Quality Review Report

2016-2017

Queens High School for Information, Research, and Technology

High school 27Q302

8-21 Bay 25th St.
Queens
NY 11691

Principal: Carl Manalo

Dates of Review:
March 16, 2017 - March 17, 2017

Lead Reviewer: Thomas McKenna
The Quality Review Report

The Quality Review is a two-day school visit by an experienced educator. During the review, the reviewer visits classrooms, talks with parents, students, teachers, and school leaders and uses a rubric to evaluate how well the school is organized to support student achievement.

The Quality Review Report provides a rating for all ten indicators of the Quality Review Rubric in three categories: Instructional Core, School Culture, and Systems for Improvement. One indicator is identified as the Area of Celebration to highlight an area in which the school does well to support student learning and achievement. One indicator is identified as the Area of Focus to highlight an area the school should work on to support student learning and achievement. The remaining indicators are identified as Additional Finding. This report presents written findings, impact, and site-specific supporting evidence for six indicators.

Information about the School

Queens High School for Information, Research, and Technology serves students in grade 9 through grade 12. You will find information about this school, including enrollment, attendance, student demographics, and data regarding academic performance, at http://schools.nyc.gov/Accountability/tools/report/default.htm.

School Quality Ratings

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td><strong>To what extent does the school...</strong></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 Finding</td>
<td>Proficient</td>
</tr>
<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>Area of Focus</td>
<td>Proficient</td>
</tr>
<tr>
<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>Additional Finding</td>
<td>Well Developed</td>
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</table>
### School Culture

**To what extent does the school...**

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td>1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults</td>
<td>Additional Finding</td>
</tr>
<tr>
<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>Area of Celebration</td>
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### Systems for Improvement

**To what extent does the school...**

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<tr>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td>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</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>3.1 Establish a coherent vision of school improvement that is reflected in a short list of focused, data-based goals that are tracked for progress and are understood and supported by the entire school community</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>4.1 Observe teachers using the Danielson Framework for Teaching along with the analysis of learning outcomes to elevate schoolwide instructional practices and implement strategies that promote professional growth and reflection</td>
<td>Additional Finding</td>
</tr>
<tr>
<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 Finding</td>
</tr>
<tr>
<td>5.1 Evaluate the quality of school-level decisions, making adjustments as needed to increase the coherence of policies and practices across the school, with particular attention to the CCLS</td>
<td>Additional Finding</td>
</tr>
</tbody>
</table>
## Area of Celebration

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>3.4 High Expectations</th>
<th>Rating:</th>
<th>Well Developed</th>
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### Findings

School leaders consistently communicate and model high expectations for staff through use of the Danielson *Framework for Teaching*, with a focus on engaging students in learning. Teacher teams and staff communicate and support high expectations for all students through the school’s articulated mission of mutual respect across the school.

### Impact

As a result of the consistent communication of high expectations, there is a culture of mutual respect and mutual accountability for those expectations across staff and students. In addition, there is a shared language across grades and classes that allows clear and focused feedback and guidance throughout the school to support all students, including high needs subgroups, in preparing for the next level.

### Supporting Evidence

- The school systematically communicates a unified set of high expectations for students through a focus on scheduling and supporting students through rigorous course options. Students have the opportunity to take advanced placement classes to earn college credits, and the school’s College & Career Readiness value has grown from 11 percent in 2015 to 28 percent in 2016. Through the school’s computer science program, all students take a range of courses that build upon their skills that will eventually culminate with them taking the AP Computer Science Principles course. Through participation in the school's college and career focused classes, students are self-aware of what is required to be college and career ready. Ninth graders participate in interactive lessons that align with understanding their progress in school, exploring career options, and previewing what to expect in college. The school has articulated college partnerships and offers opportunities for students to gain college credits through advanced programming. Currently one-third of all seniors will be graduating with at least three college credits.

- School leaders manage a robust and articulated schoolwide emphasis on mutual trust among students and adults, including clear schoolwide expectations for behavior paired with adult and student training rooted in Domain 2 of the Danielson *Framework for Teaching* to promote and support respectful interactions and maximize instructional time. This has resulted in a drop from 47 total Online Occurrence Reporting System student infractions in 2015 to 31 infractions in 2016 down to 25 in 2017. Level 5 occurrences have dropped from 5 to 4 to 0 over the same time period, eliminating behaviors that result in the most serious infractions. This drop in infractions has paralleled a corresponding increase in student achievement, with graduation results climbing from 55 percent in 2015 to 70 percent in 2016. The graduation rate for students with disabilities almost exactly matches that of general education students. Based on available school data, the projected graduation rate for 2017 will be 80 percent. As a school with several programs supporting high numbers of English Language Learners, new immigrants, and students with interrupted formal education, the school also tracks its six-year graduation rate, which has improved from 63 percent in 2015 to 84 percent in 2016.

