Quality Review Report

2016-2017

Gregorio Luperon High School for Science and Mathematics

High school 06M552

501 West 165th St.
Manhattan
NY 10032

Principal: Yecenia Delarosa

Dates of Review:
May 18, 2017 - May 19, 2017

Lead Reviewer: Lenneen Gibson
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>To what extent does the school...</td>
<td></td>
<td></td>
</tr>
<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>Additional Finding</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>Area of Focus</td>
<td>Proficient</td>
</tr>
</tbody>
</table>
### School Culture

**School Quality Ratings continued**

<table>
<thead>
<tr>
<th>To what extent does the school...</th>
<th>Area</th>
<th>Rating</th>
</tr>
</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>
<td>Proficient</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>Area of Celebration</td>
<td>Well Developed</td>
</tr>
</tbody>
</table>

### Systems for Improvement

<table>
<thead>
<tr>
<th>To what extent does the school...</th>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<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>
<td>Well Developed</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>
<td>Proficient</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>Additional Finding</td>
<td>Proficient</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>
<td>Proficient</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>
<td>Proficient</td>
</tr>
</tbody>
</table>
Area of Celebration

| Quality Indicator: | 3.4 High Expectations | Rating: | Well Developed |

Findings

School leaders and staff members effectively communicate expectations connected to college and career readiness to families. The school community establishes a culture for learning that systematically communicates high expectations through post-secondary succession plans.

Impact

The successful school and family partnership supports student progress connected to college and career readiness. One-on-one college advisement and support from an alumni college coach supports students in preparation for college and career while fostering student ownership of their educational experiences.

Supporting Evidence

- Parents are apprised of their children’s academic progress through report cards, quarterly progress reports, weekly parent engagement meetings, meet the teacher night, parent teacher conferences, online grading portals, Remind, an online communication portal, phone calls to the homes, written communications, emails, and Agile Mind. Parents serve as volunteers at the school, and have opportunities to attend workshops learning about PupilPath, child brain development, and reading student transcripts. Parents host orientations and workshops on navigating the college application and graduation process. In addition, parents are offered weekly classes in English Language Arts and technology. During the parent meeting, parents stated that the college process begins in the ninth grade with conferences and presentations by experts addressing the college admission process. Parents at each grade level have the opportunity to attend an orientation on the college process and family college night events.

- The school community establishes a culture for learning that provides all students with feedback including clear next steps to prepare them for the next level. Students have the opportunity to enroll in college level classes, including Advanced Placement and College Now. Town hall meetings are geared to academic and professional skill development in preparation for post-secondary success. Students attend workshops on college exam entrance preparation, resume writing, and personal essay writing. Extensive targeted tutoring for the lowest third is offered to support mastery of course content. Students meet one-on-one with a college advisor and an alumni college coach to create post-secondary success plans that entails college trips, the financial aid process, and internship opportunities as an advent to the College Access for All initiative. As a result of these practices, based on the 2015-16 School Quality Snapshot data, the four-year graduation rate is seventy-two percent. Seventy-four percent of the students successfully completed a college or career preparatory course or exam.

- The school has a robust robotics program that is a teacher facilitated yet student lead course about robotics. Given the opportunity to lead a class deepens the ownership of student learning and underscores the importance of the experience. Student’s work with technology fosters the school’s instructional focus of “critical thinking through a digital community to build 21st century skills. Students utilize team-building understandings maintaining an engineering notebook, computer programming skills and craftsmanship skills to build a robot to perform tasks in the First Robotics competition. Based on the 2015-16 data, fifty-six percent of the seniors enrolled in college.
Area of Focus

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Proficient</th>
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</table>

Findings
Teachers use consistent yet varied methods to check for understanding and provide opportunities for student self-assessment. Teachers use rubrics aligned to the school's curricula.

Impact
Although teachers consistently check for understanding they do not as yet conduct on-the-spot adjustments to the lesson or make students aware of their next learning steps across the vast majority of classes. Feedback is actionable and meaningful, however not all students are completely clear on what next steps to take.

Supporting Evidence

- Checks for understanding and student self-assessment are incorporated into lessons. In a science class, a teacher performed a demonstration activity to show the concept of the refractive index. The teacher checked for understanding by asking the students probing questions while performing the activity. Misconceptions were revealed and the teacher adjusted the lesson by performing another activity to demonstrate the refractive index. Students used a rubric specific for the concept of refraction for the activity. Students in social studies were studying the Great Depression. The teacher checked for understanding by circulating from group to group and listening to their conversations. Students did assess one another using a group activity rubric. In a science class, the teacher conducted a demonstration on refractive index and checked for understanding through a line of specific questioning. Based on the students' answers, the teacher adjusted the lesson by conducting another demonstration to deconstruct the concept of refractive index. However, mid-lesson adjustments were not observed across the vast majority of classrooms.

