



**Department of
Education**
Carmen Fariña, Chancellor

Office of School Quality
Division of Teaching and Learning

Quality Review Report

2014-2015

Leon M. Goldstein High School for Sciences

High School K535

**1830 Shore Boulevard
Brooklyn
NY 11235**

Principal: Scott Hughes

**Date of review: April 14, 2015
Lead Reviewer: Roxan Marks**

The School Context

Leon M. Goldstein is a high school with 1,071 students from grade 9 through grade 12. The school population comprises 10% Black, 11% Hispanic, 60% White, and 19% Asian students. The student body includes 1% English language learners and 7% special education students. Boys account for 44% of the students enrolled and girls account for 56%. The average attendance rate for the school year 2013-2014 was 96.1%.

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	Additional Findings	Proficient
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	Focus	Proficient
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	Proficient
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	Celebration	Well Developed
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	Additional Findings	Well Developed

Area of Celebration

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

Findings

School leaders communicate clear expectations to the community and members are mutually accountable to these standards. Teams of teachers provide ongoing feedback to families regarding progress toward the Common Core Learning Standards.

Impact

The schools' culture of mutual accountability and professional learning result in academic support for students and partnerships with families ensure college and career readiness for all learners.

Supporting Evidence

- School leaders communicate with staff at faculty meetings, teacher teams sessions and through email. School leaders consistently communicate high expectations to staff through faculty manual which covers administrative items including attendance, fire drills, safety, grading, assemblies and other areas. A section entitled *Effective Teaching* covers goals, principles of learning, differentiated learning, reading strategies, rubrics, questioning and other instructional items. The *Student Planning Handbook* provides a resource for students upon entering high school and covers planning course schedule, community service projects, diploma worksheet, discipline code and advance placement courses.
- Professional development is done in school and opportunities to attend outside courses is available. Teachers were asked about the specific areas they needed most help with and combined with advance data, professional learning opportunities are arranged. Teachers participate in Learning Walks to improve their pedagogy and share best practices across grades. During the meeting, teachers shared that these visits to rooms enabled them to see how teachers were implementing Depth of Knowledge (DOK) in lesson. These visits also allowed teachers to observe how students are learning to use DOK to form questions.
- To support college readiness, the senior timeline document shares clear expectations to families and students regarding SAT/ACT exams, college applications, applying for scholarships, requesting transcripts and other information necessary for students to fulfill their requirements and be on track for graduation. The college advisement office works with students and coordinates events throughout the year for families. The Senior Bulletin clearly outlines important information as families begin planning for post-secondary education. It outlines college application process, transcripts, ranking, testing schedules, links to important documents and other useful resources. Students in grade 10 are supported as they prepare to take the PSAT assessments. College Now classes help prepare students for the next level of learning. The use of Socratic Seminars helps to build discussion skills and focus on supporting students in writing research papers is preparing them for success later in life. Jupiter grades are used by parents to access information about their child's performance in classes. Teachers also use this system to communicate with parents and send out email blasts.

Area of Focus

Quality Indicator:

1.2 Pedagogy

Rating:

Proficient

Findings

Teaching strategies are aligned to the curricula and reflect the use of Danielson Framework for Teaching and the instructional shifts. Across most classrooms, there is consistent use of multiple entry points and challenging tasks for students in all grades.

Impact

Although all students are participating in higher-order thinking skills and discussions, participation and ownership expanding discussions was inconsistent across all classrooms. Emphasize is continuing placed on appropriately challenging tasks and the use of multiple entry points are being used across classrooms

Supporting Evidence

- Across classrooms teaching practices are aligned, and strategies provide access into learning for all students. Teachers create guided notes sheets and visuals to provide entry for all into the lessons. Guided scaffold in the form of questions are provided to students as they engage with texts. For example, an Advanced Placement Language and Composition lesson students were identifying, evaluating and commenting of the strengths and weaknesses in essays. The aim of the lesson was getting students to be better at identifying missing information from essays. After reading *Dumpster Diving*, teachers distributed a sample essay, working in groups they were charged with making up the essay. Most students were annotating the text as the teacher circulated asking guided questions to support groups of students.
- In another lesson in an Integrated Co-Teaching (ICT) setting students were working in groups investigating how to perform proofs involving circles. Students were engaged in dialogue with peers and used their notes to justify and verify information. The lesson was engaging and fostered independence in students. Students were using problem solving strategies as they worked through identification among angles, chords, secants and tangents. This task was modified for students; however this level of high quality support was not consistently seen across classrooms.
- In an English 2 ICT lesson the teachers used color coded scaffolds for students as they engaged in various learning stations. Another English lesson use non-linguistic strategy by having students employ kinesthetic in responding to social barometer statements. This lesson fully engaged students as they shifted positions in the room and discussed in groups the prompt provided by the teacher and justified their opinions within the group and selecting one person to share out their perspective to the larger group.
- Lastly, students' participation was high in a Forensic lesson as they were independent researchers engaged in inquiry and showed ownership of their learning as the teacher acted as a facilitator. The aim had students exploring how can blood splatter be used to determine the height from which the blood fell? Student took an active role is questioning and discussions allowed many voices to be heard and real life connections with careers occurred. Student statements in this class triggered questions and disagreement leading to purposeful and productive talk.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Proficient
---------------------------	-----------------------	----------------	-------------------

Findings

School leaders and faculty ensure curricula are aligned to the Common Core Learning Standards. Academic tasks foster higher order thinking and rigorous habits across grades and subjects.

