



**Department of
Education**
Carmen Fariña, Chancellor

Office of School Quality
Division of Teaching and Learning

Quality Review Report

2015-2016

Life Sciences Secondary School

Middle-High School M655

**320 East 96th Street
Manhattan
NY 10128**

Principal: Kimberly Swanson

**Date of review: April 12, 2016
Lead Reviewer: Buffie Simmons**

The School Context

Life Sciences Secondary School is a middle-high school with 620 students from grade 6 through grade 12. In 2015-2016, the school population comprises 5% Asian, 31% Black, 60% Hispanic, and 2% White students. The student body includes 6% English Language Learners and 21% students with disabilities. Boys account for 52% of the students enrolled and girls account for 48%. The average attendance rate for the school year 2014-2015 was 90.1%.

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	Focus	Developing
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 <i>Framework for Teaching</i> , aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products	Additional Findings	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	Developing
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	Developing
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	Proficient

Area of Celebration

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

The majority of teachers are engaged in structured professional collaborations in teams that analyze assessment data and student work and promote the implementation of the Common Core Learning Standards.

Impact

Teachers have a voice in decisions that impact learning and the greater community, and their capacity is strengthened through teacher team collaboration.

Supporting Evidence

- All teachers of core content areas including English Language Arts, math, social studies, science and English as a Second Language participate in weekly 90-minute Professional Learning Teams (PLTs) with an emphasis on engaging in lesson studies, task analysis, analyzing student work, analyzing assessment data, and revising curriculum. Each department team has engaged in 6-week cycles of inquiry connected to the school's instructional focus. As a part of this work, each team has completed a needs assessment using qualitative and quantitative data to identify a problem of practice, a fishbone diagram to identify the root causes of their problem of practice, and a driver diagram to identify a change idea to improve student outcomes. Each department team engaged in two cycles of inquiry. As a result, data trackers are school-wide to monitor student mastery of standards. Teachers are providing each other feedback through these cycles of inquiry and strengthening their capacity. "I feel supported by my colleagues and improving my practice through the team process."
- Teacher leaders are utilizing Ellie Drago-Severson's *Ways of Knowing* theory to understand a team's function and identify strategies to increase effectiveness. For example, upon close evaluation of the Common Core English Regents examination, teachers found that students struggled in understanding words in context, using individual strategies to define them, and understanding the author's purpose and craft. As such, teachers share strategies and have strengthened their instructional capacity.
- Each team has designated leaders to support colleagues and the team process. Teachers have a voice in deciding on their inquiry topic and this has positively affected student learning. For example, the grade 8 math inquiry team stated that their focusing problem earlier this year was that their students did not score well on standardized tests. Teachers collaborated and created a goal of an increase of 1 full point on their standardized test for this year. They plan to accomplish their goal by incorporating daily 15 minute skill building activity in order to improve on standardized tests. The teachers' espoused theory of action is, "If teachers provide 15 minutes of remediation daily on selected linear function math skills, students will increase their scores on the exam." The team's rationale was based on data that indicated linear functions typically make up 25%-30% of the New York State math exam and many of the skills are prerequisite for expressions and equations that make up another 40%-45% of the state exam. As a result of their inquiry, students overall showed improvement on linear functions skills. Thirteen out of seventeen students who took the second exam increased their scores, including five students with a gain of 20% or more.

Area of Focus

Quality Indicator:	1.1 Curriculum	Rating:	Developing
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Findings

Curricula and academic tasks reflect the process of planning to provide students' access and alignment to the Common Core Learning Standards. However, curricula and tasks inconsistently emphasize rigorous habits and higher-order skills across grades and subjects.

Impact

Consistent access to and ownership of rigorous curricula that cognitively engage all students, including English Language Learners (ELLs) and students with disabilities, are uneven and hinder college and career readiness for all students.

