Quality Review Report

2016-2017

I.S. X318 Math, Science & Technology Through Arts
Junior High-Intermediate-Middle 12X318
1919 Prospect Ave.
Bronx
NY 10457

Principal: Uchechukwu Njoku

Dates of Review:
February 16, 2017 - February 17, 2017

Lead Reviewer: Rosemary Stuart
The Quality Review Report

The Quality Review is a two-day school visit by an experienced educator. During the review, the reviewer visits classrooms, talks with parents, students, teachers, and school leaders and uses a rubric to evaluate how well the school is organized to support student achievement.

The Quality Review Report provides a rating for all ten indicators of the Quality Review Rubric in three categories: Instructional Core, School Culture, and Systems for Improvement. One indicator is identified as the Area of Celebration to highlight an area in which the school does well to support student learning and achievement. One indicator is identified as the Area of Focus to highlight an area the school should work on to support student learning and achievement. The remaining indicators are identified as Additional Finding. This report presents written findings, impact, and site-specific supporting evidence for six indicators.

Information about the School


School Quality Ratings

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<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 Finding</td>
<td>Proficient</td>
</tr>
<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>Area of Focus</td>
<td>Proficient</td>
</tr>
<tr>
<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 Finding</td>
<td>Proficient</td>
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</tbody>
</table>
### School Culture

*To what extent does the school...*

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults</td>
<td>Additional Finding</td>
</tr>
<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>Additional Finding</td>
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</tbody>
</table>

### Systems for Improvement

*To what extent does the school...*

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td>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</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>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</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>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</td>
<td>Area of Celebration</td>
</tr>
<tr>
<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 Finding</td>
</tr>
<tr>
<td>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</td>
<td>Additional Finding</td>
</tr>
</tbody>
</table>
Area of Celebration

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>4.1 Teacher Support and Supervision</th>
<th>Rating:</th>
<th>Proficient</th>
</tr>
</thead>
</table>

Findings
School leaders support new and veteran teachers with normed feedback from cycles of observations and analysis of student performance. Feedback identifies areas for growth and celebrates accomplishments of teachers.

Impact
Expectations for practice are reinforced and teachers engage in reflective practices with colleagues and mentors to improve their instructional skills.

Supporting Evidence

- The principal tracks the observation process on charts in his office, which also identify the professional development and instructional goals related to the Danielson Framework for Teaching. The instructional cabinet meets frequently to review the results of observations and identify trends in teacher needs. This information is used to create professional development sessions as well as to create professional learning plans for individual teachers. School leaders norm the ratings they attach to low inference evidence from observations of teaching practices to ensure coherence in their feedback to teachers.

- Feedback to teachers reflects the values and goals established by the school leaders and outlines the suggestions to improve pedagogical practices and the support that will be provided. One observation reminded a teacher that "Designing coherent instruction is the foundation" upon which all other practices are built. It went on to suggest that the teacher design instruction to meet the differentiated needs of students, such as grouping, and directed the teacher to meet with an instructional coach to build these skills. Many observation reports also referenced tools that teachers could use to help them improve their instruction. For example, one school leader directed a teacher to read an article and be prepared to discuss three takeaways in an upcoming follow up conversation.

- In addition to identifying the ways teachers could improve their practices, observation reports also celebrated the strengths of teachers. Feedback to one teacher highlighted that students were required to choose activities that challenged them to higher and higher levels of rigor and that students were assessing each other's work. Teachers indicated that they feel supported by their supervisors and the availability of additional resources such as the new teacher center and professional learning opportunities offered by the community school district.

- School leaders and instructional coaches use an individualized collaborative assessment log to plan and track support to teachers. The log prompts the teacher and the mentor to examine student work to identify what is working, the current focus or concern, and suggests topics that might be the focus of upcoming work, such as developing instructional groups, using technology, or "knowing students across multiple dimensions." The log outlines the next steps for the teacher and the mentor. In one collaborative log, the teacher's next steps included selecting and modeling a weekly skill for students to practice in independent reading time, and then requiring the students to reflect on that skill in their journals.
Area of Focus

| Quality Indicator: | 1.2 Pedagogy | Rating: | Proficient |

Findings

Teaching practices consistently provide multiple entry points and rigorous tasks for students at differing ability levels. However, they do not always provide extensions for higher performing students.

Impact

While there are high levels of thinking and participation in challenging tasks that engage all learners, including English Language Learners (ELLs) and students with disabilities, not all students demonstrate ownership of their learning.

Supporting Evidence

- Activities in many, but not all, lessons allow students opportunities to explore rigorous content using differentiated strategies. Groups of students in one class presented posters of Punnett Squares, illustrating the possible phenotypes and genotypes for a child given the genetic profile of the mother and father. The students, grouped by reading level, worked on real-world applications such as the incidence of color-blindness. Students in an Integrated Co-Teaching (ICT) class completed models of skyscrapers and bridges and displayed the research they had conducted on these megastructures. In a few other classrooms, however, the tasks were not as creative and did not provide opportunities for extensions for higher performing students. One student stated that when he finished his work, he would re-read or complete another assignment, thus missing the opportunity to deepen and extend the learning on the topic of the lesson.

