



**Department of
Education**

Carmen Fariña, Chancellor

**Quality Review
Office of School Quality
Division of Teaching and Learning
2013-2014**

Quality Review Report 2013-2014

Jamaica Gateway to the Sciences High School

28Q350

167-01 Gothic Drive

Jamaica, Queens

NY 11432

Principal: Caren Birchwood-Taylor

Dates of review: March 4-5, 2014

Lead Reviewer: Sheila S. Gorski

Part 1: The school context

Information about the school

Jamaica Gateway to the Sciences is a high school with 402 students from grade 9 through grade 12. The school population comprises 43% Black, 12% Hispanic, 1% White, American Indian/ Alaskan Native, 1%, Native Hawaiian/ Pacific Islander, 2%, 37% Asian students and 4% other. The student body includes 6% English language learners and 10% special education students. Boys account for 49% of the students enrolled and girls account for 51%. The average attendance rate for the school year 2012 - 2013 was 92.2%.

Overall Evaluation

This school is proficient.

Part 2: Overview

What the school does well

- The school's high expectations consistently communicated to teachers, students, and families are supported by effective structures that build buy-in and accountability.(3.4)
 - The school leadership regularly conveys high expectations leveraged via the Danielson Framework for Teaching and encouraging a culture where all constituencies understand the context of those expectations and work collaboratively to effectively meet them. For instance, teaching and learning begins with the school mission premise that all staff is expected to encourage high student achievement, and provide advanced academic preparation for all students. Further, Danielson training includes data-driven instruction, and student work analysis to build teacher capacity, resulting in a culture of shared responsibility. Additionally, clear expectations depict school initiatives, such as, inquiry-based instruction, individualized instruction and distributed counseling and advisory. Linked to inquiry-based instruction are Common Core aligned lessons, assessments and projects that afford students opportunities to demonstrate content knowledge. Expected in every lesson plan are planned question scaffolds, manipulatives and technology. Accordingly, teachers challenge all students, and provide opportunities to gain access to curricula to ensure that students are able to reach their highest potential. Furthermore, the school cultivates a positive and welcoming partnership with families so they understand school expectations and how to support their children at home. A myriad of discussions engages families in graduation requirements, Saturday seminars regarding State exams, academic support, community service, college trips, extra-curricular activities, internships, support at home, and family literacy ideas. For example, during the parent meeting, parents stated that the leadership and faculty communicate and involve them in school initiatives which are very structured and transparent sustaining an effective partnership with families. These efforts consistently show a unified set of high expectations that result in all students being prepared for college and careers with a focus on health and science related careers.
- The school organizes staff time so that teacher teams engage in deliberate instructional responsibilities aligned to school goals and assignments result in improved instruction and meaningful student work. (1.3)
 - The leadership has secured numerous partnerships that support the school's goals engaging students in diversified learning experiences. For example, in conjunction with the Gateway Institute for Pre-College Education, the Medical Scholar's Pipeline Program at the Hofstra North Shore Long Island Jewish School of Medicine offers students educational sessions to familiarize them with health professions. Students also engage in research study, participate in Scholastic Achievement Test (SAT) preparation, clinical activities, and are supported for acceptance into the North East Regional Alliance Med Prep Program. Moreover, specific, coordinated trips to support the students in exploring college options afford students opportunities to visit schools and sites of interest,

such as, Cornell University, Binghamton University, and Gateway Pre-Med Scholars Program, and Live Cardiac Surgery at the Liberty Science Center. Further, the school's partnership with the New York State Bar Association and the New York Bar Foundation. Students participate in a mock trial in the Law, Youth and Citizenship Program aligned to key Common Core Learning Standards (CCLS) that focus on receptive and expressive skills demonstrating student independence in research, strong content knowledge, argumentative skills, evidence, and technological skills. They work collaboratively to gain deep understanding of the law, and court procedures. This year the Law Club students will participate in a mock trial tournament engaging in an environmental conservation case. These learning experiences support the school's instructional goals and long-range action plans for student achievement as measured by student work products organized in student work portfolios.

