Quality Review Report

2015-2016

M.S. 442 Carroll Gardens School for Innovation
Middle School K442
317 Hoyt Street
Brooklyn
NY 11231

Principal: Noreen Mills
Date of review: December 4, 2015
Lead Reviewer: Debra Freeman
The School Context

M.S. 442 Carroll Gardens School for Innovation is a middle school with 217 students from grade 6 through grade 8. In 2015-2016, the school population comprises 6% Asian, 26% Black, 46% Hispanic, and 20% White students. The student body includes 7% English Language Learners and 35% students with disabilities. Boys account for 69% of the students enrolled and girls account for 31%. The average attendance rate for the school year 2014-2015 was 91.9%.

School Quality Criteria

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>To what extent does the school…</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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<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>Celebration</td>
<td>Well Developed</td>
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<thead>
<tr>
<th>School Culture</th>
<th>To what extent does the school…</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>Additional Findings</td>
<td>Well Developed</td>
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<tr>
<th>Systems for Improvement</th>
<th>To what extent does the school…</th>
<th>Area of:</th>
<th>Rating:</th>
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<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 Findings</td>
<td>Well Developed</td>
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Area of Celebration

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<tr>
<th>Quality Indicator:</th>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Well Developed</th>
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Findings
The school’s assessment and grading system across all grades and content areas is aligned to the curricula and offers a personalized and thorough portrait of student mastery. Teachers track student performance and progress and use it as the basis for curricula adjustments.

Impact
Assessment results provide teachers with meaningful information on student performance enabling them to effect curricula adjustments, to give students multiple opportunities to demonstrate mastery, and give students feedback that helps them be aware of their learning needs and next steps.

Supporting Evidence
- All teachers input assessment results, progress toward mastery of standards, and personalized anecdotal information regarding students’ strengths into an on-line grading platform called “The Hive.” This provides teachers with individualized portraits of student's academic performance in all subjects and informs meaningful feedback provided to all students. Included as well are areas that students need to work on such as perseverance in problem solving or using website resources to self-assess. One teacher noted that the student has a “strong number sense which allows her to engage in challenging problems”. This individualized approach highlights students' talents while also providing meaningful data from which teachers make curricula adjustments. The principal shares that this also serves as a communication tool for parents who follow up on appropriate next steps. When parents were asked how the school communicates their children’s progress, the parents shouted in unison, “The Hive.”

- The school implements a cohesive mastery-based assessment model wherein the needs of all students, regardless of ability, grade, language acquisition, or learning style, are met consistently. The Common Core Standards are revised into student-friendly I can statements such as, "I can use ratio language to describe the relationship between two quantities." Students readily articulate whether they are meeting, approaching, or exceeding standards in every subject. For example, in an eighth grade science class, one student shared that if he completes the chart and all his written responses are correct, “I will have reached mastery in distinguishing between genetic mutations and evolution." This academically rigorous approach to mastery-based assessment, also recognizes that no child, including English Language Learners, students with disabilities, and high performers, learn in the same way from one subject to the next. Therefore, as teachers and the principal shared, individualized instruction for all students is not based on a student’s disability, but on what skill-based learning outcome the student has mastered or needs to work on.

- The principal and teachers share that all curricula are living documents that are consistently adjusted based on formative and summative assessments. This data informs student groups for the six-to-eight week intensives class offered to support students in progressing toward mastery. Groups shift as students make progress. For example, one math student who was in the fortieth percentile on the fifth grade assessment was moved to a mid-high level group when he reached grade level.
Area of Focus

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

Findings
Across most classrooms teaching practices provide multiple opportunities for students to engage in challenging tasks and reflect student thinking.

Impact
Most students demonstrate higher-order thinking in work products, and show ownership of their learning. However, given the strong focus on independent learning, there were notably fewer opportunities for students to participate in high-level discussions impacting their constructing meaning together.

