Quality Review Report

2014-2015

Queens High School for the Sciences at York College
High School Q687
94-50 159th Street
Queens
NY 11433

Principal: Lenneen Gibson

Date of review: April 1, 2015
Lead Reviewer: Rajeev Bector
The School Context

Queens High School for the Sciences at York College is a secondary school with 419 students from grade 9 through grade 12. The school population comprises 7% Black, 10% Hispanic, 7% White, 75% Asian, and 1% other students. The student body includes 0% English language learners and 0% special education students. Boys account for 54% of the students enrolled and girls account for 46%. The average attendance rate for the school year 2013-2014 was 97.1%.

School Quality Criteria

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>Area of:</th>
<th>Rating:</th>
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<tbody>
<tr>
<td>To what extent does the school…</td>
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<tr>
<td>1.1 Ensure engaging, rigorous, and coherent curricula in all subjects, accessible for a variety of learners and aligned to Common Core Learning Standards and/or content standards</td>
<td>Additional Findings</td>
<td>Proficient</td>
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<tr>
<td>1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best that is informed by the instructional shifts and Danielson Framework for Teaching, aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products</td>
<td>Additional Findings</td>
<td>Proficient</td>
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<td>2.2 Align assessments to curricula, use on-going assessment and grading practices, and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom levels</td>
<td>Focus</td>
<td>Developing</td>
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<thead>
<tr>
<th>School Culture</th>
<th>Area of:</th>
<th>Rating:</th>
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<tr>
<td>To what extent does the school…</td>
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<td>3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations</td>
<td>Celebration</td>
<td>Proficient</td>
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<thead>
<tr>
<th>Systems for Improvement</th>
<th>Area of:</th>
<th>Rating:</th>
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<td>To what extent does the school…</td>
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<td>4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning</td>
<td>Additional Findings</td>
<td>Proficient</td>
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Area of Celebration

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>3.4 High Expectations</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings
School leaders and staff consistently communicate expectations connected to a path to college and career readiness, and establish a culture for learning that consistently communicates high expectations for all students.

Impact
By communicating high expectations to students and families, the school creates a high degree of accountability and offers ongoing feedback to help families engender a college and career mindset.

Supporting Evidence
- The school communicates high expectations to all students and prepares them for the next level. Students are provided with a student handbook, and the school’s website lists announcements, assignments, as well as course outlines and grading policies. Additionally, the school uses the ARISTA Honor Society to communicate high expectations to students.

- Although staff has established a culture for learning that communicates a set of high expectations for all students, there is limited evidence of clear, substantive and focused feedback to students to help them own their educational experience. For instance, across classes, verbal feedback to students was not always sufficiently detailed and focused, thus hindering some students from formulating their next steps for improvement.

- School leaders and staff offer ongoing feedback to help families understand student progress toward expectations connected to college and career readiness. The school communicates with families in several ways: PupilPath (a web-based system of communication); Naviance (a college application portal that apprises families of student progress); the School Messenger system; “Breakfast with the Principal,” a quarterly breakfast used to share the school’s vision and high expectations for students; monthly Parent-Teacher Association and School Leadership Team meetings; presentations by guest speakers on financial aid and scholarships; and presentations by guidance counselors on the college application process.

- Families report that the school constantly updates them on what needs to be improved in terms of students’ academic progress and makes an effort to address the needs of its student body. For instance, when the school noticed that some students were struggling in writing, it put into place a writing lab; and when one parent met with a teacher to make him aware of her child’s preference for visuals, the teacher made extensive use of visuals in his classroom.
Area of Focus

<table>
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<tr>
<th>Quality Indicator:</th>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Developing</th>
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Findings
The school is developing in its use of common assessments, rubrics and grading policies to measure student progress toward goals. Teachers’ assessment practices inconsistently reflect the use of ongoing checks for understanding and student self-assessment.

Impact
While in some classrooms assessment practices yield improvements in student work, assessment practices across the school, including the use of common assessments, are inconsistently used to adjust curricula and instruction. As a result, students do not always receive actionable feedback, and are unable to monitor their own progress and formulate their next learning steps.

