Department of Education
Carmen Fariña, Chancellor

Office of School Quality
Division of Teaching and Learning

Quality Review Report

2014-2015

The Bay Academy for the Arts and Sciences

K098

1401 Emmons Avenue
Brooklyn
NY 11235

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The School Context

The Bay Academy for the Arts and Sciences is an intermediate school with 1442 students from grade 6 through grade 8. The school population comprises 4% Black, 10% Hispanic, 57% White, and 29% Asian students. The student body includes 2% English language learners and 8% special education students. Boys account for 46% of the students enrolled and girls account for 54%. The average attendance rate for the school year 2013-2014 was 96.0%.

School Quality Criteria

Instructional Core		
To what extent does the school…	**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 Framework for Teaching, aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products	**Celebration**	**Well Developed**
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**	**Well Developed**
School Culture		
To what extent does the school…	**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	**Focus**	**Well Developed**
Systems for Improvement		
To what extent does the school…	**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:	1.2 Pedagogy	Rating:	Well Developed

Findings
Pedagogy in the vast majority of classrooms demonstrates instructional coherence, a variety of teaching strategies that provides all students access into the curricula, and student work product that reflects high levels of student thinking and participation.

Impact
Classrooms across all grades and subject areas evidence instructional practice that uses a variety strategies to actively engage all learners in activities and tasks that promote higher order thinking resulting in student work that is demonstrative of rigor, high levels of student cognition and student ownership of learning.

Supporting Evidence

- Throughout the school there is a consistent belief that students learn best when they engage in activities that allow for high levels of questioning and discussion. Teaching practice is informed by the Danielson Framework for Teaching, the instructional shifts and team discussions. For example, in a 7th Grade Art class students demonstrated high-level discussion and critical thinking when they viewed a painting and had to "take a stand" and decide if the painting was abstract or realistic. Students then engaged in a debate to support their "stand" using content vocabulary and evidence from the painting to support their point of view. A second picture led to another debate with the same question followed by a discussion on how the point of view of the artist is critical in understanding whether or not their art is realistic or abstract.

- Class instruction provides students with opportunities to engage in cognitively challenging thought and opportunities to have high-level conversations with each other. In an 8th grade English language arts class, students participated in a Socratic Seminar where they engaged in a dialogue to analyze specific chapters of *To Kill a Mockingbird.* While students in the inner circle followed a Socratic protocol to ask and answer questions about the text, students in the outer circle take notes, write responses to the discussion of the inner circle and have an opportunity to go to the "hot seat" to participate with the inner circle. The teacher acts as a facilitator and using protocols, students lead the conversation around content and engage in questioning and discussion evidencing high levels of student thinking, participation and ownership of the learning.

- Student work portfolios, classrooms, bulletin boards and notebooks show tasks that provide students with opportunities to engage in cognitively challenging activities that develop critical thinking skills. In a 7th grade math classroom students studying proportional relationships worked in groups to solve various problems where they had to determine if a proportional relationship existed. Students were actively engaging in meaningful discussion and productive struggle as they attempted to create equations that proved their answer. One group while sharing their theory recognized although the equation they developed may have worked in a particular circumstance, ultimately, it did not work consistently and therefore they needed to continue to analyze the problem to understand if a proportional relationship existed.

Area of Focus

Quality Indicator:	3.4 High Expectations	Rating:	Well Developed

Findings
School leaders systematically express high expectations to the entire school community including teachers, students and parents via several modes of communications. Professional development, parent workshops and teacher feedback place students on a path of college and career readiness.

Impact
Structures that support high expectations across all constituencies result in a culture of mutual accountability between teachers and administration and a high level of trust between the school and families. Yet, the school is deepening its commitment to families toward expanding pathways of partnership to support student progress in reaching and exceeding goals.

Supporting Evidence

- Articulation of high expectations as well as professional development lies in the domains of the Danielson Framework for teaching and includes data driven planning and purposeful pedagogic choices that make sense for students. Professional development focuses on purposeful planning, effective questioning and promoting discussion in classrooms. Feedback to teachers includes clear meaningful next steps to improve practice resulting in highly effective teaching for most teachers.

- High expectations for students include being well prepared for school, being responsible for academic work, demonstrating desirable personal behaviors such as respect, perseverance, determination and self-accountability. Teachers and administrators communicate with students via one on one conversation, guidance outreach, in-class and on-line discussions to reinforce expectations and provide meaningful guidance on next steps. A 6th grade student explains, “The school is amazing, we have goals and we know what we need to do to reach those goals. Everything we need is here for us; it is up to us to take advantage of the opportunities.”

- Regular communication with parents includes a school website, *Ed Line,* an online program that provides parents with access to grades and assignments, town hall meetings, phone calls, emails, a monthly newsletter *The Bay Gazette,* progress reports and report cards, all which provide parents with a clear understanding of expectations and student progress. Parents feel informed and believe the school does an excellent job of communicating. They express a great deal of respect for the principal stating, “She is a real leader and makes an outstanding effort across the board to make sure our kids are okay and that we know how to help and support them.”

- The school promotes college and career readiness through the lens of ensuring that students are ready to be successful high school students. Students have access to Regents classes and specialized high school preparatory courses. Parents have access to ongoing workshops on preparing students for high school and have access to grade specific events to build relationships between the school and home. In an effort to deepen the relationship with families, the school is embarking on production of webinars for parents providing detailed information across content areas allowing for more effective partnerships, supporting students in reaching and exceeding expectations.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Well Developed

Findings
All curricula align to the Common Core Learning Standards and are purposely revised and refined by using student data. All students and student groups have access to cognitively challenging tasks.

