



NYCDOE

Quality Review: Final Report

The New York City Department of Education



Quality Review Report

Brooklyn Technical High School

High School 430

**29 Fort Greene Place
Brooklyn
NY 11217**

Principal: Randy Asher

Dates of review: March 12 - 14, 2008

Lead Reviewer: John Collings

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Part 1: The school context

Information about the school

Brooklyn Technical High School is a high school with 4397 students from grade 9 through grade 12. The school population comprises 13.9% Black, 8.4% Hispanic, 21.9% White, 0.1% American Indian, 55.4% Asian and 0.3% other students. The student body includes 0.2% English language learners and 0.5% special education students. Boys account for 58% of the students enrolled and girls account for 42%. The average attendance rate for the school year 2006 - 2007 was 95.6%. The school is in receipt of Title 1 funding with 38.1% eligibility.

Part 2: Overview

What the school does well

- The principal has a very clear vision for the school, which he pursues with energy and dedication.
- The school has effective data systems, which are used well to assign students to courses to meet their needs and achievement levels.
- The school has very high expectations of its students resulting in good progress and performance.
- There is very good communication between the school and parents, which ensures students are well supported and learn effectively.
- The stimulating, broad and very challenging curriculum provides wide access to the arts as well as science and mathematics.
- The budget is used very effectively to provide wide-ranging and expanding curricular choices.
- Attendance is higher than city averages due to the positive climate for learning in the school.
- There are very strong links with outside entities successfully supporting students' personal and academic growth in the school.
- The school runs very well with very clear procedures ensuring students' learn effectively, are fully engaged in learning and feel safe.
- There is a supportive environment of mutual trust and respect throughout the school, where students are very well supported.

What the school needs to improve

- Develop a whole-school strategic plan clearly setting out the school goals and how these are to be achieved.
- Develop systems to evaluate progress towards goals that are achievable, evaluative and, where possible, measurable.
- Continue teachers' professional development in the use of the new data systems to further inform their instruction.
- Through lesson observations encourage teachers to make greater use of differentiated instruction to ensure all students' learning needs are met.

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.

Students perform well and make good progress in this high-achieving school. There have been significant improvements since the appointment of the current principal, who has been the driving force to effect change. His enthusiasm, vision and commitment have inspired staff. He has created a very effective school, where there is a high level of mutual trust between all parties and a commitment to learning is infused throughout the building. Development of middle leader capacity, professional development in the use of data and assessment and communication have improved the consistency of instruction and the development of goal setting since the last Quality Review.

Data is used very well. The systems put in place recently, enable the administration to identify the performance and progress of individual and groups of students very effectively. Information is used particularly well to assign students to courses based on their prior achievements. The goals of particular classes are clearly identified and the vast majority of students reach them. The aim is that 85% of students reach at least the 85% pass rate. Good additional classes and guidance services support students who, for personal or academic reasons, find the 85% pass rate difficult. The school is also using data well to support individual students. For example, the inquiry team has identified a group of underperforming students and created interventions to support them. The progress of these students is currently being assessed and if successful will be adapted and offered to a wider range of students.

The curriculum is focused on mathematics and science and is expanding to create more courses to meet the needs of its students more effectively. There are good opportunities within this structure for students to follow the arts. Courses are very challenging. Students who complete advanced placement courses successfully begin to earn college-level credits through, for example, links with Rochester College of Technology in the new Aerospace Engineering course. Challenge is differentiated to meet student needs through careful allocation to courses. Although, there is limited differentiation in class teaching to meet individual student needs.

The principal has a clear vision for the school and although good documentation is used to plan for the future, it is not well articulated though whole-school strategic development planning. This restricts the school's ability to evaluate its progress towards a set of clearly identified goals and the capability of departments to create their own action plans to support the overall school aims and objectives.

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 has good data systems, which it uses effectively to monitor students' performance and progress by class, department, grade, course and student. Students not making expected progress are identified and supported. The system is particularly well used to assign students to new courses based on their prior achievement. Data from middle schools is also used to allocate courses to freshman. Students therefore take courses that are challenging and appropriate to their needs and prior performance levels.

The small number of special education students is currently effectively supported through the guidance department. However, the school wishes to improve its support and has appointed a special education teacher to do this. The number of English language learners is also small. All these students are at least proficient in English and are tracked as a separate group, as are ethnic groups, to ensure they make similar progress to other students.

The school has a number of informal systems to compare its performance and progress with similar schools. A comparison is made with schools outside the City, as there are few schools within the City that are truly similar. The data systems are relatively new and are very well used by the administration and departments. Teachers do not consistently use these systems, as training in their use has not yet been fully implemented.