Supporting Evidence

- In four of eight classrooms, teachers provided limited feedback to students on their academic performance. While in some classes teachers used effective formative assessment strategies and rubrics to gauge the extent of student learning, in others teachers assessed understanding of the content for the class as a whole, circulated but did not provide feedback, and did not use checklists or rubrics to make the assessment criteria clear to students. Additionally, school leadership acknowledged that teachers did not consistently utilize assessment strategies such as exit slips or stop and jot prompts.

- The results of assessments at the classroom level are inconsistently used to make pedagogical adjustments. School leadership indicated that teachers are conducting item analyses of assessments, but that “it is happening more in an isolated situation.” School leadership and teachers stated that common assessments exist in some subjects, such as English language arts and geometry, but not in others.

- Effective adjustments based on formative assessments are not always made to meet students’ learning needs. Data from the 2013-2014 NYC School Survey report indicates that 29% of teachers do not use classroom-based checks for understanding. While in some classes teachers called on students randomly, asked students to provide a rationale, and insisted that students explain the steps they took to complete a task, in others they did not consistently monitor learning for groups or individuals, or encourage students to self- or peer-assess. Additionally, across classrooms, there were few student work products with teacher comments and next steps for improvement.

- A review of the planning documents indicated that teachers inconsistently utilize assessment practices and do so at varying levels. While some lesson plans referenced peer-to-peer and student self-assessment strategies, others made no mention of assessments, provided practice problems in lieu of assessment, or simply stated, “ask conceptual questions.”
Additional Findings

<table>
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<th>Quality Indicator:</th>
<th>1.2 Pedagogy</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings
Pedagogy is aligned to the curricula and informed by the Danielson Framework for Teaching and the instructional shifts. Teaching strategies provide multiple entry points into the curricula, and student discussions reflect high levels of student thinking.

Impact
The alignment of pedagogy to curricula enables students to be engaged in appropriately challenging tasks. While teachers create the conditions for high levels of student thinking through scaffolds and supports, students have limited opportunities to collaborate and demonstrate their understanding through meaningful work products.

Supporting Evidence

- Pedagogy is aligned to the curricula and informed by the Danielson Framework for Teaching and the instructional shifts. One of the school's goals in its Comprehensive Educational Plan is to support teachers who are struggling in component 3B (Using Questioning and Discussion Techniques), of the Danielson Framework. This correlates with the school's instructional focus of developing students' skill sets of using evidence to support argument in written form as well as in discussions across all disciplines. In 5 of 8 classrooms, students used textual evidence to substantiate their claims, participated in a fishbowl discussion, and used a document camera and the whiteboard to show and explain their work. However, across classes, students did not engage in student-to-student discussions, and did not always work interdependently while working in pairs or groups.

- Teaching strategies and routines provided multiple entry points into the curricula to engage all learners in challenging tasks. Teachers provided options of perception, such as video clips, and options for comprehension, such as graphic organizers and concept maps, to allow access to academic tasks. In a social studies class, for instance, the teacher deepened students' understanding of the concept of totalitarianism by providing quotes from social thinkers, showing a video clip of a propaganda film, and asking students to create higher order thinking questions based on the primary source readings. Similarly, in an English language arts class, students worked in different groups to write a short story on a common theme but utilized multiple means for communication and expression. One group wrote their stories in verse, another used video to present the content, and a third collaborated in real-time using Google Docs. Students used editing tools such as Vegas Pro and presentation software such as Prezi.

- Although the school's graduation rate improved from 98% to 100% from 2013 to 2014, the 2013-2014 NYC School Survey indicates that only 56% of students report the school offers "a wide variety of programs, classes, and activities to keep me interested in school." Student discussions reflected high levels of student thinking, but student work products and high levels of student participation were not evident. Students were consistently asked to justify their response, explain their thinking, and show how they arrived at the solution to a problem; in several classes, students made insightful comments in class discussions and connected the content to contemporary events and made real-life connections. However, in some classes, although students could explain in detail how they completed an assignment and demonstrated clear understanding of the concepts, they produced no written work products, and there was no expectation of the same. Additionally, during class discussions and think-pair-share activities, several students did not participate.
Quality Indicator: 1.1 Curriculum | Rating: Proficient

Findings
Curricula are aligned to the Common Core Learning Standards and content standards, and integrate the instructional shifts. Curricula and academic tasks emphasize higher-order skills across grades and subjects.