- Students are keenly aware of their current academic status. The school has created an “Emoji Board” in the main hallway to publically display individual student progress. The board is broken down by cohort. It shows the student’s OSIS number (not name), class averages, credits accumulated, and Regents results, as well as the student’s current status towards graduation. By being aware of their progress, students synthesize this information and formulate visual action plans to improve. Students use this visual action plan to work with their guidance counselors and teachers on how they can improve and either get back on track towards graduation or strive to obtain an Advanced Regents diploma.
Area of Focus

| Quality Indicator: | 1.2 Pedagogy | Rating: | Proficient |

Findings

Across classrooms, teaching practices are aligned to the curricula and reflect an articulated set of beliefs informed by the instructional shifts that fosters higher order thinking. Teaching strategies, including a schoolwide incorporation of co-teaching, and challenging tasks, many of which are hands on and interactive, provide multiple entry points into the curricula.

Impact

Throughout the school, teacher practice is refined through discussions at the teacher team and school leadership levels, and the school's focus, “Thinking through Writing,” is evident in most classes. All learners, including English Language Learners (ELLs) and students with disabilities are engaged in appropriately challenging tasks that result in quality student work products, though there were some missed opportunities for deeper engagement and extension activities observed.

Supporting Evidence

- The schoolwide adoption of “Thinking through Writing” in the content areas was observed in several classes. Teachers reported that the science department has adopted the same non-fiction writing rubric as the English department in order to create coherence and adopt an English Language Arts (ELA) best practice. The use of the rubric was evidenced in observations of two science classes and was on display along with student work in multiple classrooms. Students in a chemistry class were peer editing each other’s papers using the rubric and reported, “We use the rubric to eliminate any bias.” The instructional shift for citing evidence was also observed. The mathematics department has adopted math journals in order to help students with thinking through the process of solving a multi-step equation. The impact is evident through growth in the passing rates for every Regents across the school. For example, passing scores on the ELA Regents showed a 23.8 percent increase. The Algebra Regents showed a 34.84% growth. The Global Studies and US Regents had a growth of 6.89% and 21.55%. Living Environment Regents rates increased by 22.06 percent. Chemistry showed an increase of 39.88 percent.

- The members of the school community believe that students learn best when teachers utilize data to make informed decisions about instruction, and that data informs strategic student groupings, multiple entry points, and scaffolds. In all classes, purposeful co-teaching models were observed. In a global history class, parallel teaching lowered the teacher-student ratio, allowing more focus on students. In an ELA class, team teaching was observed, with the special education teacher working with a smaller group of targeted students to the side of the room. In almost all classes, movement and interaction with various learning stations were observed, as well as student-to-student interactions. Groupings in each class were purposeful.

- Teaching strategies across classes offered scaffolds to those students identified as low achieving; however, some scaffolds did not provide extensions for those students ready to engage with more rigorous content and tasks. Certain classes, such as the IC3 Cisco programming class, allowed higher performing students to work on additional projects or delve into work more in-depth. For example, during a science lesson, student pairs were directed to investigate different types of air masses and their origins, while later they made predictions about the effect of these masses on New York State. While most students benefited from the procedural step-by-step checklist and graphic organizer, some were able to complete and demonstrate understanding of the activity quickly and had no challenging extension opportunities related to the lesson. This absence of extensions was evident in another classroom as well.
Additional Finding

| Quality Indicator: | 1.1 Curriculum | Rating: | Proficient |

Findings

Curricula and tasks consistently emphasize rigorous habits and higher-order skills and are planned and refined using student work and data.

Impact

Rigorous habits and higher-order skills are emphasized for all students, across grades and subjects, including English Language Learners (ELLs) and students with disabilities. Planning for differentiated learning helps ensure that a diversity of learners have access to the curricula.

Supporting Evidence

- Many lesson plans contain a section entitled “differentiated instruction plan” that identifies students of concern for teachers to confer with for the day as well as differentiated tasks for these students based on Webb’s *Depth of Knowledge*. All teachers identify success criteria for both themselves and their students in each lesson. Lessons then indicate areas for reflection and exit ticket activities to allow students to respond. In ELA, questions include, “How does understanding an author’s point of view help you better understand a text?” and “How do the choices by the main character affect her final decision in the text?”

