



**Department of
Education**
Carmen Fariña, Chancellor

Office of School Quality
Division of Teaching and Learning

Quality Review Report

2014-2015

**Science and Technology Academy:
A Mott Hall School**

**Middle School X454
250 East 16th Street
Bronx
NY 10456**

Principal: Patrick Awosogba

**Date of review: January 12, 2015
Lead Reviewer: Matthew Angell**

The School Context

Science and Technology is a middle school with 448 students from grade 6 through grade 8. The school population comprises 25% Black, 71% Hispanic, 1% White, and 2% Asian students. The student body includes 19% English language learners and 15% special education students. Boys account for 61% of the students enrolled and girls account for 39%. The average attendance rate for the school year 2013-2014 was 91.9%.

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	Focus	Developing
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	Proficient

Area of Celebration

Quality Indicator:	3.4 High Expectations	Rating:	Well Developed
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Findings

School leaders consistently communicate high expectations to the entire staff and provide ongoing training. School staff partners with parents to effectively communicate expectations towards college and career readiness.

Impact

As a result, the staff shares a culture of mutual accountability and supports students' progress towards those expectations.

Supporting Evidence

- The school has a daily community meeting every morning led by the principal. The school described the meeting as an “opportunity to celebrate progress and address growth areas.” During the meeting observed, the principal covered school issues and contained student motivational pieces as well as celebrations of student accomplishments. During the meeting observed the principal spoke of the school's weekly focus and highlights around the school. For instance, students applauded as teachers announced citizens of the months in each grade.
- School leaders provide teachers with internal and external professional development opportunities along short term and long term goals. Teachers spoke to staff collaboration extending beyond scheduled meeting times. The central hallway was observed with teachers meeting informally throughout the day. The school has developed a 3 year professional development plan that covers staff, as well as individual teacher trainings connected to common core learning standards, International baccalaureate, and college and career readiness.
- The school has a college and career readiness committee that successfully partners with families to inform and assist students with high school, college, and career readiness through in school and out of school functions. All students complete a college and career survey that covers life goals and aspirations as well as if students are aware of the requirements to achieve those goals. This survey is used to inform family workshops, teacher conferences, and communication with families. Parents spoke to visiting local colleges with staff over the summer.
- Parents are regularly updated about student progress by the school messenger, teacher phone calls/emails/texts, and Skedula. Parents said during the parent meeting that their child's teachers “are like family.” Parents talked about their child's progress academically, socially, and emotionally as a result of the constant communication with the school and the advancement via individual determination program which is the school's advisory program for all students.

Area of Focus

Quality Indicator:

1.2 Pedagogy

Rating:

Developing

Findings

Across classrooms, teaching strategies inconsistently provide multiple entry points in the lesson and student discussions reflected uneven levels of student thinking.

Impact

Consequently, all learners, including English language learners are not copiously demonstrating higher-order thinking skills and producing meaningful work products in class.

Supporting Evidence

- School leader's spoke to "teachers pushing students to think deep." While unit plans and lesson plans contained higher-level questions the execution was inconsistent across classrooms. Most classrooms showed limited engagement of students in discussions. Five out of seven classrooms were teacher dominated linear lines of questioning. In one particular mathematics classroom the majority of student answers were accepted as one word responses along the teacher's linear line of questioning.
- School leaders reported an inquiry based approach to learning. In a sixth grade classroom students were observed working collaboratively in groups to create a division sentence from an unmarked visual model. The teacher brought the class back together to whole group discussion on group methods and answers. This approach to pedagogical practice of promoting high level of student thinking is not yet embedded across grades and subjects.
- Across classrooms teachers inconsistently provided supports and multiple entry points for all learners. In the majority of classrooms students received identical materials and academic vocabulary was addressed only verbally not providing English language learners with an entry point into the texts used in class.
- A review of student work posted, in classrooms and during the student meeting showed inconsistent higher-order thinking. In English Language Arts students had unit essays, with rubrics, where they need to cite textual evidence to support claims. In mathematics, students work folders contained mostly quizzes and few comments. Students spoke to unit projects being mostly in English Language Arts. Classroom observations contained mostly limited student discussion. In one classroom students were asked contrast characters and the language they use in a fishbowl activity, but the discussion was limited to about three students per question.
- Across classrooms the individual tasks students were asked to complete required varied levels of student thinking. In one science classroom students were asked to conduct an investigation on animal adaptation and in another science classroom students were asked to watch a brain pop video and take notes.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Proficient
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Findings

Across grades and subjects, written curricula are aligned to Common Core Learning Standards (CCLS), integrate the instructional shifts, and consistently emphasize rigorous habits.