Impact
Teachers promote higher order thinking skills for all students by using a variety of resources and supports. As a result, students have access to the curricula and are cognitively engaged.

Supporting Evidence

- Curricula and planning documents, across grades and subjects, are aligned to Common Core and content standards, reflect academic rigor, and make interdisciplinary connections. For instance, to understand logic truth tables and proofs in math, students read and interpret life situations that apply to logic, and then create a logic story book for children. They write journal entries related to logic, translate written sentences into logic symbols, and create a presentation and plot diagram to earn credit in both English language arts and math.

- While some curricula and planning documents incorporate student choice and differentiation, the practice is not consistent across grades and subject areas. Additionally, supports for the school's lowest third are not referenced in planning documents. For instance, the English language arts curriculum and planning documents explicitly reference informational texts, student choice, and differentiated learning activities, but these practices are not always utilized across other disciplines.

- Teachers provide options for comprehension and for expression and communication through strategies such as graphic organizers, turn and talks, Socratic seminars, and Depth of Knowledge questions. For instance, in an English language arts class, students cited textual evidence to support their claims and used graphic organizers to record their responses. In a science class students were provided Depth of Knowledge questions and encouraged to answer the higher level questions, and in a social studies class students chose different prompts in differentiated groups to complete an assignment.

- While curricula and academic tasks are designed to engage students and advance them through the content, teachers are not always able to gain a nuanced understanding of student learning based on a lack of focus on student work products. Students are consistently encouraged and expected to explain their thinking; however, the lack of clear criteria regarding the caliber of work that demonstrates mastery provides limited actionable information to teachers and students for improving student performance.
Findings
The majority of teachers are engaged in professional collaborations that promote the achievement of school goals and the implementation of the Common Core standards. Teacher teams analyze student work to improve student performance and have a voice in key decisions that affect student learning.

Impact
By examining student work and performance data, teachers are able to improve their own practice, identify areas of challenge for students, and design interventions to better support them.

Supporting Evidence

- Teachers meet in teacher teams to deepen interdisciplinary collaboration and to further the school's goal of making the curricula engaging, relevant, and exciting for students. Teachers design interdisciplinary projects in math and English language arts, science and English language arts, and music and social studies. For instance, social studies and music teachers collaborated to design an interdisciplinary project that deepened students' understanding of academic and domain-specific vocabulary by incorporating specific words and songs into the social studies curriculum. Students also wrote essays for their music class using domain-specific words.

- Teacher teams analyze assessment data and student work for students they share, typically resulting in progress toward goals for groups of students. For instance, science and English language arts teachers examined samples of student writing as a result of referrals to the writing lab and found that the students needed assistance with citation and bibliography. The team put scaffolds in place to support students with these skills. A subsequent review of student work indicated that student performance in these areas had improved.

- Distributive leadership structures are in place so that teachers have a voice in key decisions. For instance, the school has a professional development committee that conducts a needs assessment to ensure that professional development is targeted, relevant and needs-based. Professional development is delivered both by teachers and the administration. Additionally, teachers take the initiative to meet with outside institutions to form partnerships, and the establishment of these partnerships enables the students to attain research mentors for their research projects.

- Although teachers meet in teacher teams to analyze student work and plan interventions, as well as meet informally on a frequent basis, they do not always utilize structures and protocols for looking at student work, and do not develop a granular understanding of student performance trends. Teacher teams did not share any data, for instance, on the performance of their lowest and highest achieving students, indicating that “it is hard to pinpoint high achieving versus low achieving students.” Additionally, school leadership stated that “Teacher teams do not necessarily have the data to support the changes to the curriculum.”