



# **The New York City Department of Education**



# **Quality Review Report**

**The High School for Construction Trades,  
Engineering and Architecture**

**High School 650  
94-06 104th Street  
Queens  
NY 11416**

**Principal: Quintin Cedeno**

**Dates of review: May 23 - 25, 2007**

**Reviewer: Maggie Hollingsworth**

# 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**

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 High School for Construction Trades, Engineering and Architecture is located in the Ozone Park district of Queens and opened in September 2006. It has 196 students enrolled in grade 9 and expects that number to rise to 392 when grade 10 is added next year and further with additional cohorts. The ethnic make up of the student population is 42.4% Hispanic, 29.1% Asian and those from other ethnic backgrounds, 16.3% Black and 12.2% White. Four percent are special education students and 2% are English language learners. The school has Title 1 funding with 64% eligibility, which is higher than the rate for similar and City schools with complete high school enrollment. At 94%, attendance is above average for similar and City-wide schools.

This is an empowerment school. Empowerment schools have more flexibility to make key decisions and control the resources for their school community. Empowerment schools are free to develop or purchase professional development services, choose which schools to affiliate with, and benefit from reduced reporting and paperwork requirements.

## Part 2: Overview

### What the school does well

- The principal's clear vision and firm commitment have been a driving force in establishing the school's strong culture of achievement.
- Teachers, paraprofessionals and administrators know the students very well and ensure that, through their focused and timely support, students do their best.
- The principal and assistant principal have an excellent understanding of data and work together to ensure that data underpins and drives the school's planning and review process.
- Good teamwork among all staff ensures that the school is well managed and runs very smoothly.
- Teachers are open to new ideas, collaborate, and learn good practice from each other.
- Teachers' professional development is a strength of the school and the cornerstone for improvements in teaching, learning and assessment.
- The school's focus on the specialist areas of construction, engineering and architecture has a positive impact on the students' motivation and progress.
- The school's well-kept new buildings and its extensive resources are a source of students' pride and self esteem.
- Imaginatively planned project-based group work encourages students to learn effectively and enjoy lessons.
- The school community shares very high expectations of students' attitudes and achievement.

### What the school needs to improve

- Ensure that development plans have clearly defined actions, targets, time frames and benchmarks to guide future work.
- Devise a system for recording and feeding back information gained from regular informal classroom observations to teachers.
- Provide rubrics for work on display which help students to understand its strengths and how it could be improved.

## Part 3: Main findings

### Overall Evaluation

#### **This is a proficient school with well-developed features.**

Although newly established, the school has already developed a good reputation. Led by an enthusiastic and reflective administration, the small staff works together as a cohesive team to ensure that students are very well supported and do their best. In a short time, the school has developed a strong culture of high achievement.

The principal is committed to improving the students' learning through their active engagement in interdisciplinary projects. The school is well on the way to achieving this aim. Lessons have interesting themes and teaching is engaging. Students enjoy their work and want to succeed. The school's well kept facilities and resources are a source of pride for the students. Its triple themes of construction, engineering and architecture are beginning to be reflected in aspects of the curriculum, for example, through the school's chosen projects that require model making and scale drawing. This, too, is having a positive impact on student engagement.

Well led by the principal and assistant principal, the staff make very good use of data, analyzing the students' performance regularly and adjusting their planning and teaching to ensure that students are neither left behind nor held back. Despite its size, the school has been responsive to students' needs in aligning elements of the curriculum and staffing.

The school is now in a new phase and will double in size next year. It is aware of the need for careful planning to maintain its small school collegiality while it continues to train new staff and assimilate more students. It has strong foundations on which to build.

### 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.**

Data is at the heart of the school's work. The principal and assistant principal have taken the lead in providing a comprehensive and detailed analysis of data which breaks down information by gender, ethnic group and grade level within and between marking periods and highlights graphically where students are achieving well and where and why they have dropped behind. The progress of students with individual education plans and of English language learners is tracked carefully and their targets adjusted accordingly. Good teamwork between staff ensures that data is shared and that all students who need it are caught in a widespread net of additional support. Staff use the wealth of data from regular State and practice tests and ongoing formative assessments to identify barriers to learning routinely. This was particularly successful in the case of a group of 15 students whose achievement on entry was causing the most concern. By keeping track of the students' progress and attendance within and between marking periods, lapses in achievement in a subject and between subjects were identified quickly and action was taken to make up the

shortfall. The school compares its attendance with that of schools in its network and plans to compare test results once the Regents results have been received.

The school's effective use of data to raise achievement is well illustrated in mathematics, where, at the start of the school year, students were tested and the results used to place them in differentiated teaching groups. The highest achieving students were successfully fast-tracked through Regents examinations in five months, leaving scope for them to take a second mathematics paper and gain further credits.

**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.**

The staff use data routinely to identify students' strengths and weaknesses and plan work that will help them make up shortfalls. During the planning for the summer school, for example, faculty used information on the achievement of the target group of most needy students to devise a mix of project-based and subject-focused work to engage the students and provide the appropriate credit recovery. Mandated intervention programs are complemented by open tutoring sessions in all subjects so that all students, whatever their achievement, can get help to improve their grades. Teachers regularly share data at 'Kid Talk' sessions when they discuss progress of individual students across subjects. As a result, they ensure that students who are in danger of falling behind are provided with tutoring, and that those whose attitudes are of concern are counseled and, if necessary, placed on daily report.

