Quality Review Report

2014-2015

Science, Technology & Research Early College School (STAR)

Middle/High School K543

911 FLATBUSH AVENUE,
Brooklyn, NY 11226

Principal: Dr. Eric Blake

Date of review: January 7, 2015
Lead Reviewer: Miatheresa Pate
The School Context

Science, Technology & Research Early College School (STAR) is a 6-12 school with 514 students from grade 6 through grade 12. The school population comprises 88% Black, 7% Hispanic, 1% White, and 4% Asian students. The student body includes 1% English language learners and 2% special education students. Boys account for 49% of the students enrolled and girls account for 51%. The average attendance rate for the school year 2013-2014 was 97%.

School Quality Criteria

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>Area of:</th>
<th>Rating:</th>
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<tbody>
<tr>
<td>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</td>
<td>Additional Findings</td>
<td>Well Developed</td>
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<tr>
<td>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</td>
<td>Focus</td>
<td>Proficient</td>
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<td>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</td>
<td>Additional Findings</td>
<td>Proficient</td>
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<tr>
<th>School Culture</th>
<th>Area of:</th>
<th>Rating:</th>
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<tbody>
<tr>
<td>3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations</td>
<td>Celebration</td>
<td>Well Developed</td>
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<tr>
<th>Systems for Improvement</th>
<th>Area of:</th>
<th>Rating:</th>
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<td>4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning</td>
<td>Additional Findings</td>
<td>Well Developed</td>
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Area of Celebration

Quality Indicator: 3.4 High Expectations | Rating: Well Developed

Findings
School leaders incorporate various trainings to communicate high expectations consistently to the entire staff. School leaders and staff effectively communicate expectations to build partnerships with families.

Impact
The communication of high expectations has resulted in a culture of mutual accountability with staff. Feedback to families supports progress towards those expectations.

Supporting Evidence

- Administration communicates high expectations for all staff, which is evidenced through verbal and written structures such as the “Theory of Action Efficacy Paradigm” guidance manual, staff handbook, and weekly updates to staff. The dialogue with administration revealed that observation feedback is verbal and written to include a detailed action plan aligned to instructional areas of improvement. The review of the school wide professional development calendar further revealed several opportunities for teachers to engage in better understanding the Danielson framework and participate in deep dives via professional learning cycles that focus on specific components of the framework.

- Teachers conduct inter-visitations amongst staff members to observe teachers engaged in Socratic Seminars as well as inter-visitation to college level professor’s classes to observe the instruction at the college level.

- As an Early College school partnered with Brooklyn College, school leaders and other staff members work as a team in study groups, planning sessions, and other professional development modes, establishing a culture of professionalism that results in a high level of success in teaching and learning across the school. For instance, content teams, professional learning teams, and data teams meet weekly which has results in ongoing expectations being achieved as evidenced by the professional development calendars, teacher surveys, discussions with Brooklyn College Liaison and the review of student scholarship data.

- Teachers communicate student progress regularly in a variety of ways. The school uses a system called Engrade in which during the parent interview it was revealed that teachers use Engrade to provide ongoing information to parents of what students are working on and the various skills to be covered across subject areas. During the interview with parents it was further revealed that teachers provide progress reports, and have face to face meetings to discuss expectations and opportunities for partnering within the community.
Area of Focus

<table>
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<tr>
<th>Quality Indicator:</th>
<th>1.2 Pedagogy</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings
Across classrooms, teaching strategies consistently provide multiple entry points and discussions reflect high levels of student thinking and participation.

Impact
Consistently providing multiple entry points into the curricula with challenging tasks support the engagement of all students in high levels of thinking and participation that culminate in meaningful work products. However all students showing mastery was not evident across classrooms.

Supporting Evidence

- Teachers across classrooms use several instructional strategies to engage all students in high levels of thinking and participation. For instance, during classroom observations the group talk, graphic organizers, and student choice of tasks were observed. Classrooms observed reflect consistent levels of student thinking and participation.

- During a six grade mathematics lesson, students were engaged and required to solve mathematical problems: students took turns coming up to the smart board to show their work, justify their answer, explain a loud their process and how it connects to mathematical reasoning, and defend their response when their classmates counter claims were presented. This demonstration of teaching strategies, entry points, student thinking and discussion was observed across classrooms in similar forms. The opportunity to develop multiple endpoints so that all students show mastery of the learning objectives and corresponding standards was not evidenced across classrooms.

- Teacher practices consistently demonstrated the school’s instructional focus of Developing and Defending Arguments (speaking, writing, reading, and listening) through the integration of Socratic Seminar which was observed across classrooms. Students used rubrics and other guidance materials to self-assess and assess the work of their group. Administration provided samples of student writing, however students writing and using text based evidence throughout the lessons observed were uneven.
**Additional Findings**

| Quality Indicator: | 1.1 Curriculum | Rating: | Well Developed |

**Findings**
School leaders and faculty make purposeful decisions in aligning curricula to the Common Core Learning Standards (CCLS). The school has planned and refined curricula academic tasks across content areas.