- In a mathematics class, checks for understanding were conducted using a color card system. A red card symbolized help was needed; a green card meant you understood the content. The teacher circulated and reminded the students to think about what they should be doing. A student mentioned that they should be using their checklist. As students completed a question pertaining to the circle review, the checklist was used to demonstrate if they understood the question, or required more support. In a science class, students were planning an experiment to test the dissolve rate of Alka-Seltzer by manipulating factors such as the temperature, concentration, or surface area. The teacher conferenced with the student groups and posed questions. However, attempts to adjust the lesson were not observed. Students were given access to a presentation rubric for this activity. In an ELA class, students were reviewing the requirements of the text analysis question on the ELA Regents. The teacher checked for understanding by conferencing with the student groups and adjusted the lesson to do a quick teach about how answers are assessed and resolving the outcome when group members have differing scores for a paper. Mid-lesson adjustments such as this were not regularly in evidence across the vast majority of classes.

- Teachers use assessments aligned to the school's curricula to provide actionable feedback to students. Samples of student work showed assignments were assessed using a rubric and included feedback relating to the student's reflection of their work as deep, thoughtful, and honest and whether they included character and theme in their reflection. Another sample of student work commended the student for including specific details in their essay and recommended that the student write their verbs in the past tense. However, feedback does not provide clear next steps for the attainment of mastery.
Additional Finding

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

School curricula are aligned to the Common Core Learning Standards and integrate the instructional shifts. Units, lessons, and academic tasks are planned and refined using student work and data.

Impact

Purposeful decisions regarding curricula result in coherence that promotes college and career readiness for all students. All students have access to the curricula and are cognitively engaged.

Supporting Evidence

- Curricula and academic tasks are planned and refined using New York State English as a Second Language Achievement Test (NYSELAT) data to strategically group English Language Learner (ELL) students. A mathematics lesson plan showed diverse learners received translated texts, and were grouped by ability levels. Another mathematics plan indicated modifications for ELL students by incorporating targeted practice problems using formulas to find the circumference of a circle to a specified decimal point or in terms of pi. A social studies lesson included modifications such as tiered questions, graphic organizers, and translated primary source documents. An ELA lesson plan included a modification for a task. In a science plan students were grouped according to their language proficiency levels and provided visuals, and online supports at a modified level for lower level students.

- A mathematics unit plan was modified based on student work analyzed the previous school year. The revision led to a change in the sequence of concepts taught compared to the suggested sequence stated in the Common Core guidelines. A mathematics lesson shows students grouped by classwork data such as results on exit tickets and do now quizzes. Additionally, the questions in the lesson were differentiated for the different proficiency levels of ELL students. A global history unit plan was revised to include additional key learning activities that were aligned to a sequence of topics.

- Across grades and subjects the instructional shifts focused on citing textual evidence and argumentation. A mathematics plan required students to give an informal argument for the circumference of a circle, area of a circle, and volume of a cylinder by applying the respective formula. In an ELA class, students were required to analyze a text-based response and assess the work using a task specific rubric. A social studies plan required students to cite evidence from primary and secondary sources on the effect of the Industrial Revolution in Great Britain.
**Additional Finding**

<table>
<thead>
<tr>
<th>Quality Indicator</th>
<th>1.2 Pedagogy</th>
<th>Rating:</th>
<th>Proficient</th>
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**Findings**

Across classrooms, student discussions and their work products are aligned to the curricula and provide multiple entry points into the curricula for all students. Student work products and discussions reflect high levels of student thinking and participation.

**Impact**

Through the multiple entry points all students have access and are engaged in appropriately challenging tasks. Critical and rigorous thinking result in improved work products.

**Supporting Evidence**

- Teaching strategies provide multiple entry points by encompassing scaffolds and conversing in the students’ native language, so that all learners are engaged in challenging tasks, and demonstrate higher-order thinking skills in their work products. In a social studies class with diverse learners, the objective of the lesson required students to investigate the problems that Americans faced during the Great Depression and engage in solutions. Students accessed Google classroom and used a graphic organizer to solve problems occurring in the Great Depression and factors that affected the American people during this time period. Students had the opportunity to respond in their native language. In an ELA class, students analyzed quotes from *The Great Gatsby* and addressed the following questions: “How would you relate *The Great Gatsby* to the real world?” “How are the real world and Gatsby alike? How are they different?” A scaffold was used as the students sought quotes from the text and cited textual evidence to substantiate the quote. In a science class, the learning objective stated, “Under what conditions can light bounce back from a refracting surface?” The teacher performed a demonstration of the concept of light refraction. During the demonstration students completed a scaffold to deconstruct the light refraction demonstration by asking a series of questions during the demonstration.

- In a mathematics class with diverse learners, students were working on a jigsaw/station activity reviewing concepts related to circles. Students worked on different problems that posed a challenge, were given an allotted time to solve the problem, and became an “expert” in their practice session. Students used a circle review scaffold to deconstruct their circle problem. Students were observed teaching one another how to solve circle problems and they moved around the room to support their peers. In an ELA class with diverse learners and differentiated tasks, students were engaged in a Regents preparation session to deepen their understanding of the text analysis question on the Regents exam. Students reviewed sample anchor papers and noted how the papers were assessed using a rubric and added a “glow” and “grow”. Students made comments such as ensuring their paragraphs have a well-developed central idea with relevant and sufficient evidence. Those students who passed the January ELA Regents exam worked on a project entitled, “The American Dream through the Decades.” Students were tasked with creating a virtual museum exhibit of a specific decade and had to answer the prompt, “How has the quest for the American Dream influenced our society?”