Supporting Evidence

- A review of sample unit plans shows that the school is making progress in developing units aligned to the Common Core Learning Standards. However, the middle school, high school and department teams are at different stages in developing Common Core-aligned curricula and performance tasks. The principal stated, "that shared language does not equal shared understanding, our staff has engaged in the development of and calibration around a school-wide definition of rigor by reflecting on their own understandings of rigor within their content areas and exploring professional literature on rigor." The school has begun exploring research to redefine what it means to be "smart" as possessing and demonstrating a growth mindset, as articulated by Carol Dweck.
- In 2014-2015, no students tested proficient in middle school math and 26% of students reached the City University of New York (CUNY) college readiness benchmarks. The school is developing writing specific, purposeful learning targets that are aligned to the Common Core Learning Standards for each day's lesson and creating rigorous learning tasks that allow students to demonstrate mastery of the day's learning target. In addition, they are utilizing a lesson planning process guide to dive deeply into the creation of one lesson plan to help support instructional practices around creating more rigorous lesson plans consistently across the school community.
- Some departments are following a uniform method for curriculum development and unit plan revision. The middle school, under Middle School Quality Initiative, (MSQI), uses a multi-tier interdisciplinary approach that focuses on language acquisition and academic vocabulary. Academic vocabulary is incorporated in the newly formed but not completed middle school literacy, math, science and social studies curriculum. Additionally, the school is using backward planning to create Common Core Learning Standards-aligned unit plans that are organized around thought provoking essential questions and end with rigorous summative performance tasks.
- Across classrooms, evidence of writing is limited. During the classroom visits, students completed worksheets. During the interview, student work comprised of work sheets, work without tasks or directions, limited authentic writing and math computations without explanations. Student work and tasks displayed inconsistently emphasized Common Core Learning Standards and the instructional shifts. Overall, the quality of the curriculum remains uneven among departments.

Additional Findings

Quality Indicator:	1.2 Pedagogy	Rating:	Developing
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Findings

There is an uneven application of differentiation and instructional strategies to provide appropriately challenging and rigorous learning opportunities that promote high achievement.

Impact

The delivery of instruction inconsistently employs scaffolds, extensions and questioning techniques to provide entry points and discussions that are appropriately challenging for all learners.

Supporting Evidence

- Although the school has shared beliefs about differentiation and scaffolding the instruction to provide appropriate entry points for students, the implementation of agreed-upon strategies for extending higher-order thinking was not present in a number of classes visited. For instance, in a Global History class, the students received a packet of documents about Mansa Musa. Though the activity called for students to review various sources and answer questions, students were unable to complete the task without assistance from the teachers. Though students were sitting in a group formation, some tried to participate or complete the activity work independently and others just did not work on the task.
- Across classrooms, teaching strategies, questioning and discussion, inconsistently provide multiple entry points into the curricula. In an ICT algebra class, one teacher posed rapid fire questions and students, including ELLs, and students responded in choral to teacher. Students sat in groups but worked independently. Both teachers roved and responded to the same students at the same table. The teacher facilitated and posed *Depth of Knowledge* questions and answered their own questions. "What is the length of the diagram? What is the width?" Others students were finished with the activity and were not provided with extensions to support their learning.
- In the majority of the classes, teachers taught whole group instruction and students either listened or responded to the teacher. In a grade 7 science class, students use a dichotomous key to differentiate between movies, shows, game and books. Students were provided with several writing samples to assist in the activity. This was the norm for classes. Consequently, classrooms across the grades and subjects inconsistently use individualized teaching scaffolds or extensions for learners. Students are given limited opportunities to experience differentiated applications for access to learning.

Quality Indicator:	2.2 Assessment	Rating:	Developing
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Findings

The school has common assessments and grading policies that are loosely aligned. Across classrooms, teachers' assessment practices do not reflect the use of ongoing checks for understanding and student-self assessment.

Impact

School leaders and faculty have no clear portrait of student progress toward goals within and across grades and subjects. Consequently, the lack of checks for understanding does not allow for effective adjustments to lessons, which leads to student confusion.