Impact
Curricula decisions ensure coherence and promote college and career readiness by strategically integrating the instruction shifts. Analysis of data and student work ensure appropriate access to all learners including highest and lowest achieving students and special education students, so that all learners engage in academic tasks and deep thinking.

Supporting Evidence

- Across content areas units of study require all students to engage in deep reasoning, including multi-step problem solving, argumentative writing and text-based responses, content specific vocabulary and Depth of Knowledge aligned tasks. For example, a 7th grade unit on the English colonies provides opportunities for students to study the political, social and economic development of specific colonies through study of primary source documents, and tiered tasks, giving all students choice and opportunities to demonstrate mastery of standards.

- Lesson plans within units of study pose questions along the Depth of Knowledge framework from recall to extended thinking allowing students to demonstrate skill and engage in activities that promote higher order thinking. Through questioning scaffolds, all learners have access to instruction with opportunities to reach learning targets. Within an 8th grade science lesson, students studying genetics are required to demonstrate their understanding by working through several activities using Punnett squares to show understanding of how traits are inherited by incomplete dominance. A final activity asks students to predict the probability of an individual's genotype under certain conditions giving students an opportunity to be deeply engaged in a challenging task that requires critical thinking.

- Planning is refined using data from student work and assessments including conference notes, on demand writing, exit slips, and formative and summative tasks. Teacher lesson plans evidence purposeful planning to engage all learners using a Universal by Design model of differentiation. These include flexible grouping, guided group activities, leveled readings, differentiated tasks and manipulatives, as well as incorporating technology and programs such as *Brain Pop and Khan Academy*.

Quality Indicator:	2.2 Assessment	Rating:	Well Developed

Findings
Across the vast majority of classrooms, the use of assessments, rubrics, student self-assessments, and ongoing checks for understanding allow for a clear portrait of student mastery and meaningful feedback to students.

Impact
Through deep analysis of data gathered from various assessments and ongoing checks for understanding teachers consistently refine unit and lesson plans to meet student-learning needs and to provide students with information, thus making them aware of their next learning steps.

Supporting Evidence

- Teachers across subject areas use rubrics, including a school created short response two-point rubric and an extended response essay rubric to monitor student progress and mastery of writing and content standards. In addition, there is a school-wide homework rubric and clear grading policies specific to content areas, allowing for coherence across the school and a consistent medium to offer students actionable and meaningful feedback.

- The use of rubrics for all tasks and activities provides students with clear expectations as well as an entry point for teachers to provide meaningful feedback. For example, feedback on a math task was specific stating, “Your reasoning is correct, however, in question 8 you need to find the unit rate to properly explain your outcome.” The student was able to explain what their next learning steps were to advance on the rubric. Teachers also use different color highlighters to mark rubrics and student work so that students can clearly see the areas of their work that resulted in a particular grade and can match feedback to gain a clear understanding of next learning steps.

- Ongoing checks for understanding are evident in the vast majority of classrooms. These include conferences, focus questions, use of Near Pod app with I Pads for immediate assessment, exit slips, teacher observations and conference notes. Teachers collect data and modify instruction either during the course of the period or during follow-up lessons. For example, during a 7th grade math lesson, students worked in pairs and the teacher circulated taking notes and asking questions. She explained that she uses the class assessment data to pull guided groups and inform the next day’s lesson and grouping.

- Students use rubrics and self-assessments to identify next steps to inform their learning. Across all content areas, students are adept at reflecting on their work and the next steps necessary to reach and exceed standards. Teachers use conferencing with students to gauge the depth of student understanding of the task, rubric and standard. These meetings allow students to have clarity on their next steps, for example, a student explains, “After meeting with my teacher I recognize that I am using the same words at the start of each paragraph and part of the task is to use varying vocabulary to engage the reader.” Teachers use the data from conferencing to inform their planning toward facilitating student progress.

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

Findings
The vast majority of teachers engage in inquiry work systematically analyzing the impact of teacher practice, and leadership roles, influence key decision across the school.

Impact
The work of teacher teams results in teacher leadership throughout the school, where deep collaboration among colleagues leads to identification of practices that impact student learning, netting substantial gains for all students in mathematics and English language arts.

Supporting Evidence

- Inquiry teams use multiple sources of data including student work, Expeditionary Learning module baseline and culminating assessments, teacher created math assessments, MOSL assessments, and item analysis from State assessments in math and English language arts to understand trends across the school, grades, classes and individual students. Curriculum maps, units of study and lesson plans demonstrate planning aligned to the Common Core Learning Standards and highlight the instructional shifts. Changes to curricula are based upon data, for example, a focus on writing across the curriculum and use of a targeted two-point rubric for extended response questions resulting from findings from data analysis of State exam outcomes.

- During weekly inquiry team meetings, teachers participate in lesson study, analysis of student work, performance, and progress outcomes with the goal of understanding the impact of teaching on student learning. Each month the teams have a different focus, studying targeted groups of students to gain understanding of strategies that are successful and expand practice to impact students across the school. For example, the English language arts inquiry team is focusing on high achievers as data shows that this group of students is losing points in writing on state assessments. The team is developing writing protocols as well as embedding enrichment activities into all units of study that support the continual progress of students. .

- The use of protocols to analyze data and study student work products across grades and content areas allows for a deep understanding of student learning and informs the school where there are areas of concern. For example, item skill analysis in mathematics indicates that students that dropped one or two levels on state exams had difficulty with extended response questions. As a result, the math team is working to develop strategies to increase opportunities for students to engage in extended response, using strategies that support struggling students while creating extension activities for high achieving students that allow for problem solving at an accelerated level. The creation of a two point writing rubric that aligns to math extended response gives student clear understanding of expectation and allows for data that demonstrates areas where students need to be more specific when completing the problems.