- The leadership uses its limited space strategically to ensure that teachers and students share environments conducive to learning. To further secure qualitative learning the principal also schedules time specific for team leaders to meet once a month with the assistant principal to discuss procedural plans and their progress, espouse new strategies and share best practices derived from numerous meetings hosted by the school's network. Teacher teams also meet regularly, or twice per week with department team leaders to identify and monitor progress of individual students via analysis of student work. Furthermore, the inquiry team meets once per week to examine student essays with a five part emphasis to ensure that units and lessons include making connections to text, to self, and to the world and, next, changing habits of learning toward rigor and higher-order thinking. Additionally, teams work on providing multiple pathways for all students to facilitate comprehension of text via strategies, such as, "chunking" where reading is separated into smaller passages, and the teacher stops at key points to ask targeted questions. Moreover, academic language and interpretations are academic needs on which noted teams focus activities so that students make inferences, and build academic and subject-specific content vocabulary. Instructional and pedagogical responsibilities of teams align to school goals, resulting in improved instructional practices and students engaged in challenging academic tasks as evidenced by an 84% pass rate of all students who took the English assessment in the third quarter.
- The school ensures alignment of curricula to Common Core Learning Standards (CCLS) and encourages learning experiences that promote higher-order thinking across grades for all students. (1.1)
 - The school has collectively ensured that curricula are CCLS aligned by securing modules from Engage, NY in English language arts and math. Teachers use the modules to build coherence and promote understanding the CCLS and citywide instructional expectations and their demands so that the school makes focused decisions on curricula changes. Subsequently, teachers design units of study that increase proficiency levels in academic and content vocabulary, making inferences, visual interpretations, and application of concepts. All units incorporate tasks, essential questions, enduring understandings, and relevant standards. They also include a language objective, focus skills, an assessment plan and multiple entry points and scaffolds which also

consist of vocabulary, and the Frayer model for vocabulary words. Additionally, through a weekly message entitled, "*From the Principal's Desk*", the principal highlights an instructional tip that is driven by the Danielson Framework for Teaching, such as, a tip advising teachers that after a question is posed they should plan to engage students in the, "pair-share" strategy where students share responses with a classmate, then teachers take responses from volunteers and non-volunteers alike so that all students including relevant subgroups are engaged. Tasks across grades and subjects are designed via high interest topics and literacy and math levels to promote higher-order thinking skills. These collective curricula and rigorous task development efforts encourage college and career preparation for all students including English language learners, and special education students.

- Teacher teams use student work to leverage learning across the school toward meeting student goals, and improving teacher practice. (4.2)
 - The school's inquiry team meets every two weeks with the administration and gather once a week to focus on student literacy and plan CCLS assignments so that students engage in productive struggles with the academic demands of the new English language arts and algebra exams to be administered this year. Content area teams meet regularly to discuss the Drop Everything And Read (DEAR) program by assessing student progress of complex text comprehension, making inferences, and building academic and subject-specific content vocabulary which is a school initiative. Teacher teams keep the leadership and staff well-informed of student progress and make instructional adjustments, such as the math tool box for solving equations which include graphic organizers to show various ways to represent the solution to an equation with an example in each box to support student action plans of students they share, thus elevating teacher practice and growth toward goals for all students.
 - Teacher team leaders report each team's conclusions, based on student work, and results to the School Leadership Team (SLT) to keep them up-to-date of the progress and instructional adjustments made to the curricula including rationales for the changes. Moreover, team leaders articulate suggestions made by the teams to the leadership during weekly cabinet meetings to ensure that the context of the findings are clear and rationales provide support toward accomplishing the school's initiatives. Additionally, the school has leadership structures in place to continue to strengthen the academic status and prepare future school leaders. Every department has a subject leader that guides their peers through department strengths and needs and collaborates on instructional changes. Subsequently, teachers coordinate specialized clubs, such as, the model United Nations (UN), the medical club, the law team and the public relations club. These teachers coordinate, and organize these clubs in areas of school interest to afford students greater opportunities to experience the learning in the sciences for students to consider as future possibilities, and to build on student academic repertoire, thus leveraging key decisions that positively improve student learning in the school's specialty areas.

