



**Department of
Education**
Carmen Fariña, Chancellor

Office of School Quality
Division of Teaching and Learning

Quality Review Report

2015-2016

Jamaica Gateway to the Sciences

High School Q350

**167-01 Gothic Drive
Queens
NY 11432**

Principal: Caren Birchwood-Taylor

**Date of review: March 29, 2106
Lead Reviewer: Deborah Burnett-Worthy**

The School Context

Jamaica Gateway to the Sciences is a high school with 519 students from grade 9 through grade 12. In 2015-2016, the school population comprises 40% Asian, 44% Black, 10% Hispanic, and 2% White students. The student body includes 8% English Language Learners and 11% students with disabilities. Boys account for 49% of the students enrolled and girls account for 51%. The average attendance rate for the school year 2014-2015 was 90.7%.

School Quality Criteria

Instructional Core		
<i>To what extent does the school...</i>	Area of:	Rating:
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	Additional Findings	Well Developed
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 <i>Framework for Teaching</i> , aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products	Focus	Proficient
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	Additional Findings	Proficient
School Culture		
<i>To what extent does the school...</i>	Area of:	Rating:
3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations	Celebration	Well Developed
Systems for Improvement		
<i>To what extent does the school...</i>	Area of:	Rating:
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning	Additional Findings	Well Developed

Area of Celebration

Quality Indicator:	3.4 High Expectations	Rating:	Well Developed
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Findings

School leaders consistently communicate high expectations to staff members and provide training to support the achievement of these beliefs. Teacher teams and staff consistently provide focused feedback and guidance while communicating high expectations to students concerning preparation for college and advancement to the next academic level.

Impact

Consistent communication of high expectations to the teachers and staff yields a positive college-going culture and mutual accountability for student achievement. These communications also result in student ownership of their educational experience as they prepare for the next academic level.

Supporting Evidence

- Administrators routinely communicate their expectations to staff through a system of continual feedback. Agendas for teacher team meetings and written feedback and targeted questions to teachers reflect an articulated set of beliefs that all professionals in the school make their thinking transparent. The school community has a theory of action for communication that includes expanded bands of concentric circles and communication protocols leading to a “comprehensive and collective impact on student achievement.”
- Each child is known well through an advisory structure in which Specific, Measurable, Achievable, Realistic, and Timely (SMART) stretch goals are established for each child. There is an advisory point person per grade team who meets regularly with the students. These advisors contribute to a culture of high expectations by connecting the academic focus and college preparatory expectation between the students and advisors. Teachers increasingly have meaningful communications with students as a result of this structure.
- A college-going culture for all students begins at the ninth grade orientation with college and career exploration and transcript review. The Junior College workshop gives an overview of the college application process and types of college options. For older students and their families, activities included helping families understand and complete the Free Application for Federal Student Aid (FAFSA) form, universal SAT participation for all juniors as well as SAT preparation courses. Interviewed students spoke about these college preparatory events and relayed their responsibility to be aware of where they personally are in the process.

Area of Focus

Quality Indicator:	1.2 Pedagogy	Rating:	Proficient
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Findings

Across most classrooms instructional practice reflects coherence around a set of beliefs regarding how students learn best that is informed by the Danielson *Framework for Teaching* and the instructional shifts. Teachers implement a range of scaffolded instructional supports and consistently provide multiple entry points into the curricula.

Impact

Coherence in teaching practices ensure that all learners, including English Language Learners and students with disabilities, are engaged in high-level thinking and demanding tasks and produce meaningful work products. Opportunities to further push the thinking of the highest achievers are not yet consistently provided.

Supporting Evidence

- Across classrooms, lessons followed the workshop model, providing students with a do now, mini-lesson, guided practice and independent or group practice, and an opportunity to share and reflect, ensuring coherence across grade levels and content areas. In lessons observed, teachers consistently asked students to cite textual evidence to support their thinking, and in math, students were given opportunities to demonstrate their thinking and justify their answers. For example, in an English Language Arts lesson on the novel, *Like Water for Chocolate*, students were expected to work in groups to identify and articulate the big ideas and symbolic events in the novel, and to use evidence from their annotated texts in order to collaboratively develop responses to tiered questions.
- Across classrooms, teachers implement lessons that provide opportunities for hands-on learning, and that expect students to explain their mathematical reasoning. For example, in an Algebra lesson on the different ways a function could be represented, students participated in tiered activities in which one group of students matched the function rule with corresponding graphs; another group completed that task and matched the tables to the corresponding graphs, and a third group matched the function, rule, graph, and table. Following the activity, all students were expected to complete a reflection about the activity in which they articulated the difference between an absolute value function and quadratic function, then chose one function match from the activity and described how they found the matches, and explained how one identifies the difference between a quadratic function and a linear function without looking at their graphs.
- Lesson plans across the majority of classes consistently provided evidence of strategic planning for multiple entry points and scaffolds to engage all learners. For example, in an English Language Arts class for newcomers, students utilized the *Achieve 3000* software program, which provided them with text at their level. In a global history lesson on the major political, economic, and cultural changes that occurred as a result of imperialism, the teacher provided English Language Learners with a translated text and graphic organizer, and students were strategically grouped as they completed the task of annotating text. Opportunities to extend the learning task and further challenge the highest achieving students was not a consistent occurrence.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Well Developed
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Findings

School leaders and faculty ensure that curricula are aligned to the Common Core Learning Standards and strategically integrate the instructional shifts, and tasks consistently emphasize rigorous habits and higher-order skills.