- In an ELA, students used the present tense and adverbs of frequency to describe people’s emotions and actions. The students were given pictures of people displaying a specific emotion. Students wrote complete sentences for each picture and engaged in a turn-and-talk within their groups to discuss the connections between emotions and actions. A student shared they like to eat ice cream when they are sad. In a social studies class with diverse learners, students were analyzing primary and secondary sources to explain the effects of industrialization and urbanization on Great Britain. Student groups looked at images before and after the revolution, made inferences, and constructed higher-order thinking questions using the Google classroom.
Additional Finding

| Quality Indicator: | 4.1 Teacher Support and Supervision | Rating: | Proficient |

Findings

Feedback to teachers accurately captures strengths, challenges, and next steps using the Danielson Framework for Teaching. School leaders utilize teacher observation data to plan professional development for teachers.

Impact

Observation data is used to design and facilitate professional development. Feedback to teachers delineates clear expectations for teacher practice and supports teacher development.

Supporting Evidence

- A review of an observation report revealed a teacher being commended for having an engaging lesson and using a scaffold for the writing assignment so that it was accessible to student’s language needs. The area of focus for the teacher was assessment. It was recommended that the teacher reflect on whether the students met the learning objective through proper assessment. Subsequent observations showed that the teacher improved in this domain. The feedback and the teacher’s performance were in alignment with effective practices that support student-centered instruction. Another report commended a teacher for their questioning and discussion techniques. The area of focus for this observation and a subsequent observation was engagement. The teacher implemented a Socratic seminar to maximize student engagement but needed to refine the process so that students could glean information from the process and reflect on the seminar itself.

- A review of additional observation reports revealed recommendations to a teacher that focused on assessment providing opportunities for student input into the assessment process. Professional reading resources were suggested and subsequent reports indicated that the improvement in the area of assessment was now an area of commendation. Another report commended a teacher for the student engagement that was observed in the lesson. The area of focus was questioning and discussion. It was recommended that questions be posed that would lead to deeper exploration of the task and that students arrive at the conclusion on their own. The feedback provided clear expectations and supported teachers in their development. Teachers shared they feel supported by both their principal and assistant principals.

- Data from Advance was used to plan and establish goals for professional development. The Administrative team identified components in the Danielson Framework for Teaching that were areas which needed to be focused upon for teacher improvement. Professional development sessions were held on questioning and discussion techniques, student engagement, and data driven instruction. Models of student-centered discussion were the focus of professional development sessions. Student engagement strategies with a focus on teachers and students generating high-level questions were also presented during professional development conferences.
## Additional Finding

<table>
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<th>Quality Indicator:</th>
<th>4.2 Teacher Teams and Leadership Development</th>
<th>Rating:</th>
<th>Proficient</th>
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</thead>
</table>

**Findings**

Distributive leadership practices are in place. Teachers engage in professional collaborations that align with the school’s instructional focus.

**Impact**

Teachers have a voice in key decisions that affect student learning across the school. Professional learning communities engage in teacher team activities that strengthen the instructional capacity of teachers.

**Supporting Evidence**

- Teacher teams meet weekly to discuss strategies to support the school’s instructional focus which centers on discussion and maximizing student engagement in instruction. Using a prescribed protocol, a teacher presented a dilemma faced in class. The teacher noticed that students were demonstrating proficiency in their essays but were not demonstrating mastery. The teacher was looking for insight on how students could attain mastery. The team looked at a piece of student work and posed probing and clarifying questions to the presenting teacher. Teachers inquired about the lesson activities conducted and the assessment strategies used to check for understanding. Teachers suggested providing student friendly checklists, providing students with exemplar essays and opportunities for self and peer-assessments. Teachers believe their collaborations have resulted in cross content cohesiveness, the use of data to drive instruction, and foster inter-visitations amongst colleagues that support teachers’ goals.

- A review of ELA team minutes indicated department goals included team collaboration to deepen understanding of the English Regents and its demands on literacy, develop and revise ELA curriculum maps to align them to the skills assessed on the Regents exams, looking at student work, and achieve a passing rate of sixty percent for all juniors on the ELA Regents exams. Teachers meet monthly to unit plan, As a result of the work accomplished by the team, a seventy-seven percent pass rate was achieved on the January 2017 ELA Common Core Regents exam.

- Teachers across grades and content areas all had a voice in developing the school-wide grading policy. Teachers serve in roles such as bi-lingual coordinator, special education and safety liaison, and coordinator of student activities (COSA). The professional development team meets weekly to support the school’s instructional focus that emphasizes higher-level questions, student lead discussions and peer and self-assessment. The team has devised a professional development plan and facilitated professional development sessions on questioning techniques, methods of questioning to deepen student understanding, and discussion techniques. The professional development team meets with the principal and assistant principals and provides them with observational data.