Supporting Evidence
- Teams share the same language around mastery-based learning, and focus on providing appropriate scaffolds to engage all students in higher-order thinking. Students are pushed to solve multi-step problems, to engage with and support each other, and to focus on mastering learning outcomes in all content areas. For example, in a seventh grade math classroom, the teacher created four stations, each focused on the learning outcome the student needed to master. The teacher also targeted a small group of students for a mini-lesson to reteach and assess understanding of using proportional relationships to solve multi-step ratio and percentage problems. In a science class, one group reviewed density concepts in a text in order to determine if four objects would float or sink, another gleaned information from an iPad presentation on matter and its properties, and a third, revised their research findings based on teacher feedback. Across classrooms students were provided with checklists, technology, or various graphic organizers to provide access to consistently rigorous tasks, and in one class, a computer station with a video was available for two students new to the country because “we don’t have enough language yet.”

- In all classrooms students worked independently completing high quality work products that reflected their thinking and ownership of their learning and progress. Students spoke with clarity about what they were learning and why, and what mastery would look like. For example, a student shared that if he completed the task responses correctly he would understand how to draw inferences from images. The principal shared that what drives learning and engagement at her school is making certain that instruction, scaffolds, and extensions, support students’ learning styles and independence.

- In a humanities class, students were grouped based on their research progress. Some were in the planning stages, reading and taking notes, while others were gathering more research based on conferring feedback, or beginning their first drafts. One student explained that the chart posted indicated that students marked in blue were researching, and students in black were moving into writing a first draft of their research papers. Resources, such as mentor texts, and an accompanying Information Writing Continuum, modeled paragraphs earning either a not yet, approaching, meeting, and/or exceeding standards.
## Additional Findings

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<th>Quality Indicator:</th>
<th>3.4 High Expectations</th>
<th>Rating:</th>
<th>Well Developed</th>
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**Findings**

The principal consistently communicates high expectations to her teachers and students, and provides multiple ways to support progress toward meeting expectations successfully.

**Impact**

As a result, teachers and students hold themselves accountable for the school leader’s rigorous academic expectations, and all students own their learning process. This amply prepares all students for their next educational setting.

**Supporting Evidence**

- For the past three years, the principal has partnered each teacher with one or more students to serve as a mentor. Student and mentor meet weekly to review progress toward mastery of learning outcomes across all content areas. This forms the basis for setting, assessing, and revising student-generated goals and nurtures student ownership of learning. Students use this meeting time to practice self-assessment. According to the principal, this personalized support encourages students to take charge of their progress. In communication documents, mentors consistently follow up with students on their goals and push them to set higher ones.

- The school reflects a set of high expectations that prepare students for their next educational level. As soon as you walk into the building a large bulletin board titled, “Attention 8th Grade-Class of 2016” features high school fair dates and several faculty members who are available to answer questions and support students and parents through the process. Earth Science and Algebra are offered, and parents shared that the intensive structure offers students extended time to excel in math and English, while also providing advanced study for students who have achieved mastery in an area.

- The English Language Learner reading specialist provides professional learning for teachers in curricula planning and instruction to emphasize purposeful adjustments for the English Language Learner. She also builds students’ capacity, confidence, and language acquisition, for greater participation in class. The Nest coach provides professional development for teachers in effective conferencing skills. The principal shared that her expectation is that these supports allow ongoing adjustments to practice to support all learners.
Quality Indicator: 4.2 Teacher teams and leadership development
Rating: Well Developed

Findings
Teacher teams systematically analyze student work and their instructional practices. Structures are in place for teachers to step into leadership roles.

Impact
As a result, students make progress toward mastery of learning objectives, and teachers have an integral role in key decisions that impact student learning.

