



**Department of  
Education**  
*Carmen Fariña, Chancellor*

Office of School Quality  
Division of Teaching and Learning

# Quality Review Report

## 2014-2015

**Gregorio Luperon High School for Science and  
Mathematics**

**High School M552**

**501 West 165<sup>th</sup> Street  
Manhattan  
NY 10032**

**Principal: Juan Villar**

**Date of review: May 1, 2015  
Lead Reviewer: Richard Cintron**

## The School Context

Gregorio Luperon High School for Science and Mathematics is a high school with 491 students from grade 9 through grade 12. The school population comprises 0% Black, 100% Hispanic, 0% White, and 0% Asian students. The student body includes 90% English language learners and 1% special education students. Boys account for 46% of the students enrolled and girls account for 54%. The average attendance rate for the school year 2013-2014 was 90.0%.

## School Quality Criteria

<b>Instructional Core</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
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	<b>Focus</b>	<b>Developing</b>
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	<b>Additional Findings</b>	<b>Developing</b>
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	<b>Additional Findings</b>	<b>Developing</b>
<b>School Culture</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations	<b>Celebration</b>	<b>Well Developed</b>
<b>Systems for Improvement</b>		
<i>To what extent does the school...</i>	<b>Area of:</b>	<b>Rating:</b>
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning	<b>Additional Findings</b>	<b>Proficient</b>

## Area of Celebration

<b>Quality Indicator:</b>	<b>3.4 High Expectations</b>	<b>Rating:</b>	<b>Well Developed</b>
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### Findings

Leadership and staff successfully partner with families to support student progress towards high expectations connected to college and career readiness and provide effective guidance/advisement support.

### Impact

The school has created true partnerships with parents and students that has resulted in positive relationships and increased student achievement.

### Supporting Evidence

- Parent workshops are driven by parent needs and designed to partner with parents as they support their children as students and new arrivals to the country. Workshops include topics such as understanding the Common Core Learning Standards, pathways to citizenship, English language learner classes for parents, GED classes for parents, how to communicate through Pupil Path, understanding high school transcripts and the college application process, as well as various guest speakers from the New York City District Attorney's Office and the Health Department. Parents spoke to how the school has been instrumental in creating a welcoming atmosphere for parents and in helping parents to understand a completely different school system and culture than their home country.
- Students spoke to how teachers and guidance staff regularly discuss and challenge them to take advantage of opportunities such as College Now and advanced placement classes. Students also spoke to how staff members share their own personal experiences and challenges they faced as newly arriving immigrants and discuss the ways in which they learned to adjust to life in a new country and their own transition from high school to college. Students feel that teachers want the best for them and also teach them how to advocate for themselves. An example that students spoke of was how the guidance department, in addition to exposing them to various colleges, regularly encourages them to research and visit local colleges on their own or with their friends and to come back and share these experiences with other students. Data from the school's Quality Guide indicates that the school has consistently outperformed its peers with regards to the college and career preparatory course index, the six year college readiness index with persistence, and the postsecondary enrollment rate after 18 months.
- The school offers a number of different opportunities to support students with college and career readiness so that all students can own their educational path from the moment they enter the school. Examples include the school's advisory program, as well as a dedicated guidance counselor who helps to coordinate all in-house college fairs and workshops for students and parents, all in-house career days and guest speakers, as well as all college trips. Parents spoke about how in addition to attending parent association meetings, the school's guidance counselor meets individually with all students and parents to ensure that they understand the entire college application process.
- During a student meeting, when students were asked how they knew they were ready for the next grade, one student spoke to how she had learned to be independent and responsible and felt she could now succeed by working alone and with others. A second student spoke to how she now feels comfortable being challenged and is not afraid to fail.

## Area of Focus

**Quality Indicator:**

**1.1 Curriculum**

**Rating:**

**Developing**

### Findings

Curricula alignment to the Common Core Learning Standards and/or content standards across all subject areas is developing, and academic tasks inconsistently emphasize rigorous higher order thinking skills across grades and subjects.

### Impact

Students are inconsistently challenged with high level tasks that push student thinking and promote college and career readiness for all learners.

