Quality Review Report

2011-2012

High School for Construction Trades, Engineering and Architecture

High School Q650

94-06 104th Street
Queens
NY 11416

Principal: Lakeisha Gordon

Dates of review: December 12 - 13, 2011

Lead Reviewer: Juan Mendez

Part 1: The school context

Information about the school

High School for Construction Trades, Engineering and Architecture is a high school with 904 students from grade 9 through grade 12. The school population comprises 10% Black, 41% Hispanic, 17% White, 30% Asian students and 0% other students. The student body includes 0% English language learners and 4% special education students. Boys account for 64% of the students enrolled and girls account for 36%. The average attendance rate for the school year 2010 - 2011 was 92.8%.

Overall Evaluation

This school is proficient.

Part 2: Overview

What the school does well

- The school has aligned and integrated curricula to Common Core Learning Standards (CCLS) across grades and subject areas, and the school offers a wide range of engaging programs to prepare students for postsecondary success. (1.1)

    - Students choose a career major leading to State certification in one of three technical fields while pursuing a college preparatory course of study. The State approved curricula denote key State standards and also provide multiple CCLS tasks that emphasize real world scenarios. While students complete the recommended courses required in their selected Career and Technical Education (CTE) area of concentration, they also have access to Advanced Placement and college courses on site. As a result, greater numbers of students are taking higher-level courses and earning college credit in high school.

    - The academic curricula integrate many career and technical education experiences through interdisciplinary projects. Academic and CTE teachers work together to align curricula and plan integrated research-based projects that emphasize higher order skills, embedding this practice across the school. Teachers use literary and expository writing to increase the amount and quality of research projects to make instruction more engaging and to increase achievement. This inter-disciplinary practice contributes to accelerated student outcomes and steadily increasing graduation rates which have moved from 92.1% to 97.9%.

- School leaders make strategic and effective organizational decisions to structure teacher and student time in order to promote accountable collaboration, resulting in improvements in learning. (1.3)

    - All teachers belong to a common planning team for each subject area and grade-level in their program. Teams meet five times a week for curriculum development, academic advisory and student case study. This structure provides targeted academic and guidance support for every student. Each teacher on a team teaches the students studied, and one member of the team is the advisor for those students as well. In addition, teachers engage in case conferences with their students to share their results and provide students time to self reflect on their academic goals. This has resulted in an average credit accumulation rate of 96%.

    - The school is organized into three small learning communities around career and technical education (CTE) themes. The principal, assistant principal, a leadership consultant and a coach comprise the cabinet and meet weekly. The leaders of the small learning communities then meet with their staff, including a dedicated arts teacher and guidance counselor. This distributed leadership approach ensures coherence and allows teachers the opportunity to provide close and detailed attention to individual students and subgroups. Students and parents spoke of close relationships within these communities. As a result, these communities are widely supported, and strategic decisions pertaining to these communities positively impact the school. Also, teachers hold themselves accountable for their students' success in all classes. As an illustration of this accountability, in all observed humanities classes, students were reading informational texts and developing arguments based on textual evidence. This aligns to the school's Comprehensive Educational Plan (CEP) goal which states:

"By June 2012, 100% of our History and English teachers will use strategically selected Common Core Standards to align writing within their department."

- School leaders and staff regularly gather and analyze a wide range of relevant data to determine areas of strengths and needs of individual students and sub-groups. (2.1)

  - Schools leaders and common planning teams harvest data from Regents examinations and scholarship reports to identify student performance trends. This data is used in advisory discussions with students where academic goals and benchmarks are set. Inquiry teams identify student sub-groups that are making little progress and teachers follow-up by conducting highly focused Regents preparation classes. This process resulted in a 13.6% improvement in the mathematics Regents examination scores among students in the lowest third. This practice is now utilized for targeted students as needed and is embedded school-wide.

  - The school analyzes Acuity Predictive data, baseline assessments, interim assessments, marking period scholarship reports and student work products to make effective adjustments to school structures in order to meet the learning needs of students. In order to more closely track student interim progress, teachers administer assessments every nine weeks. This process enables all teachers to plan their lessons for content and skills mastery, resulting in a 2.3% improvement in credit accumulation and a 5.8% increase in cohort graduation rates.

- Schools leaders and faculty use tools in a highly effective manner to gather, analyze, disseminate and use data in order to identify student mastery and performance trends, greatly impacting curricular and organizational decisions. (2.3)

  - Internal observations and multiple data systems such as ARIS, Student Transcript and Academic Reporting System and Automate the Schools allow staff to closely analyze student progress on Regents examinations and school-level assessments in order to adjust instructional programs accordingly. For example, identified trends have led to the faculty to make adjustments in social studies curriculum and instruction, where emergent trends showed that students need more rigorous feedback on document based essays, content knowledge and literacy skills. As a result, level 4 students have increased by 10% in the Global and U.S. History and Government Regents examinations.