The school expects students to work hard and achieve well and plans its goals, which include interim- and long-term objective measures of success, around this expectation. The requirement that all students achieve 12 - 17 credits more than regular graduation ensures that students cannot waste valuable learning time. The school's strongly supportive culture assists individual students and groups of students to achieve their best. A student commented: "Everyone keeps an eye on what you do. Teachers care." Parents fully support the school's goals and expectations and greatly value opportunities to meet teachers informally by request as well at regular formal meetings. The students themselves aim high, requesting to retake tests where this would allow them to gain better grades. They are proud of the school's splendid new facilities and resources, and of its work ethic that enables them to achieve well and drives the activity of the whole school community.

**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 good use of information on student performance to make decisions about which courses and programs to offer throughout the year. For example, when summer assessments showed that a large group of students were already proficient at mathematics A, the school offered a course in mathematics B which has accelerated their credit accumulation. In mathematics and science, students also receive more than the

mandated amount of instruction to enable them to gain three rather than two credits a year. For those who are in danger of falling behind, student advisors collect and analyze test results to decide who would benefit from academic support before or after school, or from the Saturday academy. The few special education students are taught in general education classes with additional support to achieve the targets in their individual education plans. All students take a course in information technology and use the school's computer laboratories to help them present projects in other subjects to a high quality. In lessons, teachers check the students' work regularly and provide feedback on how it can be improved, although students' work on display does not always reflect this rigorous process. While attractively mounted, some does not give enough information about why it was awarded the grade it was given nor show the rubric that was used to assess it.

Faculty often meets with the administration to discuss students' academic needs and plan to secure student engagement and accelerate their progress, while holding teachers to account. For example, a characteristically good-humored and effective meeting was observed during which the teachers exchanged ideas on what would engage students best for the upcoming summer school. The small instructional team works together productively. Using common planning sessions as well as their own time, teachers discuss and devise cross-curricular theme-based projects for class lessons. Subject boundaries are often crossed to the benefit of students' motivation and progress. Lessons demonstrate good levels of student engagement. Despite its small size, the school manages to provide a suitable curriculum because instructional staff teach more than one subject, and teachers support each other in monitoring the progress of each student through the use of meaningful data generated by the curriculum. Data is used effectively to make suitable budgeting and staffing decisions.

Staff know their students very well and there is a high level of mutual respect. As a result, students report that they enjoy school and find the staff easy to talk to. The school has effective measures and procedures in place to ensure good student attendance.

**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 school will double in size next year and its assertive teacher recruitment campaign rightly reflects this. There has been no shortage of potential recruits but these are assessed rigorously on their willingness teach project-based work and work alongside other teachers in a team.

Professional development is a strong feature of the school and is encouraged by weekly sessions where the whole staff meets together. As well as training in the use of the school's state-of-the-art technology, including its computers and electronic smartboards, the staff have learned to develop students' thinking strategies. The latter was evident in lessons observed where students were encouraged to develop their ideas by responding to phrases such as: 'I used to think but now I think...' Teachers have also reviewed students work together to ensure that they check and evaluate to common standards. Students benefit from the collegiate approach teachers take by devising programs, lessons, and assessments which meet the students' needs.

The principal and assistant principal frequently observe lessons, and teachers are encouraged to do similarly. These observations play a key role in determining the

effectiveness of the school's professional development program and in driving improvements to instruction. While the administration records formal observations, the principal is aware that there is no similar record of his informal comments, which, although not mandatory, staff have requested.

The principal's clear vision and firm commitment have been a driving force in establishing the school's strong culture of achievement. He is well respected by the whole school community and staff and students appreciate his open door policy. He received strong support from the assistant principal whose meticulous record keeping has been used to great advantage in documenting and building the school's progress in the critical first year of its development. The school runs exceptionally smoothly because all staff share high expectations of the students' work and behavior. Staff work well together and are committed to evaluate their work in their drive for continuous school improvement.

The school's partnerships with external agencies are in their infancy but nevertheless play an important role in providing advice and support for the school's vocational themes.

**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 school's administration is thoughtful and reflective. The principal and assistant principal use data wisely to evaluate each step of the school's progress, realigning elements of the curriculum and teaching as flexibly as the school's size and staffing capacity allows. Faculty retreats and other meetings focus effectively on data, which is compared and analyzed to understand students' achievement and to enable staff to consider how far the school has come and what its priorities should be for the future.

The principal's summary of the teachers' views entitled 'Food for Thought' showed staff that he took their views seriously. The Student Senate gives students a genuine voice in developments that directly affect them. The Comprehensive Education Plan, under development for the coming year, has involved the whole school community in its evolution. The plan is still in outline and, while it has suitably ambitious goals, it lacks defined actions, targets, time frames and benchmarks to guide future work. Nevertheless, the collegiality that underpins the school's work ensures that the school's plans for the future are well known and that all parties pull together to achieve them.

## Part 4: School Quality Criteria Summary

<b>SCHOOL NAME: The High School for Construction, Engineering and Architecture (HS 650)</b>			
	∅	✓	+
<b>Quality Score</b>			
		X	
<b>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.</b>	∅	✓	+
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"> <li>each student, classroom, grade level,</li> </ul>			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"> <li>ethnic groups, English language learners, special education students*</li> </ul>			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"> <li>all other categories of interest to the school*</li> </ul>			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	
<b>Overall score for Quality Statement 1</b>			
			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.

<b>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.</b>	∅	✓	+
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	
<b>Overall score for Quality Statement 2</b>			
			X

<b>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.</b>	∅	✓	+
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	
<b>Overall score for Quality Statement 3</b>		X	
<b>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.</b>	∅	✓	+
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	
<b>Overall score for Quality Statement 4</b>			X
<b>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.</b>	∅	✓	+
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
<b>Overall score for Quality Statement 5</b>		X	