### Supporting Evidence

- Conversations with the school leadership as well as a review of curriculum documents revealed that the school is still in the process of aligning curricula in all core subject areas to Common Core Learning Standards and/or content standards and integrating the instructional shifts. The school is currently in the process of defining criteria for what students need to know and what skills they need to master to move to the next grade in all subject areas. Although teachers are provided feedback on teacher work products by their peers and the administration, the school has not yet developed a system to collect and review this information to ensure that feedback is being implemented and that it is helping to develop a of common understanding across the school for measuring rigor in all teacher work products.
- Lesson plans are inconsistently written to cognitively engage learners and challenge them with higher-order tasks. While most lesson plans did include objectives related to Common Core Learning Standards that teachers were planning to address, summative tasks were not always aligned. For example, in a tenth grade world literature lesson plan, although the lesson plan read that students would be able to relate the Lord of the Flies to the Milgram experiments of the 60s that explored human nature, the summary assessment asked students to provide a 2 minute summary of the salient discussion points and any interesting questions that were discussed in their groups. In a tenth grade English as a second language lesson plan, although the lesson plan read that students would determine what roles dreams play in the destiny of individuals and peoples (ethnic groups), the summary assessment was listed as a handout and an exit ticket.
- A review of curriculum documents revealed that targeted supports for students who struggle are not always specific nor are they consistently planned for in all subject areas. For example, while a review of a lesson plan from a tenth grade English as a second language class did not indicate any intentional planning to support struggling students, English language learners, or students with disabilities, in a ninth grade algebra lesson plan, the teacher identified common misconceptions students may have, planned scaffolding questions to support students, and planned extension activities for students who were above grade level. In addition, although the principal explained that all incoming students are newly arriving immigrants and that vocabulary development is a key element in helping students with developing their language skills, not all lesson plans reviewed revealed purposeful planning for vocabulary support.

## Additional Findings

<b>Quality Indicator:</b>	<b>4.2 Teacher teams and leadership development</b>	<b>Rating:</b>	<b>Proficient</b>
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### Findings

The majority of teachers are engaged in structured, inquiry-based collaborations that promote student achievement and strengthen teacher practice. Distributed leadership structures allow teachers to have a voice in key decisions across the school.

### Impact

The work of teacher teams has strengthened teacher collaboration resulting in improvements to pedagogical practices and a stronger voice in key decisions affecting supports for student achievement.

### Supporting Evidence

- All teachers are engaged in structured professional collaborations that regularly meet during the school day. In addition, the school's professional development team, which is comprised of department and grade team leaders, also regularly meets to examine student work and discuss specific instructional strategies related to increasing student achievement and teacher practice. Strategies developed during these meetings are first implemented in department or grade team leaders' classrooms so that they can these practices can be modelled for the rest of the school. Individual teams then participate in instructional rounds within their departments and grades so that all teachers can receive feedback from their peers. All visits conclude with a formal reflection process for both the teacher visited and the observing teacher that includes next steps for implementation and improvement. Teachers spoke to how this process has been instrumental in helping to drive teacher improvement with both planning and practice within their classrooms. The administration spoke to how they have seen growth in identified areas of focus such as questioning, engagement, and student assessment by way of increasing in Advance scores.
- During two teacher team meetings, teachers spoke about how they have a pro-active voice in key school-wide decisions that affect student learning. For example, teachers collaboratively worked with the administration to create unit plan and lesson plan templates that the majority of teachers use. Teachers have redesigned the school's Advisory curriculum and are in the process of interviewing students to determine the effectiveness of the new curriculum so that they can make further modifications for next year. Teachers have collaboratively worked with the administration to redesign the school schedule to allow for ninety minute block scheduling. Teachers also mention how they regularly post all teacher work products on Goggle Docs and this decision has allowed them to strengthen a culture of learning across the school where regular peer feedback is encouraged and welcomed by all teachers.
- The principal regularly meets with the schools professional development team to discuss student scholarship, observation trends, and school culture. These meetings frequently result in the modification of school-wide plans to further support teachers and students. For example, the school is currently reviewing all content area curriculum documents and is in the process of overhauling all end-of-year assessments to ensure coherence across grades and content areas. The team has also identified goals for next year such as supporting teacher's growth with formative assessments practices during lessons.

<b>Quality Indicator:</b>	<b>1.2 Pedagogy</b>	<b>Rating:</b>	<b>Developing</b>
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### **Findings**

Across classrooms, teaching strategies inconsistently provide entry points into the lesson and student discussions reflect uneven levels of student understanding.