  - Common planning teams and individual teachers meet regularly during and after each marking period to analyze overall student and subgroup data, especially the lowest third. This leads to critical recommendations such as after school and Saturday tutoring, which has yielded higher levels of student achievement. Furthermore, this allows underachieving students to receive customized academic intervention services. As a result, the passing percentage of students taking Regents examinations in mathematics has increased by 4.5%.

- School faculty work cohesively in examining periodic assessment data and student artifacts to track progress and adjust school-wide and classroom-level goals for all students and subgroups to ensure continued success for all. (3.3)

  - Administration and faculty are integrally involved in the frequent monitoring and evaluation of commonly developed periodic assessment data, including baseline, interim and final data, as well as scholarship reports. This ensures the achievement of school-wide and individual goals, which has a positive impact on

the school and community. As a result of this in-depth analysis, all tenth grade students follow a science literacy curriculum that develops the skills required to write effectively and confidently in college level courses offered at the school. Furthermore, this increases the number of students who successfully pass the chemistry and physics Regents examinations. Overall, this process increases student motivation, student expertise and community support.

  - Teams of teachers use data from baseline assessments, the progress to graduation tracker, and attendance and safety data to identify student inquiry subgroups. These subgroups include the lowest third, struggling students, and students with disabilities. This process allows inquiry teams to set individual goals for students from the aforementioned groups. Additionally, teacher teams are able to track progress and make adjustments. As a result, students in the lowest third were able to achieve learning targets and improve their academic performance by scoring 75 or above on the mathematics Regents examination. This was an increase of 13.6% and 100% of all student subgroups graduated with their cohort.

- The school leader and faculty share a strong vision for the school's future and clearly articulated core beliefs and theories of action provide the framework for goal setting and action planning, resulting in accelerated student achievement. (3.1)

  - School leaders have a keen understanding of how students learn best, which is mechanized by clear expectations that drive teacher and student performance. A school-wide interdisciplinary component allows the transference of teacher knowledge across departments while maintaining a focus on key standards. This interdisciplinary component is tracked closely with teacher-administered assessments to gauge mastery levels. Additional leverage points include underlying theories of what works and what enhances pedagogical practice. School leaders identified theories pertaining to Norman Webb's Depth of Knowledge and Charlotte Danielson's Framework for Teaching. As a result, goal setting is made on the basis of informed decisions, leading to academic improvement on state assessments in all major subject areas.

  - Faculty and staff collaborate to improve the consistency of organizational and instructional practices as reflected in school level and teacher goals. The teacher team spoke of a recent analysis of instructional practices that revealed grammatical deficiencies in specified subject areas. This prompted the need to establish interdisciplinary goals. Teacher teams mentioned the process of aligning social studies curricula to English curricula, which coincides with a CEP goal that states, "Our goal is to continue to improve and sustain the educational paradigm and scheduling infrastructure that has enabled our teachers to create cross-disciplinary, performance based assessment tasks and activities that integrate literacy skill(s)." This results in the accentuation of critical skills in major subject areas and an increase in the four-year cohort graduation rate, which was comprised of 91% Hispanics and 96% economically disadvantaged students.

What the school needs to improve

- Further hone and expand differentiation practices among faculty to provide opportunities for students of all ability levels to engage in in-depth discussions, high levels of student thinking and participation. (1.2)

  - Across classrooms teachers provide multiple entry points for students to engage in lessons. Norman Webb's Cognitive Rigor Matrix was clearly incorporated into

lesson planning, but academic rigor was inconsistent in the classrooms we visited. Some teachers did not provide adequate extension activities to appropriately challenge students who have attained mastery. This results in inconsistency in attaining a more personalized learning experience for all students.

- Extend the practice of teacher teams to generate assessments and rubrics to identify students' strengths and areas of need in order to inform curricular and instructional decisions, resulting in detailed next learning steps that support student mastery. (2.2)

    - The school examines and shares its overall results from state and school assessments with parents and students. However, teachers do not extend this analysis into the classroom. Teachers observed were not effectively using rubrics to clarify the specific learning steps that would enable students to achieve higher levels of mastery. Providing a clear profile of students' strengths and weaknesses is clearly not an embedded practice in the school. As a result, instruction is limited to the attainment of passing scores, and students who are ready to move ahead are not being provided with the necessary means to do so.