- During lessons, teachers display the tasks and charts of vocabulary to provide access to the lesson and often use interactive white boards to display timers to pace the lesson. In one lesson, the teacher posted the definitions of ethos, pathos, and logos so that students could use these words accurately in their discussions and their writing. Students engaged in a rigorous discussion to recognize the use of these rhetorical devices in the poems of Tupac Shakur and Eminem. A student said, “I would like to read more pathos because it helps me to understand the feelings of the author or the character.” Students used accountable talk stems as they prepared for a debate about women in math and science professions. They used focus words such as variable and context to outline their thinking about science professors having different expectations for male and female students.

- In one class, students were allowed to choose which differentiated note-taking template would support them as they outlined their thinking about George Washington’s reaction to Lord Dunmore’s Proclamation, which offered freedom for slaves who volunteered to fight for the British king. One student used an open-ended graphic organizer to note that Black soldiers were paid less than their White counterparts.

- Tasks that incorporate the instructional shifts require students to make claims and justify them with evidence from the text. One assignment asked students to choose a poem they had studied and argue that it should receive a best poem award. One student wrote a series of entries in a journal and letters to a brother from the perspective of a child who was fleeing Europe during the Holocaust. The letters included references to historical events, such as living in ghettos, food shortages, and travel to the United States and concluded with a letter from 1956 celebrating their reunion. On a math assignment, a student explained in detail the steps he took to solve an equation in one variable. Although the written explanation was not in sentences and paragraphs, the teacher commented to the student that he used “great academic language and sequential language.”
Additional Finding

<table>
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<tr>
<th>Quality Indicator:</th>
<th>1.1 Curriculum</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings

The instructional cabinet ensures that curricula are aligned to the Common Core Learning Standards and integrate the instructional shifts. Tasks consistently emphasize higher-order thinking and cognitive engagement.

Impact

Curricula promote readiness for the next grade and for college and the materials are accessible to a variety of learners.

Supporting Evidence

- The instructional cabinet at the School of Math, Science, and Technology through the Arts (MSTA) is composed of school leaders, English Language Arts (ELA) and math coaches, the English as a New Language coordinator, and a special education teacher. This committee reviews unit and lesson plans to ensure that they are aligned to the Common Core. A lesson plan in social studies addressed the question of how language developed as civilizations evolved and the task that involved the virtual exploration of the Lascaux Cave was aligned to the standards regarding analysis of primary and secondary sources. The practice of reviewing curricula across departments and grades increases the coherence of planned instruction.

- Teachers and school leaders use a five-step protocol to help them deepen and extend their understanding of the standards. The protocol requires teachers to identify key terminology, generate questions to clarify the intended learning outcomes, create tasks that demonstrate proficiency, and determine how to make the standards meaningful to students. As a result of this purposeful alignment of curricular resources to the standards, there has been improvement in proficiency levels on the State exams. For example, the percentage of eighth grade students passing the State ELA exam rose from 40 percent in 2015 to 62 percent in 2016. The percentage of grade six students with disabilities passing the ELA exam rose 23 percentage points and the passing rate on the math exam in grade seven more than doubled from 16 percent to 40 percent during the same period.

- One lesson plan outlined how students would analyze images of posters from World War I and answer questions about the point of view represented by the images. The task required students to identify the purpose of the symbols and colors used by the artists. A discussion question for one group asked students if the poster would be effective in mobilizing Americans for war today. Another lesson plan specifically identified and grouped the students by their ability levels and matched each group with a differentiated worksheet. A lab investigation in a science class was provided in both English and Spanish.
Additional Finding

<table>
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<tr>
<th>Quality Indicator:</th>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings
Teachers create rubrics and assessments that are aligned to the curricula. Teachers incorporate ongoing checks for understanding as well as student-to-student and self-reflection into their assessment practices.

Impact
Teachers provide meaningful feedback to students on their performance and use information from assessments to revise curricula and adjust their instruction.

Supporting Evidence
- Teachers circulate around the classroom to gather information about student performance, such as completion and quality of the warm-up task at the beginning of a lesson. One teacher was observed using the MSTA Daily Tracking Sheet to monitor student participation in a whole class discussion. Another teacher used this tool to note that a certain student “made an inference based on text.” In a music class, the teacher noted how students were engaged in playing guitar. Many teachers use exit tickets to assess how well students have mastered the content of the lesson. For example, after a lesson in which students explored propaganda posters from World War I, they were asked to respond to the prompt, “What was the purpose of propaganda in WWI?” Teachers analyze the results of these assessment practices to determine adjustments to their future lessons, including grouping students and refining graphic organizers.

- One classwork rubric includes descriptions of performance levels related to computation and accuracy, organization and notation, and written explanation, with a place for the teacher to recommend next steps, such as “Make sure to write answers in complete sentences.” On a task that required students to write a five-paragraph essay comparing and contrasting the stance that candidates have taken on healthcare, higher education costs, or social security, the teacher used the rubric to inform the student that he could improve by ensuring that the paragraphs have concluding sentences. One grade seven student said that her teacher was using criteria from eighth-grade rubrics to help them prepare for the next grade.