Supporting Evidence
- The principal surveys her teachers for input into professional development work. With the school-wide focus on questioning and discussion, individual and pairs of teachers created inquiry studies to improve their practice, connected to this focus. For example, “If I provide students with examples of evaluative questions that I would use to check for understanding, then the sophistication of student mathematical reasoning critiques will increase as measured against a student reasoning critique rubric,” and “If we utilize time constraints and a writing component for turn and talks, the classroom discussion and participation will become more meaningful and diverse as measured by teacher-facing discussion trackers and volume of short stop-and-jot student responses.” Additionally, department leads provide professional learning experiences for colleagues and the school’s coach provides ongoing support on how to individualize learning for every student.

- Teachers hold themselves accountable for their students’ academic performance. This was in evidence during the sixth grade team meeting during which teachers took a deep dive into one student’s work products and performance across three subjects, math, English, and science. They identified strengths such as complete answers, descriptive language, and finding value in a table, and areas for targeted support, including following multiple-step problems in science, applying new math learning to a higher-level problem, and unpacking task questions in English. This laid the groundwork for teachers’ instructional next steps including more opportunity to reflect in class, deconstruct higher-level questions, and place the student’s work on a continuum for self-assessment. One of the teachers said she would begin the reflection process next period.

- Teacher leads, many new to the role and adult learning, said their roles aligned to their passions. For example, the Nest Coach turnkeys new strategies to “push the boundaries” for student groupings and students’ assigned roles in the groups. The science inquiry lead shared that the themes for teachers’ half-day inquiry was born from a survey that went out to parents, teachers, and students regarding the purpose of education and the role of teachers. The technology lead, who created the school’s current grading platform to provide more accessible and succinct information on student achievement, provides support to all teachers in effective and consistent use of the system. One teacher shared that having a voice in instructional decisions to support student achievement helps teachers “feel safe to innovate.”
Quality Indicator: 1.1 Curriculum  
Rating: Well Developed

Findings
All curricula are aligned to the Common Core Standards and strategically integrate the instructional shifts. Rigorous habits are emphasized in all curricula and tasks.

Impact
All curricula and tasks emphasize research and argument writing skills, preparing students for college and career. As a result, all students consistently demonstrate their thinking across content areas.

Supporting Evidence
- “We are a project-based learning school,” the principal stated. One example of a project currently being implemented is the Gowanus Canal Unit, which integrates science, humanities, and technology. The driving question for this unit is, "How can we educate and inform members of the community about the Gowanus Canal to help make informative decisions about the future of our neighborhood?" Students gather evidence from a variety of sources, organize research for relevancy and urgency, and distinguish what is essential for the Gowanus community to know about the effects of the Canal's water pollutants. The culminating product is an I-Book organized into chapters to serve as an informational expose. The written work is taken through all stages of the writing process, from planning, drafting, and revising, to publishing. Students are cognizant of audience and expected to also provide evidence to support the counterargument.

- Curricula projects and tasks cross over content areas to build coherence and ensure opportunities for in-depth thinking and learning. For example, the Give Me Shelter project embeds science, math, and technology, and is grounded in research, logistical planning, and a pressing real world scenario. Students are required to apply their knowledge and understanding of rates and proportions to produce a research-based proposal for designing a shelter for Hurricane Sandy victims using Google Sheets and Google Docs. Students develop a deep understanding of content in all three subjects and hone their skills as they arrive at their solution.

- In a science class, students were engaged in the first part of a project focused on how evolution changes a population over time. The task was purposefully refined to provide access for all students. Some students recorded responses to the evolution of Jordan sneakers, others of protozoa, and a third group read and annotated a chapter from Your Inner Fish. The task's learning outcome was the same, follow a multi-step procedure, design an experiment, observe, and classify the process of evolution in order to cite real world evidence to support the theory. In a humanities class, students were writing persuasive essays to defend whether we should celebrate Columbus Day or Indigenous People’s Day. Students had planning documents to determine a stance, and some students sorted a set of statements provided by the teacher for relevance to their position. The expectation was that all essays include a hook, claim, evidence, counterclaim, and persuasion.