- Expand the use of external partnerships to further support students in continual learning opportunities that promote high levels of achievement and social-emotional development. (4.4)

    - School leaders hold regularly scheduled assemblies to celebrate students' areas of growth and organize frequent college trips to address college readiness goals, however the school does not maximize opportunities for extracurricular activities and academic clubs. As a result, students do not have high levels of access to after school staff and community-based organizations that could provide expanded opportunities for cultural enrichment.

- Further align the feedback and next steps provided to teachers through the Danielson researched-based framework in order to elevate school-wide instructional practices and student learning outcomes. (4.1)

    - School leaders provide consistent formal and informal feedback to teachers based on frequent classroom observations and review of student performance outcomes. However, although student work products are frequently used to gain a valuable perspective into levels of academic rigor, it is not frequently used to provide the recommendations necessary to produce highly effective instruction. As a result, teacher-focused professional development and collaboration efforts do not always result in improved teacher practice.

Part 3: School Quality Criteria 2011-2012

School name: High School for Construction Trades, Engineering and Architecture	UD	D	P	WD
Overall QR Score			X	

Quality Statement 1 – Instructional and Organizational Coherence: The school has a coherent strategy to support student learning that aligns curriculum, instruction and organizational decisions.				
To what extent does the school regularly…	UD	D	P	WD
1.1 Design engaging, rigorous and coherent curricula, including the Arts, for a variety of learners and aligned to key State standards?				X
1..2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best, and ensure that it is: aligned to the curriculum, engaging, and differentiated to enable all students to produce meaningful work products?			X	
1.3 Make strategic organizational decisions to support the school's instructional goals and meet student learning needs as evidenced by meaningful student work products?				X
1.4 Maintain a culture of mutual trust and positive attitudes toward learning that support the academic and personal growth of students and adults?			X	

Quality Statement 2 – Gather and Analyze Data: School leaders and faculty consistently gather, analyze and share information on student learning outcomes to understand school and student progress over time.				
To what extent does the school …	UD	D	P	WD
2.1 Gather and analyze information on student learning outcomes to identify trends, strengths, and areas of need at the school level?				X
2.2 Align assessments to curriculum, use on-going assessment practices and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom level?			X	
2.3 Use grading policies and tools to enable school leaders and teachers to organize, aggregate, and analyze student performance trends to inform instruction and curriculum?				X
2.4 Engage families in school decision-making, activities and an open exchange of information regarding students' progress toward school and class expectations?			X	

Quality Statement 3 – Plan and Set Goals: School leaders and faculty consistently engage the school community and use data to set and track suitably high goals for accelerating student learning.				
To what extent does the school …	UD	D	P	WD
3.1 Establish a coherent vision of future development that is reflected in a short list of focused, data-based goals that are understood and supported by the entire school community?				X
3.2 Use collaborative and data informed processes to set measurable and differentiated learning goals for student subgroups, and students in need of additional support?			X	
3.3 Ensure the achievement of learning goals by tracking progress at the school, teacher team and classroom level?				X
3.4 Communicate high expectations to staff, students and families, and support students and families to achieve them?			X	

Quality Statement 4 – Align Capacity Building: The school aligns its leadership development and structured professional collaboration around meeting the school's goals and student learning and emotional needs.				
To what extent does the school…	**UD**	**D**	**P**	**WD**
4.1 Use the observation of classroom teaching and the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection, with a special focus on new teachers?			X	
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning?			X	
4.3 Provide professional development that promotes independent and shared reflection, opportunities for leadership growth, and enables teachers to continuously evaluate and revise their classroom practices to improve learning outcomes?			X	
1..4 Integrate child/youth development, guidance/advisement support services and partnerships with families and outside organizations with the school-wide goals to accelerate the academic and personal growth of students?			X	

Quality Statement 5 – Monitor and Revise: The school has structures for monitoring and evaluating progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.				
To what extent does the school…	**UD**	**D**	**P**	**WD**
5.1 Evaluate the quality of curricular, instructional and organizational decisions, making adjustments as needed to increase the coherence of policies and practices across the school, with particular attention to the CCLS?			X	
5.2 Evaluate systems for assessing students, organizing data, and sharing information with student and families, making adjustments as needed to increase the coherence of policies and practices across the school?				X
5.3 Establish and sustain a transparent, collaborative system for measuring progress towards interim and long term goals and making adjustments during the year and over time?				X
5.4 Use data to regularly evaluate the effectiveness of structured professional collaboration, capacity building and leadership development strategies?			X	

Quality Review Scoring Key							
UD	**Underdeveloped**	**D**	**Developing**	**P**	**Proficient**	**WD**	**Well Developed**