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 sets students' rigorous goals. This is achieved through allocating students to appropriately challenging courses based on their prior performance, identified by good data analysis. The time frames for achievement of goals are the end of course grade and report card assessments and course pass rates. The physics department has developed an impressive range of additional interim assessments. This enables them to monitor individual student, class and group progress even more closely. This model is being extended to other departments. This results in more rigorous overall monitoring of performance and progress identifying students in need of extra support as early as possible.

Good use of data has enabled the inquiry team to identify a group of students in particular need of support and an intervention program has been developed to give these students the additional instruction and attention they need. Initial monitoring of the success of the intervention program has just been reviewed, and if shown to be

successful will be extended to support a wider range of students. Monitoring and improving the performance of students in the greatest need of support has been well developed through good use of comparative case studies. The whole staff is fully committed to improving students' performance and helping them to make the best progress possible. Very high expectations are embedded in the climate throughout the school, although the whole-school goals are not well articulated. Communication with parents is good. A very good web site is used for communication with students and also with parents. Parents find the school supportive. They believe their views and concerns regarding their children are listened to and they appreciate the online academic support the school offers for its demanding courses.

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.

The school uses data particularly well to assign individual students to the most appropriate courses, as well as to identify the performance progress of students within its courses. Students are well aware of very clear expectations within each course. The very high expectations result in students learning well. The curriculum is broad and stimulating with good opportunities for involvement in the arts as well as in mathematics and science. There is a continual drive to improve the range and access to courses. Lessons are interesting and challenging resulting in students who really enjoy school and are very eager to learn. They feel safe and supported and have high aspirations. The budget is used well to facilitate the wide and expanding range of courses open to students, for example, the new Aerospace Engineering course.

The school differentiates instruction largely through assignment of students to appropriate courses. Their past performance entitles them to take advanced placement, honors or college courses. There is also differentiation where students are assigned to different parallel classes depending on achievement. Yet, because there is limited differentiation within classes, based on students' prior performance, work is not consistently matched to student need. The high level of mutual trust and respect between all staff and students promotes a climate where students feel very well supported in both their personal and academic development. The newly formulated counseling service is providing good guidance to parents and students by giving timely support to enable students to maintain high attendance which ensure students' continue to make good progress.

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.

Although there is an appropriate structure of classroom observations to help teachers improve their instruction these currently do not focus significantly on developing classroom differentiation. However, data is being used well to develop differentiated support for teachers so that they can improve their instruction.

Interim assessments in the physics department are being used particularly well to ensure all classes make good progress, and where not, teachers are given appropriate support. Although teachers are generally reflective practitioners, intervisitations between classes are largely voluntary and largely within departments. There are no minimum expectations set by the administration. Teachers new to the school or to the profession however, are well supported through opportunities for intervisitations, mentors, additional planning time and “buddies” within their departments.

An assistant principal now supervises counseling services. This has given a high profile and a new direction for the department. There is also a good range of additional services available to students through the counseling department such as, psychologists and social workers. The creation of small learning communities for grade 9 students is of particular note, giving them a very good introduction to such a large school. They are taught initially by a small range of teachers belonging to their small community before being introduced to the larger school community. These good procedures ensure the school runs well, students feel safe and enjoy learning.

There is a good range of outside organizations that are used to support students' personal and academic growth. There are links with many colleges and universities, for example, the Rochester College of Technology, which supports the new Aerospace Engineering class. Of particular note are the alumni who are launching a campaign to raise “\$21,000,000 for the 21st century” to continue upgrading the building, develop more courses and secure the school's financial future.

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 proficient.

The principal has a very clear vision for the school and he has successfully developed collegiality and a common commitment to high expectations and supporting students to learn effectively. The school has plans to increase the number of courses and range of students attending those classes. The overall aim is that 85% of students meet an 85% pass rate in Regents Examinations. Overall departments use data well to modify teaching, support teachers and set expectations. However, these plans do not have clear interim goals. For example, they don't have a clear system for departments to evaluate the progress towards measurable goals that are modified for the individual circumstances of each department or community.

The school is using a number of documents to shape its future, some of which were compiled some time ago. As of yet, the school does not have a well-articulated strategic plan giving clear direction to enable all stakeholders to follow and contribute to a common direction. The school plans to refine their future strategic plan by identifying the interrelationships, interim and long-term outcomes, timeframes of the goals set and consequences of goals.

Part 4: School Quality Criteria Summary

SCHOOL NAME: Brooklyn Technical High School	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