Impact

The school's purposeful curricular choices have resulted in coherence among subjects and promote college and career readiness.

Supporting Evidence

- Lesson plans across subjects and grades use the school-wide lesson plan template that include Common Core Learning Standards and International Baccalaureate standards, do now, think and answer, mastery objectives, mini-lesson, and investigation. For example, an eighth grade Science plan for a multi-day multi-part investigation into animal adaptations included scaffold questions through the different segments of the investigation to support learners. The lesson plan also included strategic group questions to check for understanding. The teacher also supported the class in understanding of content during the lesson by reviewing key vocabulary and engaging students in accessing prior knowledge.
- A review of the curricula across content areas revealed that all units of study follow the school template and include CCLS and IB standards, unit purpose, statement of inquiry, content, skills, and assessment. A review of an 8th grade unit on *To Kill a Mocking Bird* showed students engaging in a variety of fiction and non-fiction texts to answer the questions "Is it worth taking a stand for one's self? For others?".
- A teacher team was observed giving feedback on a lesson plan designed to address areas of concern seen in a recent assessment. Teachers spoke to spiraled skills and unit revisions over the course of the year based on the data including scaffolds use for students with disabilities and reteach plans.

Quality Indicator:	2.2 Assessment	Rating:	Proficient
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Findings

Across classrooms, teacher use assessments and rubrics aligned to the curriculum. Teachers also consistently use ongoing checks for understanding during instruction.

Impact

Assessment results provide students and teachers with actionable feedback and allow teachers to make effective instructional adjustments.

Supporting Evidence

- Across classrooms teachers used assessments connected to rubrics and provided next steps to students verbally and in writing. A review of student work showed assignments with clear next steps aligned to rubrics. Teachers also create reteach plans based on periodic assessment data that identifies standards missed, analysis of misconceptions, and an instructional plan.
- Across classrooms teachers consistently checked for student understanding during lessons. Teachers used cold calling and clarifying questions during group discussions. Teachers circulated during group work time to check for understanding. In one social studies classroom students were asked to write three tiered questions and the teacher met with each group to monitor their proficiency and progress.
- Students spoke to teachers guiding them through self-assessments using a rubric during assignments. Students could speak to rubric aligned goals in their classes that they were working on and how they used feedback in future assignments. One student spoke to her improvement on using specific evidence aligned to her claim on a recent unit essay on Myth.

Quality Indicator:	4.2 Teacher teams and leadership development	Rating:	Proficient
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Findings

The majority of teachers engage in structured professional collaboration. The school uses distributed leadership structures to support teacher capacity.

Impact

Teacher collaboration has strengthened the instructional capacity of teachers and promoted the achievement of school wide goals. Teachers have also had a voice in key decisions that affect student learning.

Supporting Evidence

- Teachers reported that their voice is valued in instructional school-wide decisions. For example, the literacy team spoke to a review of student work, state test results, and Measures of student learning (MOSL) results from last year that highlighted a need to improve student writing. The teachers shared this finding with school leadership and staff during a June conference and this year there is a school-wide focus on writing. Content area teachers shared strategies and practices adopted this year as a result of English language arts teacher’s suggestions.
- During a vertical English department team meeting observed, teachers presented a lesson plan designed to address a gap noticed on a recent benchmark assessment. Teachers gave feedback on the lesson strategies, supports, and assessments. Teachers also shared best practices from their past experience of teaching similar skills in their own grade.
- During the second teacher team meeting, with representatives from multiple teams, teachers spoke to creating their own focus of inquiry. The assessment team spoke to a focus on supporting students in the school bottom 20th percentile by looking at biographical, attendance, and academic information and creating supports in the class and in the school. Each team is responsible for a staff presentation at the end of the year to share their findings.
- School leaders meet regularly with teacher teams and provide feedback on their progress towards team’s goals as well as feedback to individual teachers through the observation cycle. For instance, based on data and teacher feedback, the school has implemented the use of targeted running records. Student progress is tracked by teams using google documents. The team has provided training on support interventions for struggling readers. As a result, students showed significant progress on the recent mid-year assessment.