Impact

The schools' curriculum is aligned to standards and promotes access and career and college readiness for all students, including English language learners (ELLs) and students with disabilities (SWDs).

Supporting Evidence

- School principal shared that they use Engage NY resources and worked with teachers to implement the instructional shifts based on Common Core Learning Standards expectations. School leader shared that teachers are integrating of literacy shifts into content area instruction. Focus on informational texts, annotating texts, was seen in classrooms. For example, a document for Algebra 1 outlines expectations for lessons, standards for math practice along with the timelines for units including unit overview, essential questions and standards. Course overviews and content sequences are shared with teachers, for example the Algebra plan lists the big idea for the unit and subsequent skills that are addressed with students. Booklists which defines texts used for courses was shared.
- College readiness is addressed through College Now courses that all students partake in to earn college credits. Advance placement courses are offered and 9th graders have to option to enroll. The school currently has a 90% college readiness rate. The vast majority of classroom visited, students and teachers were using technology, including SMARTboards, iPad and computers as well as ensuring the instructional shifts were embedded in their lessons.
- For example the unit plan for the Forensics course identified essential questions, focus on Common Core Learning Standards, big ideas or key student learning objectives, texts and assessments. Another unit plan for geometry with a focus on circles was aligned to Common Core Learning Standards and also included more specific details for daily lesson and included teaching strategies for group work which provides access for English language learners and students with disabilities.
- School leaders shared that they use DOK to inform high level questioning, however questions were not planned in the units reviewed. Most of the units submitted included assessments. However some plans did not clearly identify the key vocabulary or explicitly address the use of Hess or DOK to ensure high levels of rigor in pre-planned questions or tasks. Although some lessons included questions at varying levels, these were not consistently embedded in units.

Quality Indicator:	2.2 Assessment	Rating:	Proficient
---------------------------	-----------------------	----------------	-------------------

Findings

Across classrooms, teachers use assessment data and rubrics to track and monitor progress. The school has a Student Information System (SIS) in place to determine progress towards goals.

Impact

The SIS assessment system provides teachers with data that is used to inform progress towards goals. Teacher teams used data to provide actionable feedback to students.

Supporting Evidence

- School uses formative and summative assessments data to identify trends and teachers use data to plan group activities and make adjustment to curricula. Grading policy indicates that 60% based on summative assessment and 40% formative. The school has a comprehensive system to capture data and shows mastery level for all subjects. Item analysis are done with assessments to drill down to specific skills and content that proves challenging for students. Teachers shared that initial benchmark data is used to identify areas of focus. New York State (NYS) Standards are identified using item skills analysis and this data is discussed by department teams and used to revise curricula based on trends observed.
- Teachers use a variety of rubrics for various forms of writing, myth, narrative, argumentative as well as rubrics are used for oral presentation, class participation, projects and Socratic seminars. Checklists are used by students including peer assessment sheets created for the Hero Project unit. During the small group meeting with students, work products included the use of rubrics and with clear next steps for learning.
- The data system communicates information to teachers and families and is used to inform instruction and identify groups of students needing support. The SIS system provides all staff with real time data including report card grades, Regents scores, transcripts, attendance, notes from dean, guidance and other academic staff. The SIS provides biographical information and specification of ELLs and SWDs. All assignments are logged in with the scores and grades and column provides the impact on grade when data is added. Jupiter grades allow views of classroom level data for students.

Quality Indicator:	4.2 Teacher teams and leadership development	Rating:	Well Developed
---------------------------	---	----------------	-----------------------

Findings

All teachers participate in structured collaborations to support academic development and continuously look at assessment data and student work products to make effective adjustment in teaching. Distributive leadership affords teachers a voice in decisions.

Impact

Participation in teacher teams and shared decision making results in coherence across the school and ensures the promotion of the Common Core Learning Standards, instructional shifts and progress for all learners.

Supporting Evidence

- The vast majority of teachers are engaged in structured collaboration within and across grades and subjects. All teams have a representative that serves on the instructional cabinet. The instructional team provides guidance to administration through regular scheduled meetings and time is allocated for this team to share information with the entire staff.
- Teacher teams use the inquiry process to structure their meetings. Analysis of student work products and assessment data enables teams to refine curricula, identify trends and plan lessons. Teams have centered their work on supporting the instructional focus of designing coherent instruction and those areas they see needs growth and development based on data and work products.
- During the teacher team observation were discussing specific students who were classified as at risk and some with attendance issues. This team targeted students that are failing 3 or more classes and using a collaborative approach created strategies and supports to improve their performance. Teachers shared that collaborating with their peers has provided them with other ideas to support students as well as how knowledge learning styles is used in lessons and their capacity is being strengthened as they share strategies in the team.
- Distributive leadership is encouraged and valued at the school; teachers commented that the principal wanted teachers to come up with focus students groups based on interest and data in order to provide meaningful support for students. Teacher share responsibility in the work in teams and learn from each other during school-wide sharing sessions that is held monthly. During these sessions teams have the opportunity to seek direction and feedback from other teams. This time allows for school leaders to gain insights into areas that are challenging for teams in order to provide supports through professional learning opportunities.