### **Impact**

School-wide there are missed opportunities to engage all learners in consistent challenging tasks and higher-order thinking, thus hindering students from exhibiting their work at high levels and being integral to their learning.

### **Supporting Evidence**

- Across classrooms visited, although students worked in pairs or groups, teachers did not consistently assume a facilitator role to further encourage student discussion and ownership. For example, in a twelfth grade pre-calculus class, when a student asked a question about a particular problem, instead of asking if another student could answer the question, the teacher answered the question and explained the rule associated with the question. However, in a twelfth grade physics class, when a student asked a question about the experiment that her group would be conducting, instead of answering the question, the teacher encouraged the student to work with her group members to complete the experiment and then to answer the question as a team using the information they had uncovered.
- In classrooms visited, questioning strategies to promote higher levels of student thinking were inconsistent. Some teachers asked only low-level recall questions that did not require students to strategically think or extend their thinking. For example, in a tenth grade English as a second language class, as the teacher displayed notes on a white board in the front of the room, the teacher asked several questions requiring simple one or two word answers from the students to determine if they knew who Langston Hughes was. When the students could not produce answers, the teacher answered his own questions.
- Students' use of evidence to defend their ideas was not consistently seen across classrooms and teachers did not consistently ask students to justify their responses using evidence from documents they were reading or from their notes. For example, in a tenth grade English language arts class, when students offered potential answers for how they would characterize Ralph from the book *Lord of Flies*, some students' referenced evidence from the book and others did not and the teacher did not challenge them to do so. However, in an eleventh grade English language arts classroom, when the students were working in their groups discussing an article they had just read and how it was connected to the book *Maus* that they had also read, students consistently pushed each other to use evidence from the article to support their points of view.
- Students across classrooms could not consistently articulate what they were learning and why it was important. In a twelfth grade pre-calculus class, when asked why they were learning about polynomials and rational functions, students responded that the material would be on a test at some point. When asked how they might use the material beyond the test the student could not state a reason. In a ninth grade algebra class, when students were asked why they were learning how to factor trinomials, the student responded that it will help them on the upcoming regent test.

<b>Quality Indicator:</b>	<b>2.2 Assessment</b>	<b>Rating:</b>	<b>Developing</b>
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### **Findings**

Teachers inconsistently use rubrics aligned to the school's curricula. The practice of teachers regularly checking for understanding and incorporating student peer and self-assessment is emerging.

### **Impact**

The inconsistent use of rubrics, checks for understanding, and student peer and self-assessment limit teachers' ability to provide all students with actionable feedback regarding student mastery.

### **Supporting Evidence**

- Student work displayed in hallways and classrooms and submitted by the administration did not consistently include rubrics with targeted feedback from teachers describing next steps for how students could improve. For example, feedback provided to a student regarding an assignment in art just gave them the score they received on the rubric. Feedback provided to a student regarding an essay they wrote in English included the teacher writing that she had highlighted the boxes in the rubric that describe the student's essay and then provided the total score the student received. Feedback to students in a science class where they had written a double journal entry included a comment by the teacher that they needed to finish the journal.
- Across classrooms, teachers' use of checks for understanding varied. In a ninth grade math class, while students worked collaboratively, the teacher spoke individually with students to ensure they were on task and using their group members to support them with completing a problem that contained a pattern and also identifying the rule associated with the pattern. In other classes, teachers only asked questions to the whole class or called on select students to determine if all students understood and then moved on with the lesson after receiving a few answers. For example, in a tenth grade English as a second language class, after students copied notes that the teacher displayed on a white board in the front of the room, the teacher asked the entire class if anyone had any questions. The teacher then waited a few moments and when no students raised their hands the teacher displayed the next section of notes onto the white board and moved on with the lesson.
- Across classrooms, teachers' use of peer and self-assessment practices varied. In an eleventh grade English language arts class, while students worked collaboratively to develop a claim, students used their group members as a resource for determining if the evidence they had identified actually supported their claim. In other classrooms, although students worked together in pairs or in groups on similar problems, they did not peer or self-assess their work or other student's work but instead waited to hear from the teacher to determine if their work was correct. For example, in an eleventh grade physics class, after conducting an experiment concerning the difference between a series circuit and a parallel circuit, students had to fill in an activity sheet defending their hypothesis which was then graded by the teacher.