What the school needs to improve

- Enhance instructional practices so that across classrooms all students are actively engaged in higher-order thinking and discussions that result in meaningful work products, and student ownership of the work. (1.2)
 - The school's beliefs about how students learn best is informed by the Danielson Framework for Teaching with emphasis on student engagement and questioning and discussion in collaborative settings where students are accountable for their learning. Active engagement, peer discussions and student evaluation of their work were noted in the majority of classrooms. Student thinking is probed by open-ended question scaffolds so they are able to justify their thinking. Lessons provide a variety of writing opportunities such as short responses, essays, and writing on demand across content areas. Teachers highlight academic and content vocabulary to further support comprehension. During classroom visits these beliefs were visible, as students engaged in a Socratic Seminar in a U.S History class studying a unit on immigration specifically, "*Student Dreamers fight for Immigration Reform*", based on President Obama's New Immigrant Policy. Students were citing textual evidence, evaluating an author's premise via agreement or challenge of validity, writing arguments and verbally expressing ideas to peers as they evaluated one another, and posed questions to deepen each other's thinking in a respectful manner. In math and other subjects similar lessons were observed. In spite of school efforts to ensure that multiple points of access, including extensions, questions and discussions were implemented for all lessons and for all students, they were not yet strategically planned and executed to afford all learners opportunities to demonstrate higher-order thinking skills, thus hindering students, including relevant subgroups, from fully participating, taking ownership of their learning, and demonstrating their thinking in their work products.
- Increase the use of data analysis to determine student progress and effective instructional adjustments resulting in clear, actionable and meaningful feedback, and in-depth understanding of student's next learning steps. (2.2)
 - Teachers consistently use periodic assessments particular to content areas with specific rubrics that align to subject curricula, including performance-based assessments used at the end of every unit. Furthermore, analysis of academic tasks provides feedback to students regarding their strengths and skills. In addition, teachers use data-driven strategies to support student needs and form flexible groups. Teachers also use checks for understanding during individual conferencing. For instance, open-ended questions are tailored to individual students to push their thinking and during student discourse to assess comprehension of student responses. Moreover, teachers across the grades check comprehension via a common assessment, the Drop Everything And Read (DEAR) program. Teachers use this program to address the sub-skills of complex text so students make connections to text by using text-based references to support their opinions, make inferences, and build academic and subject-specific content vocabulary. During a student meeting, students expressed attributes of their work, and revealed commitment, and perseverance to learning. Conversely, students were unable to explain their next steps to gain mastery of skills taught and the demands of the academic tasks.

While teachers are incorporating checks for understanding in their lessons, and provide feedback, the school does not yet afford students meaningful feedback so that it supports their understanding of the rigorous demands of academic tasks and of the next steps in learning, thus impeding opportunities to make students integral to their learning and further accelerate mastery.

Part 3: School Quality Criteria 2013-2014

School name: Jamaica Gateway to the Sciences High School	UD	D	P	WD			
Overall QR Score			X				
Instructional Core							
<i>To what extent does the school regularly...</i>	UD	D	P	WD			
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?			X				
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?			X				
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?			X				
School Culture							
<i>To what extent does the school ...</i>	UD	D	P	WD			
1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults?			X				
3.4 Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations?				X			
Systems for Improvement							
<i>To what extent does the school ...</i>	UD	D	P	WD			
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			
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?			X				
4.1 Observe teachers using the Danielson Framework for Teaching along with the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection?			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				
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?			X				
Quality Review Scoring Key							
UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed