



**Department of
Education**
Carmen Fariña, Chancellor

**Office of School Quality
Division of Teaching and Learning**

Quality Review Report

2014-2015

Bronx Academy for Software Engineering

High School X264

**2474 Crotona Avenue
Bronx
NY 10458**

Principal: Benjamin Grossman

**Date of review: May 22, 2015
Lead Reviewer: Michael L. Schurek**

The School Context

Bronx Academy for Software Engineering is a high school with 226 students from grade 9 through grade 10. The school population comprises 32% Black, 51% Hispanic, 5% White, 10% Asian, 1% Native American and 1% other students. The student body includes 14% English language learners and 28% special education students. Boys account for 86% of the students enrolled and girls account for 14%. The average attendance rate for the school year 2013-2014 was 92.0%.

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	Proficient
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	Additional Findings	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	Focus	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	Additional Findings	Proficient
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	Celebration	Well Developed

Area of Celebration

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

All teachers engage in inquiry-based professional collaborations that focus on increasing student achievement. Teachers take on leadership roles and are integral in key decisions that affect students learning.

Impact

The work of teacher teams results in school-wide instructional coherence, improved teacher practice and improved achievement for all learners.

Supporting Evidence

- The school has four collaborative inquiry teams; Technology, Engineering and Math (STEM) teams and 9th and 10th grade Science and Humanities teams. Teams meet bi-weekly to review student work, examine teacher practice, and create instructional strategies and supports for students. For example, to ensure that all students make sense of problems and persevere in solving them, the STEM teams designed an annotation strategy that requires students to **Box** the question, **Underline** the important information, **Circle Key** words, and **State a Strategy** (BUCKSS). This strategy supports vocabulary acquisition and is used across the school. As a result, the problem solving abilities of students is increasing.
- Teacher teams analyze assessment data and student work utilizing protocols. For example, the 9th grade Humanities team reviewed the work of a special education student first paying close attention to what has worked well with the student, and then planned next steps to ensure the development of supports that maximize the student's strengths and preferred method of learning. Furthermore the team is able to identify patterns and trends across students by this close review of student work. These practices have enabled the team to identify large numbers of students that demonstrate weak paraphrasing skills, making it difficult for them to make inferences and draw evidenced-based conclusions about texts. Additionally, teams have developed templates for students to use for accessing, comprehending, paraphrasing, and making inferences from complex texts. As a result, targeted groups of students are demonstrating accelerated achievement in selected skills and concepts.
- The Inquiry Leadership Team (ILT) is a vertical team that meets weekly to plan inquiry meetings, develop and test protocols for learning with student work and examining teacher practice, and plan professional learning across the school. Members of the ILT work with teachers on their respective teams to develop their own capacity for facilitation and team leadership. In addition, teachers sit on a vision committee and a hiring committee with administrators as equal partners in all decisions thereby demonstrating high levels of teacher ownership in school decision-making and effective distributed leadership structures.

Area of Focus

Quality Indicator:

2.2 Assessment

Rating:

Proficient

Findings

The school-wide grading policy and use of common assessments provide all stakeholders with feedback about student progress. Assessment results are used to make curricula modifications.

Impact

The school uses common assessments and the analysis of data to track student progress and results are used to provide feedback to students and inform adjustments in units and lesson plans.

Supporting Evidence

- Teachers use curricula aligned assessments and discipline specific rubrics including common core writing rubrics, Regents-based rubrics, and teacher-created focus standard rubrics to provide students with actionable feedback. Feedback provided is explicit, pushes students to explain their thinking and involves higher-order thinking. For example, feedback on a 10th grade global assessment prompts the student to give text-specific examples for statements made utilizing a school made paraphrasing rubric. Other feedback observed asks students to explain their thinking and make connections. Students articulate that they find the feedback useful and routinely are provided with the opportunity to write another draft utilizing the next steps feedback.
- Grading policies are aligned with the school's curricula and grade students against school-wide focus standards and school rubrics. Students state that they know how they will be graded on each project, essay, design challenge, etc. through the routine use of rubrics presented at the beginning of each particular task. While students are provided with ample amounts of feedback and use it to improve the quality of their work, they are unable to articulate specific goals they must work on to achieve mastery across subject areas.
- Teachers, students and families use information gathered from common assessments including 8th grade summative assessments in English language arts (ELA) and math for incoming 9th grade students, School-net periodic assessment, Regents benchmark assessments in ELA, math and global studies, and humanities and STEM mastery opportunity assessments made by teachers utilizing backwards design to determine student progress towards goals across grades and subjects. The analysis of data informs adjustments to written curricula and is evident in written units and accompanying lesson plans.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Proficient
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Findings

Curricula and academic tasks consistently emphasize rigorous habits and higher-order skills across grades and subjects and for all students. Curricula and academic tasks are planned and refined using student work and data.

Impact

As a result the school's decisions lead to instructional coherence that promotes college and career readiness for all students.

Supporting Evidence

- Teachers use ATLAS curriculum mapping and Understanding by Design to ensure that curricula are planned backwards from selected standards. In each academic class students face a design challenge quarterly that requires them to perform subject-specific skills and the actions of the school's learning framework rubric. For example, in a global history class, students work in small groups to design a whole class lesson plan on Hinduism and choose to use a PowerPoint format to meet the needs of both visual and auditory learners. Their decision to consider the needs of their audience demonstrates actions of empathy that align to one section of the school's learning framework while the topic of Hinduism is a global history content standard. The unit plan includes rubrics that student observers use to evaluate the group's performance and the quality of their planning.
- The school's lesson plan template is used in all content areas to reinforce higher order thinking and includes access points during the flow of the lesson to ensure that all learners are provided with scaffolds to enable them to complete tasks. For example, a 9th grade special education ELA lesson plan requires students to paraphrase the claims of "magical realism" of three authors to compare to a shared-out class definition. The lesson plan includes a list of pictures representing magical realism that are used as scaffolds to ensure all students understand this concept. The access points section of the plan explains how students are assigned to groups homogeneously and read complex text on three different levels utilizing group template tools to annotate, construct paraphrases, and make inferential statements that they share aloud as part of the lesson summary. In addition, lesson plans contain pre-meditated open-ended questions the teachers use to push student thinking.
- Refinement to curriculum and instruction is an ongoing process that takes place during collaborative inquiry team meetings. Teams focus on teacher development and student growth in the school wide instructional focus areas of problem solving with perseverance, making inferences from read text, and citing textual evidence to support conclusions drawn from texts. This year's instructional focus was expanded to include a commitment to construct multiple entry points for students of all cognitive abilities, across all classrooms. The tools teams have created are designed so that the tools can grow with students as they develop strengths in skill areas and ensure that all learners have access to learning.

Quality Indicator:	1.2 Pedagogy	Rating:	Proficient
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Findings

School leaders and staff believe students learn best when students receive teacher supports and engage in partner work. Teachers consistently provide students with a variety of entry points.

Impact

Instructional practices promote high levels of student thinking across content areas resulting in meaningful student work that promotes thinking.

Supporting Evidence

- Across classrooms, teaching practices reflect the common belief that students need to be cognitively engaged in their learning through participation in classroom discussions that reflect critical thinking and participation. Students engage in partnership turn and talks and share strategies with each other in small groups to exchange thoughts and ideas. For example, students in a 9th grade ELA class used an anticipation guide to express their initial understanding of power by agreeing or disagreeing with some shared statements about power. Students used this guide to participate in a discussion activity requiring them to move to agree or disagree to defend their point and share out responses to support their arguments.
- Students conduct close reading of complex informational texts and engage in conversations that demonstrate their thinking. For instance, in a 10th grade global studies class, students role play in a trial in which five groups have been indicted for their roles in creating the unjust social and ecological conditions of "global sweatshops". Student groups read informational articles about each of the accused five groups and refer to the texts to defend their group's innocence and explain to the judge the ways in which the other groups are guilty.
- Teachers employed a variety of entry points to engage all students in learning. In a computer science class, front-loaded vocabulary with definitions, planning sheets, elbow partners, and guided notes were provided to students needing some or one of these supports.
- Teachers' questioning is open-ended and requires students to explain their thinking. Protocols for discussion have been internalized by students enabling them to agree or disagree with each other respectfully.

Quality Indicator:	3.4 High Expectations	Rating:	Proficient
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Findings

School leaders consistently communicate high expectations to all staff using Danielson's Framework for Teaching. Feedback provided through a variety of venues keep families updated of student progress.

Impact

Structures that highlight the school's high expectations ensure that all constituents are accountable, thus preparing students for college and career and higher levels of learning and achievement.

Supporting Evidence

- Frequent classroom observations using Danielson's Framework competencies, and leadership conversations with staff utilizing a professional learning teacher goal-setting tool hold staff accountable for meeting expectations that elevate teachers' practice.
- The school comes together as a full staff weekly to examine teacher practice through the Danielson Framework, develop mastery of the Design Thinking learning framework, and explore research in areas related to their understanding of how students learn best. The Inquiry Leadership Team is developing a "Critical Friends" curriculum to facilitate effective and comfortable classroom inter-visitations amongst staff.
- The school communicates expectations to students and families through events including curriculum night, parent/teacher conferences, Individualized Education Plan (IEP) meetings, and School Leadership Team (SLT) and Parent Teacher Association (PTA) meetings. Teachers maintain consistent communication with families about student progress both through individual contact like emails, texts, phone calls, and tweets and through the school's online grade book and mid-marking period progress reports.
- The school conducts events that allow students to present their work to the wider community, such as school-wide design challenges in which students pitch their ideas and receive feedback from members of the software engineering industry, local community organizations, and mentors to help accelerate student learning through real world applications.
- Teachers conduct seminar classes with assigned students to provide advisement and academic support as needed by seminar members. In addition, the school has established a partnership with iMentor, which pairs all students up with a college-graduate mentor with whom students share weekly emails aligned to a college-bound curriculum.