Impact

School leaders and faculty make purposeful decisions that lead to high levels of student engagement, increased rigor of student tasks, and the promotion of college and career readiness for all learners, including English Language Learners and students with disabilities.

Supporting Evidence

- The English Language Arts content team has developed a “skill continuum” matrix using standards and skills from the Common Core with increasing levels of complexity as students’ age through the vertical grade structure for each class. As an example, ninth grade students in English Language Arts are expected to make a claim and cite relevant evidence to support the claim; tenth graders are expected to deepen their analysis and infer meaning; eleventh graders are expected to infer implicit meaning; and twelfth graders are expected to infer meaning even when the text is ambiguous or unclear.
- Grade level teacher teams explicitly plan for curricular modification and supports for students with disabilities and English Language Learners. Teacher teams co-plan for co-teaching, thus allowing for the curriculum modifications and support to receive proper attention in the classrooms. For example, the general education English Language Arts teacher and the English as a New Language teacher made several adjustments to the curriculum after a co-planning session took place between the special education and English Language Arts teacher teams. The unit on *The Crucible*, by Arthur Miller, was co-taught implementing the twelve modifications that had been decided on. Using an audio book to improve fluency was one of the observed modifications. At times, it is hard to tell which teacher in the classroom is the general education teacher and which is the special education or English as a New Language teacher providing support for each student as needed.
- Teachers work collaboratively to promote a high level of rigor across classes to ensure that higher-order skills are emphasized across grades and content areas for all learners, including English Language Learners and students with disabilities. For example, an English as a New Language lesson asked students to develop higher-order thinking questions in response to an article that had been modified to support students’ current reading level. In an Integrated Co-Teaching (ICT) algebra lesson observed, students were provided with targeted supports such as strategic student groupings, resources such as a BrainPOP video and graphic organizers, and scaffolded math problems on varied worksheets so that all learners in the class were engaged in the high-level task of solving equations with variables on both sides.

Quality Indicator:	2.2 Assessment	Rating:	Proficient
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Findings

Across classrooms, teachers collaboratively develop and implement common assessments and rubrics, and utilize the data outcomes to provide feedback to teachers and students regarding student achievement, and to adjust curricula and instruction.

Impact

Teachers and students are provided with consistent and actionable feedback. Effective teacher collaboration ensures alignment of assessments with the school's curricula and consistent adjustments to meet student needs.

Supporting Evidence

- Teachers have developed a common grading policy that incorporates formative and summative assessment. In addition, although students stated that they receive feedback from teachers on task-specific rubrics outlining next learning steps, students in classes were not observed referring to a task-specific or classwork/participation rubric, and during lessons, students could not articulate how they were being assessed on their classwork or on their participation.
- The instructional team is engaged in the ongoing process of developing and refining assessments and rubrics, and teachers use the resulting data to identify student-learning needs and inform next instructional steps. Teacher feedback on student work provides clear next steps to move students from one level to the next, and feedback is aligned to a task specific rubric. For example, a geometry teacher documented the following praise and next steps on a student's math assignment "Glow: Great recall for using the Pythagorean Theorem and SOHCAHTOA. Grow: Be careful rounding off your conclusions/answers. See me for a practice worksheet." In the following assignment, this student received positive feedback for his rounding off skills.
- Although teachers consistently reflect the use of rubrics, checks for understanding and actionable feedback for their students, there was little documented evidence of the use of self-assessment by the students. Interviewed students were also able to speak to next steps from their teachers but not all were able to articulate their own reflection on their schoolwork beyond the rubrics and comments they received.

Quality Indicator:	4.2 Teacher teams and leadership development	Rating:	Well Developed
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Findings

All teachers are engaged in a series of overlapping professional collaborations consistently using an inquiry approach that promotes the implementation of the Common Core Learning Standards and instructional shifts. Teacher teams systematically analyze assessment data and student work products for students they share.

Impact

The teaming structure allows for teacher teams to feel empowered to make decisions and adjust plans based curricula areas and to ensure mastery of goals by student groups.

Supporting Evidence

- Teachers stated that the school professional development team has a representative from every content area. Teachers share feedback with school leaders about specific content area needs and school leaders combine that feedback with data from common assessments and observations to create professional development for teachers. For example, the social studies team concentrated on increasing student engagement, student discussion and instructional rigor as the goals for their February inquiry work. As a result of their findings the February professional development was adjusted to the role of questioning in the classroom, a practice that affects all three concerns.
- Teacher instructional capacity is promoted by a scholarly inquiry approach. As an example, teachers on a team take turns bringing in a text on a specific instructional practice. The group reads the article using a text-based protocol, reviews their lesson plans based on the pedagogical or curricular innovation, refine their plans using a modified tuning protocol, teach the lesson with the modification, and bring examples of student work to a subsequent meeting to determine the efficacy of the innovation. An example of this is the use of an Educational Leadership article called “Strengthening Student Engagement: What do Students Want” that was used by a team to refine a lesson plan, teach the lesson, and bring student work from that lesson to a subsequent meeting using the Tuning Protocol to see if their goals around student engagement were met.
- Teacher teams track student progress through baseline, benchmark and summative assessments using shared spreadsheets and Skedula. Each assessment is broken down by rubric trait or standard. Teachers use the data to select student work for their meetings that represent different subgroups of students and different proficiency levels. Teacher teams are able to make effective adjustments during their inquiry to identify best practices and appropriate strategies that support their students.