Supporting Evidence

- Common assessments are given throughout the year in order to monitor students' progress towards grade level proficiency. These assessments include ELA (mid-unit and end-unit assessments, 3 Degrees of Reading Power assessments, and 3 Common Core Learning Standards-aligned interim assessments), math (mid-unit and end-unit assessments, and 3 Common Core Learning Standards aligned interim assessments), and social studies/science Measures of Student Learning and Common Core Learning Standards-aligned unit assessments. The school grading policies are inconsistent and the school is currently developing a uniform grading policy that would assign 40% of the grade to summative assessments (tests, large projects, essays, lab reports, presentations, portfolios), 30% to formative assessments (quizzes, short projects, re-writes, homework and presentations), and 30% to classroom environment (class work, class activities, class participation and collaboration). Moreover, students during the interview did not know the grading policies for their classes or requirements needed to be successful in the class.
- Instructional assessment practices are inconsistent and school leaders addressed this on teachers' observations. Across classrooms, checks for student understanding were not observed steadily across classes and subjects. In a few classes, the teacher conferred with students at tables and provided feedback to the whole group for clarification, however in most classes teachers circulate. Ongoing checks for understanding throughout the lessons are inconsistent across classrooms. During classroom observations, some teachers included exit slips, questioning, and walking around to assess student understanding; however, some teachers failed to check for student understanding or ask a general question about the main ideas of the lesson or activity. For example in a math class, the teacher asked students, "How many know how to do this?" No one responded and the teacher continued the task without acknowledging that students did not weigh in. There are uneven practices in terms of assessing understanding during and after the instructional task.
- Across classrooms, varying use of teachers' feedback to students hinders their next steps. In a math classroom, the teacher wrote meaningful comments to ensure correction. "It is good that you noticed a pattern. Is this pattern a negative or positive correlation? I like how you showed all your calculations and labeled them. Next step: What does this actually mean for Mr. Premo? Which vase should he buy?" However, this practice was not consistent where the presentation of student work was either devoid of rubrics or meaningful feedback including next steps. During the interview, students shared their work. Student work comprised of ungraded work, fractions denoting how many questions the students answered correctly (such as "30/100" or "1/4"), lack of rubrics, lack of task specificity, or had only a check mark or short phrases such as "excellent work" or "study more to improve".

Quality Indicator:	3.4 High Expectations	Rating:	Developing
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Findings

The school communicates high expectations to staff, students, and parents, and is developing a coherent system to engender accountability for continuous student progress.

Impact

The school is creating structures that support the school's high expectations amongst staff, students and their families to provide a path towards elevated student achievement and college and career readiness.

Supporting Evidence

- School leaders share high expectations through staff correspondence and observational reports. Professional articles are shared with staff and a clear list of expectations is provided to teachers including weekly staff bulletins. In addition, school leaders have created professional development and intervisitation opportunities. Learning round and team meeting calendars were also developed in order to map weekly tasks for teams during professional learning time. The professional learning plan includes topics such as “Laying the foundation for department team meetings and identifying a problem of practice,” “Shared language does not equal shared understanding: Defining rigor at LSSS,” “Lesson-Planning Process guide,” and “Lesson Study Debrief Protocol.” The school leaders are measuring the impact of these practices and thus far see positive results.
- School leaders and staff members are establishing strong systems for communicating with families to deepen their understanding of grade-level requirements, CCLS standards, and college and career readiness. These systems include grade 6-8 orientation, September curriculum night, student led conferences, academic parent teacher teams, progress reports, online grade books, and website development and maintenance.
- Students shared during the interview that the principal communicates high expectations to them as well. In fact, recently students attended a college summit for young men. The student stated, “Because of what she has accomplished in a few months, students are being exposed to higher expectations and college fairs.
- School leaders and staff are developing systems to provide feedback to families. Parents shared that feedback varies. Particularly, one parent stated, “More teachers need to provide feedback so I can know about my children’s progress.” The school plans to strategically focus on supporting their families by enlisting the parent coordinator and collaboratively developing a comprehensive plan for next year.