- Teachers conduct an item analysis of previous Regents data and mock Regents data to inform changes that need to be made in the curricula/lesson plans. After the last administration of the Regents, each department reported implementing common practices to meet these skill gaps. The science department is employing “do nows” as a specific section of their lesson plans to evaluate graphs, charts and diagrams in order to answer secondary questions about them. The mathematics department reports that students are struggling with justifying their responses on the extended response portion of the Regents exam, so as a result teachers have incorporated into all lesson plans a writing journal for students to be able to improve their explanations of their process. The ELA/ENL department has decided to employ more time on text analysis strategies such as close reading and annotation, and these are clearly detailed in curricular documents.

- A review of curricular documents reveals purposeful planning aligned to the school's instructional focus on writing across grades and subjects. Lesson plans consistently detail high-level student discussions and writing. A grade nine ELA lesson plan emphasizing peer editing incorporates multiple high level questions such as, “How can you apply your partner’s feedback to your next revision?” and “How can you compare your essay to that of your peer editing partner?” This lesson plan included the structures for grouping students. A grade ten Global Studies lesson plan indicates that students will discuss “Why was the presence of Soviet missiles in Cuba a problem for the US?” and “Analyze the responses of the US and Soviet governments during the crisis.” This lesson plan also included specific adjustments for students with disabilities and ELLs.
Findings

Across the vast majority of classrooms, teachers use assessments, rubrics, and grading policies that are aligned with the school’s curricula and give students clear feedback that they then actively use toward improving their achievement. In addition, teachers’ assessment practices consistently reflect the varied use of ongoing checks for understanding and student self-assessment.

Impact

High quality assessment practices provide actionable and meaningful feedback to students and teachers regarding student achievement. Teacher assessment practices result in effective adjustments during classroom instruction and in modifications to subsequent lessons, meeting all students’ needs and making them aware of their next learning steps.

Supporting Evidence

- During a student meeting, students came to a quick consensus when reporting about how the use of assessments and rubrics for written assignments provided them with clarity focused on their attainment of mastery. Students report, and shared in conjunction with their work samples, using detailed rubrics with comments that include written feedback with clear next steps from teachers. The feedback process also calls for the students to provide written reflection on the next steps, which then leads to students’ conferencing with teachers and revising their work products. One example of feedback in a grade eleven ELA essay stated that while background evidence was used well in supporting a claim, the student needed to incorporate clear evidence of a counterclaim into the next revision. Other feedback on a math assignment noted a student making a series of mechanical errors in representing a function graphically and provided clear next steps to revise.

- Teachers use a multitude of data sources to inform groupings and differentiation: Achieve 3000 Lexile levels, exit tickets, EDAT report (ELL Data Report), student IEPs, Castle Learning Results, mock Regents item analysis as well as classroom assessments that range from ongoing checks for understanding to summative. The impact of this use of assessment data is that teachers provide meaningful differentiation to meet student needs. All lessons clearly embed checks for understanding as part of planning, and every class observed evidenced checks. In a social studies class and an ELA class that were both engaged in group work, teachers circulated around the room and asked clear comprehension questions to group members that offered short, immediate moments for reteaching to groups. One ELA teacher, when noting a common misunderstanding in three student groups, immediately refocused the entire class on reteaching, using two students who had understood the lesson to explain to the class. Additionally, all classes observed used exit tickets as a check for understanding. A common reflective exit ticket included sections for students to fill out that included, “At first I thought ______,” “What confused me the most was ______,” and “I was successful in _____."

- Across the school, students use checklists and rubrics as self-assessment tools during the completion of work. Examples of the checklists and rubrics used were posted on classroom walls and hallway bulletin boards and included within student work portfolios. The grade ten Socratic seminar self-evaluation rubric for participant’s notes citing evidence, creating probing questions, steps for clarification, close reading of text, and preparing higher order questions. An argumentative essay rubric used across disciplines includes claims, counter claims, and evidence.
Additional Finding

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<tr>
<th>Quality Indicator:</th>
<th>4.2 Teacher Teams and Leadership Development</th>
<th>Rating:</th>
<th>Well Developed</th>
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</table>

Findings

All teachers are engaged in inquiry-based, structured professional collaborations both in content areas and at the grade level. Teachers are empowered to positively affect student learning through service as grade, department, equity, and data team leaders as well as through the school leadership’s open-door policy encouraging ideas for initiatives.

