from the wide range of resources and facilities available to them. Data from initial assessments of incoming students' mathematics and writing skills is used well to establish balanced 9th grade mathematics classes and in addressing weaknesses in essay writing skills. There is clear evidence of this making a significant difference to students' progress early in their career at the school. The school maintains a drive for high standards because this ethic permeates everything that teachers and students do. There is a culture focused strongly on students' academic success. The enthusiasm of the teachers for their subjects along with the students' thirst for learning leads to additional courses being added to the curriculum. The benefits of providing large numbers of optional courses and programs however need to be weighed against the increased pressure on students.

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 proficient.

The school makes very good use of its financial resources and has focused these through enhanced staffing where data have identified improvement is needed. For example the weaknesses identified in some students’ writing skills when they started at the school was addressed through enhanced staffing in the English department to enable smaller classes and more individual attention to skills that needed improvement. The teachers are strong advocates for their subjects and teach with enthusiasm and dedication. They fully accept responsibility for the standards their students achieve through coverage of the curriculum. They set regular tests, assignments and tasks to enable students to see their progress. Development of pedagogic skills is not routinely a priority for departments. Only relatively recently has the school started to consider what constitutes good preparation or a good lesson. Teachers’ skills in questioning remain highly variable. In lessons seen, the teachers frequently asked open ended questions that required students to think and offer extended answers and explanations. They did not however use questions so well to target individuals and draw them into the lesson or to ensure understanding amongst those students who did not readily volunteer answers. Department leaders have engaged with some but not all of the whole school initiatives on improving teaching. Students study diligently, both in lessons and outside school. They are highly committed to the courses they follow and grasp every opportunity to enhance their learning through additional projects and advanced courses. They are conscientious about completing work but individual workloads can be very uneven. The great majority of students thrive in the academic climate of the school. A small proportion finds life more difficult. Students are expected to be proactive in seeking help for academic issues. Until this year the student counseling service was inadequate in size and structure to cope with the personal needs of a large student body. Students did not know with certainty who to turn to when they had a problem. This was recognized by the school and the service was reorganized and strengthened this year. The enlarged team of counselors is now starting to make a more effective contribution to the well being and development of students and to a reduction in stress levels. This new service is well managed but has not set itself any markers by which to quantify its development or impact. Student attendance at school is high and unexplained or lengthy absences are followed up rigorously.

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 proficient.

The school hires teachers with subject knowledge of the highest order and their teaching capacity is evaluated as part of the process. The school’s leaders have a good grasp of their areas of subject responsibility and their departments function well. Department leaders are less secure in driving through developments aimed at improving further the quality of teaching. They know how well students are doing in broad terms but do not undertake deeper analysis of students’ progress and examination results. Departmental improvement plans lack precision about how to make the constant small improvements necessary to take a high performing school even higher. The teachers are single minded in the search for the highest possible outcomes for their students. In doing so, they encourage students to work to their utmost. They provide many opportunities for students

to work with outside organizations. These placements as part of advanced research projects are extremely valuable in preparing students for university. The teachers use peer observations to explore aspects of teaching and learning. Professional development initiatives in recent years have started to focus on the key elements of teaching which the school has judged need improvement. These developments have not been followed through with the rigor or depth needed to make strong inroads into the weaker elements of teaching which the school knows it has. The teachers are less secure in bringing about improvements in their own practice. Informal peer observation and evaluation is improving but lacks rigor because department leaders do not give a sufficiently strong steer. A small number of teachers are starting to explore more innovative ways of bringing about improvement such as direct written feedback from students about the quality of teaching they receive. The information that is starting to emerge is already driving new thinking within the computer science department. Such developments need a wider platform for discussion amongst faculty. In this and similar innovations, the cabinet lacks a strategic role. The principal knows his school well and is respected by the wide school community. He is frequently moving about the building and observes lessons to provide helpful feedback. He has the determination to improve the school still further and the will to make it happen. Some important improvements have already been brought in but more remain to be tackled. The school's overall vision is unclear and key leaders lack full accountability for analysis of progress and planning for continued improvement. The day to day organization of the school is very secure and office staff and all those who support teachers ensure that it runs very smoothly and without fuss. The wider aspects of communication with parents or students are insecure. For example access to information is not always available for parents in their home languages. This has been recognized as in need of improvement and updating. This work is in hand but until complete and effective, communication remains a relative weakness.

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 proficient.

The teachers make enormous use of tasks and tests during the school term and between formal examinations to anticipate the potential final outcomes for cohorts and classes well. There is less evidence of this information being used to set interim goals or benchmarks to gauge progress towards the school's overarching targets for examination results. Without these markers the department leaders have insufficient information to judge the progress of their departmental development plans or to adjust or refine plans. The cabinet has a good overview of many of the practical aspects of running a large school. They have however, no overarching key strategic objectives to drive their work in raising students' achievements. Best practice and new individual initiatives are insufficiently shared at this level of management in order to disseminate back to departments. At present such developments are more likely to communicate themselves across the school by informal channels.

Part 4: School Quality Criteria Summary

SCHOOL NAME: Stuyvesant High School (HS 475)	∅	✓	+
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	