- School leaders and staff are in the process of refining the grading policy to recognize that homework is not always the most reliable indicator of how well students are mastering content. There is also a strong belief that preparing students for college is the goal, and that means preparing them to study and complete work independently outside of the classroom.

- Students provide feedback to each other using protocols and graphic organizers. On a narrative poetry essay, one student suggested that the author should “add more powerful words” and “check spelling.” On another research assignment, a student reflected on his own work and determined that in the future, he would use a wider variety of sources than just looking up information on Google.
Additional Finding

**Quality Indicator:**
3.4 High Expectations

**Rating:**
Proficient

Findings

School leaders outline expectations for professionalism and student outcomes in handbooks, observations, and weekly newsletters to the staff. Similarly, the family handbook mirrors the expectations for college and career readiness for parents and students.

Impact

Teachers have many opportunities for professional learning and support from supervisors, mentors, and colleagues. Families understand the progress their children make toward meeting expectations.

Supporting Evidence

- Families receive the MSTA student and parent handbook at the beginning of the year. In the handbook, the principal urges parents to become involved and states that students must be prepared “to navigate a future dominated by constant innovations in science and technology.” The handbook also includes guidance on parent leadership roles at the school, district, and city levels and reminds them that when parents are involved in their school, students have “better academic performance, and are more likely to complete secondary school.” At an honor roll assembly, the principal welcomed parents and family members to the celebration and thanked them for attending. He told students how important it is for them to have support at home in order for them to do well.

- Many families participated in the family night activities that included the opportunity to follow their children’s program and learn about the course expectations from each teacher. Parents utilize PupilPath to monitor the progress their children are making. At the beginning of the year, parents received instruction on accessing their accounts in order to track assignments and project deadlines, and to monitor homework and test scores, promotion eligibility, and attendance. Teachers distributed detailed syllabi outlining the scope and sequence and the grading policy for their courses. A grade six syllabus for students and parents addresses the transition to middle school and outlines the expectation that students “begin to take responsibility for their own work and are prepared every day.”

- School leaders outline expectations for professionalism and participation in reinforcing the culture of the school. The expectations include norms such as making the learning visible by posting daily lesson agendas, planning for smooth transitions between instructional activities, and checking regularly for student understanding and focus. The principal writes a weekly newsletter to the staff that reinforces his expectations and includes a personal message urging them to meet these expectations. A recent edition of this newsletter announced the teachers who would be providing academic intervention services to provide students with support to reach proficiency in math and ELA. The same edition included a reminder that staff should hold themselves to the same standards of dress that are expected for students. The school policy manual also reinforces these expectations by clearly outlining the deadlines for unit and lesson plans to be completed, when performance tasks should be administered, and the cycle of assessment data analysis.
Additional Finding

### Quality Indicator:
#### 4.2 Teacher Teams and Leadership Development

**Rating:** Proficient

### Findings

Teachers engage in cycles of collaborative inquiry on a regular basis during which they analyze data on student performance with colleagues in their content area or their grade level.

### Impact

Teachers improve their instructional capacity as well as the performance of their students.

### Supporting Evidence

- Teachers meet regularly in content and grade-level teams to discuss planning and modifying curricula. At a social studies team meeting, teachers discussed how to modify the curricular materials they are using to infuse texts for struggling readers, students with disabilities, and ELLs. Suggestions included finding texts with visual aids and glossaries in English and the native languages of their ELL students. Other modifications included creating more graphic organizers and using sentence starters to scaffold writing.

- Teachers conduct intervisitations with each other as part of their collaborative community of practice with the purpose of creating “a shared vision and purpose for our work leading to more effective practice and higher levels of student learning.” During these intervisitations, teachers take low-inference notes and record their own wonderings. They also reflect on the strengths and challenges they observed. One teacher wrote that the teacher could improve the lesson by previewing “focus questions to help students know what to look for in the film.” One teacher explained that conducting intervisitations has strengthened his practice in several ways. For example, he noted the impact of seeing instruction from a different perspective has made him realize that “I give feedback that I realize I can use for myself.” Another teacher tried a strategy of incorporating more visuals into his instruction for ELLs. He noted that, as a result, one of his students improved 76 Lexile points as measured by iReady.

- Teachers analyze data from iReady assessments as well as unit tests. One team was observed using a protocol to analyze student work on a task involving random sampling. The work samples were from a class that included students with disabilities and ELLs. After taking notes on the work using a template for analysis of student work, the teachers discussed individual student performance and identified trends across the class. The teachers determined that students were struggling with the vocabulary, which included words such as random, biased, and prediction. They also determined that many students were struggling with writing complete sentences. The teachers agreed that they would provide more academic vocabulary support by using online translation and modeling the use of these words. One teacher explained that she has been simplifying the language she uses to ensure that students understand what she is teaching, but now she realized that the students need more exposure to complex language.