Impact

Collaborations within grade teams and the vertical inquiry team have strengthened teachers’ instructional capacity, established a level of schoolwide instructional coherence, and improved student performance and achievement. Across the school within grade teams and individually, teachers have built leadership capacity and have a voice in key decisions around professional development and resource acquisitions that affect student learning.

Supporting Evidence

- School leaders and teacher leaders, including team leaders, instructional leaders and department leaders, identify distributed leadership practices and structures that are deeply rooted in the school’s day-to-day operations. These structures foster a culture in which teacher leaders provide continual input into strategic decisions that affect student achievement. For example, the school supports and empowers a range of teachers as grade leaders, department leaders, equity leaders, and data leaders.

- Content area teams work together during common planning periods using a schoolwide “Learning from Student Work” protocol that allows teams not only to track student progress, but to reflect on teaching practices and identify grade and content level changes needed to improve student results and support schoolwide coherence. As several teacher and school administrators reported separately, once the content team has agreed on a strategy, they will create a lesson to employ the strategy, and one or two members of the team will visit the classroom to provide feedback on the strategy. The schoolwide “Thinking through Writing” initiative evolved from the work of the ELA and social studies content teams. During interviews, both school leadership and two separate groups of teachers reported that teachers are now employing common instructional techniques to improve their pedagogy and student outcomes. Grade level teams focus on the academic and social/emotional needs of the students, using the school’s “Kid Talk” protocol. The “College Access 4 All” team works together on implementing lessons on college and career readiness exploration, analyzing student work from lessons and using it to improve practice and make adjustments to improve student engagement.

- The school Teacher and Leader Effectiveness Team (TALENT) is comprised of teacher leaders and two administrators. According to team members, “We set out to look at cohort data and create systematic changes in order to increase scholarship and graduation rate.” This team helped shape Regents programming and preparation and "Kid Talk" protocols, as well as policies regarding the extended day and credit gaps analysis. This team’s focus is moving the school from, as one teacher stated, “A big picture of cohort data to formative and summative assessments in the classroom that leads to curricular and lesson changes.” Both teachers and leaders attribute the increase in student achievement, including increased graduation rates from 55 percent to 70 percent, in part to the work and insights of the data team.
Additional Finding

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<th>Quality Indicator:</th>
<th>4.1 Teacher Supervision</th>
<th>Rating:</th>
<th>Well Developed</th>
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Findings

School leaders support teacher development with effective feedback and next steps from frequent classroom observation cycles. An effective system drives the use of teacher observation data in the design and facilitation of professional development.

Impact

School leaders follow official classroom observations as well as informal walkthroughs with effective and prompt written and verbal feedback. The data team meets with school leaders to design professional development based on a review instructional trends noted during classroom visits, teacher intervisitation, formal observations, and noticings from grade team meetings.

Supporting Evidence

- The school is in year three of a three year professional development plan that was based on an analysis of student performance and teacher observations, created with the input of teachers garnered through group and individual meetings with school leaders. Year one consisted of a schoolwide focus on student engagement and training on accountable talk, rigor, and integrating the Common Core Learning Standards. Year two focused on continuing the work of year one and added teacher leadership, using data, and learning through intervisitation. The current year has continued the work of the previous two years and has added establishing a growth mindset and furthering the school's college preparation culture. Teachers and leaders report that student performance and assessment data, as well as continued examination of observation data and teacher feedback, are reviewed three times a year and incorporated into professional development adjustments. This work and adjustments are documented in the school’s professional development planning materials.

- In addition to whole-school professional development focused on schoolwide improvement, observation data is used to create differentiated professional development plans for staff. School leadership reports utilizing observation data in conjunction with teacher input tied to individualized goal setting to assist teachers in identifying areas of focus that will both improve teacher practice and student outcomes. Many teachers in the science department are part of both out-of-school city-wide living environment and earth science curriculum design pilots and in-school questioning and discussion techniques. Other teachers report receiving administrative support for leadership training which then improves their skills in leading schoolwide initiatives.

- Frequent cycles of classroom observation provide feedback utilizing the Danielson Framework for Teaching. Each rated item on observation reports includes specific language from the rubric, evidence from the classroom that supports the rating, and actionable next steps. One observation report includes feedback to the teacher on the improvement of engagement strategies and checks for understanding: “There are a number of strategies you can use to stimulate the involvement of non-volunteers without threatening their comfort level in class. For example, you may ask two students to confer (pair-share) in order to answer a question, or you may ask a student to paraphrase an answer of another student.” Another observation report includes feedback that the teacher should, “Create group activities with math problems that reflect real world situations that will help students to engage in the work, participate in productive discussions, as well as explore those real world connections to content more deeply.”