**Impact**
Academic tasks provide consistent opportunities to engage diverse subgroups and promoting college and career readiness.

**Supporting Evidence**

- School leaders and faculty have adopted Code X; Go Math; NYS K-12 Social Studies Framework and Next Generation because of their alignment to the Common Core Learning Standards. As an Early College school, the school has partnered with Brooklyn College to ensure the alignment of high school curricula to the Common Core Learning Standards. For instance, the faculty has engaged in professional development with the college level curricula specialist specifically around connecting curricula maps and unit plans to the CCLS. Additionally, the school has partnered with College University of New York (CUNY) who provide instructional coach support for teachers to ensure instructional coherence. The coherence was observed across classrooms via lesson pacing, scope and sequence pacing, and among academic tasks.

- In reviewing the school wide professional development calendar for the 2014-15 school year, it was observed that school leaders scheduled whole and small group sessions with the content supervisor and coach to plan and refine curricula and academic tasks. For instance, the professional development calendar notes that ongoing(weekly) and monthly professional learning sessions will be dedicated to developing pedagogical skills focused on improving academic tasks, questioning and discussion.

- During the observation of classroom instruction teachers ensured that a diversity of learners were cognitively engaged via implementation of tiered academic tasks. For instance, in an Electrical Engineering classroom the teacher provided academic task options, hands on supplemental and graphic organizers to groups of students. In observing the mathematics classroom, students were grouped and given different academic tasks to complete which ensured that higher achieving students are cognitively engaged. This approach was observed across classrooms.
Findings
Across classrooms, teacher’s practices consistently reflect the use of rubrics and groupings based on common assessments towards the achievement of student goals.

Impact
The use of common assessments and rubrics, results in teachers providing actionable feedback to students and teachers being able to determine student progress across grades and subject areas which support the adjustment of curriculum and instruction.

Supporting Evidence

- The review of bulletin boards across classrooms displayed rubrics. The rubrics included actionable feedback. For instance, when observing the bulletin boards in all classrooms each student work product had a rubric attached to their specific work with teacher feedback. The rubric reflected feedback such as: “Student A: Overall, good job! Your explanation of why Jasmine and Paul’s answers were wrong, were correct. However, here are a few suggestions: look backwards, how do you think Jasmine ended up with an extra zero? Explain why a fraction is incorrect. What does the fraction represent? By doing this you would have scored higher”, a 4 instead of a 3 on the rubric.

- The school uses technology to focus on and monitor our school-wide assessment using “Engrade Pro”. Based on the assessment outcomes teachers use “Study Island” which allows students to self-assess while promoting higher order thinking. Administration revealed Study Island uses the Depth of Knowledge (DOK) guidelines to ensure that students are exposed to content in a way that will properly prepare them for national and state summative assessments. These programs are student data driven resulting in teachers better determining student progress across grades and subject areas.

- Administration revealed that the school has a data and assessment team who uses Engrade-Pro, and Study Island (online platform grading system; a computer excel generated spreadsheet web-based system) which maintains and delineates for teachers all ongoing assessment processes and the results of a school-wide six-week Interim assessment cycle, and term benchmarks.
**Quality Indicator:**
| 4.2 Teacher teams and leadership development | Rating: | Well Developed |

**Findings**
All teachers are engaged in inquiry-based professional collaborations aligned to school goals and opportunities are embedded to empower them to assume leadership roles that directly impact key decisions across the school.

**Impact**
The work of teacher teams has increased student achievement for all learners resulting in teachers having built leadership capacity and a voice in key decisions.

**Supporting Evidence**
- During the observation of a teacher team, teachers were guided by a teacher developed agenda. Teachers made reference to the school's instructional focus and used a looking at a student work protocol. Throughout the meeting, the teachers engaged in a five step process which resulted in teachers coming to a consensus as to the new strategy to be used school wide. This agreed upon strategy is shared with administration and staff, the result has been improved student achievement as evidenced via data reports.

- As an Early College school students attend Brooklyn College campus for classes. The administration recognizing that distributive leadership is vital has empowered a teacher to be assigned to lead the partnership with the college. For instance, the teacher leader has an office at the college and is named the liaison for decision-making as well as the lead instructional point in English language arts and student learning tied to the curriculum.

- During dialogue with administration, it was revealed that the school employs a “Teacher Learning Logic Model”; the model is built on the concept of teachers collaboratively conducting instructional need assessments via surveys, lesson studies, and inter-visitations to surface instructional trends. For instance, this collaborative process revealed that the student to student discussion was an area of focus. What resulted was the implementation of the Socratic Seminar, this was observed across classrooms.

- During dialogue with administration and teachers, it was revealed that the Professional Learning Team (PLT) consisting of teacher representatives from grades 6-12 engage in professional collaborations on how to improve teacher practice school-wide. Teacher Leaders determine the agendas during these meetings and provide input to administration. For instance, teachers determined that incorporating the strategy of coding text would support student learning and support them in citing evidence from text when writing. The administration agreed with the determination and supports it being reflected as topic during the professional learning cycles.