

Quality Review Report

2013-2014

**The Environmental, Science,
Mathematics, and Technology School**

Intermediate School 190

**1550 CROTONA PARK EAST
BRONX
NY, 10460**

Principal: DIANAJADE SANTIAGO

**Dates of review: May 28 - 29 2014
Lead Reviewer: Myrna Rodriguez**

Part 1: The school context

Information about the school

E.S.M.T a middle school with 253 students from grade 6 through grade 8. The school population comprises 26% Black, 71% Hispanic, 1% White, and 1% Asian students. The student body includes 8% English language learners and 21% special education students. Boys account for 55% of the students enrolled and girls account for 45%. The average attendance rate for the school year 2012 - 2013 was 92.0%.

Overall Evaluation

This school is proficient.

What the school does well

- The leadership ensures that curricula is aligned to the Common Core Learning Standards (CCLS) to provide rigorous and engaging learning experiences for all students, resulting in improved student achievement. (1.1)
 - The school designs the curricula to emphasize higher order thinking using non-fiction and informational texts in all core subjects, with an emphasis on building writing stamina across all grades. Student work from sixth to eighth grades show a steady growth in increased rigor as identified in the Common Core Learning Standards (CCLS). For example, all student work displayed in classrooms and hallways demonstrate extensive writing using textual evidence. In several essays students used such phrases as “on page “x” the author says...” or “even though in the first chapter it seems as if the main character is evil, in the third chapter we see a change in his attitude towards slaves.” In the curriculum maps, specific and differentiated tasks are outlined for English language learners, students with disabilities, and high achievers. As a result, students exhibit steady levels of growth in organization, development, length, reflections on writing and peer revisions, thus supporting improved student outcomes and promoting college and career readiness.
 - The school uses data gathered from student work to plan and refine tasks for varied learners emphasizing the use of non-fiction reading throughout the curricula, vocabulary supports for English language learners, and focusing on reading of science and social studies texts in preparation for high school. In a science class students were discussing a page from the text, as to whether it would be possible for them to calculate what the eye color of an unborn child would be using various formulas from the text. In another class, English language learners were grouped with monolingual students and with vocabulary supports and a remediation teacher, they were able to respond to the same task of preparing a presentation about “what are characteristics of heroes and how do their writings help us to discern those traits? Students used various primary documents including the Gettysburg Address, the Declaration of Independence, and Declaration of Human Rights, which were translated in Spanish. This use of non-fiction documents and texts demonstrates the purposeful alignment to the Citywide Instructional Expectations (CIE) and CCLS and provides for a high level of student improvement by enabling them to develop an understanding of the skills that are needed to succeed in high school and college.
- The school uses a research-based framework that informs instruction and curricula and is supported by all teachers and evident in classroom practices, allowing for the engagement of students in learning. (1.2)
 - All teachers share the belief that students learn best when instructional strategies and class structures include the workshop model, accountable talk, and questioning that elicits higher order thinking skills. In most classes, students begin their responses by saying "I don't agree with everything you said, especially because on page "x" the author clearly states..." and they use excerpts from texts to defend their responses. Across classes students demonstrate through their responses,

conversations with partners, and work products, high levels of thought and academic understanding. Furthermore, the school's participation in professional development rooted in the Danielson Framework Teaching allows teachers to practice and express explicitly what they need to do to improve instruction and curricula. During several lessons the principal noted that the some teachers who initially had a low rating on questioning techniques, have improved in this area as evidenced in the implementation of suitable strategies, including differentiated tasks, into classroom instruction. For example, teachers used several knowledge-based questions, but are now steadily increasing the level of questioning, using Hess's Rigor Matrix, which are embedded in their lesson plans to engage students in their learning. In an English class the teacher asked students to quickly summarize the end of the historical novels that they were reading and to rewrite the ending using a specific audience in mind, children, teenagers, or adults, and to justify why their ending improved the novel for these audiences. Thus, teacher pedagogy is supporting improved student work products.

- The school engages in a wide variety of activities and supports students' growth in emotional and social behavior, which results in an environment conducive to adult and student learning. (1.4)
 - The school has a joyful environment where many staff members in the school, including the leadership, know students. Through the student council, students work with teachers to define academic and behavioral goals and student voice helps to determine academic activities such as trips, school events, and books to read. The school's Positive Behavior Intervention System (PBIS) is a behavioral program that rewards students and has proved to be very effective as evidenced by the dramatic decrease in incidence data on the Online Occurrence Reporting System (OORS). The principal, assistant principal, coach, faculty, and/or staff mentor all students during early morning, lunchtime, and after school, that includes tutoring, counseling and club activities. For example, the principal has a walking club where students share and communicate with her on various topics ranging from school rules, college and career paths, and student concerns. As a result of the structures established by the school to communicate and engage students in meaningful academic conversations and social support, student achievement is steadily increasing as evidenced in student work products.
- The leadership and faculty have developed various assessments, including student self-assessments, which are aligned to the curricula and inform instructional planning that is focused on improving student outcomes. (2.2)
 - The leadership and teacher teams review and revise grading policies in English language arts, math, writing, and reading, so that results from the State assessments in English language arts and math align closely. The school data showed that many students were achieving high grades in the core subjects, but did not achieve high levels of proficiency in writing, and they now specifically include writing assessments throughout all subjects providing actionable feedback to students and next steps for improvement. Across classrooms in all subjects, teachers develop common assessments and rubrics to ensure that teaching and learning are consistent. As a result of continuous, targeted feedback based on their goals, each student is aware of what he/she needs to do to improve his/her work. Students self-assess using rubrics, and partner with peers to further review and revise work, leading to improved student work

products. In classrooms and in hallways student work displayed evidenced the first draft and various revisions to final product that showed responsiveness to feedback. Additionally, students self-assess using task specific rubrics in each subject area, and peer revisions are all included in the final product display. For example, in a math example using tessellations, the peer reviewer indicated on the work he was reviewing that even though the student had the correct depictions, his written responses were not accurate because he had failed to use some specific numbers. As a result of the varied assessments, student work products demonstrate high levels of engagement, effort, and improved work products.

What the school needs to improve

- Establish a coherent vision of school improvement that is reflected in data-based goals that are tracked for progress and are understood and supported by adults and students. (3.1)
 - The school has a short list of clear focused goals and action plans that include writing with textual evidence in all subject areas, teacher questioning to develop higher order thinking, and differentiation of tasks for varied learners. They are included in the Comprehensive Education Plan (CEP) and planning documents that are used to periodically track progress and are adjusted when needed to improve student achievement. However, the link between attendance and the school goals has not been sufficiently developed to allow all constituencies to take ownership of the consequences and impact of low student attendance on student achievement and college and career readiness. Furthermore, although the school involves and communicates with the school community, including teachers, parents, and students, about school improvement plans, the action plans around attendance are not fully developed, precluding improvement in this area. As a result, although the school has upped its action plans regarding attendance, the lack of deep analysis of the reasons for high absenteeism hinders further student improvement as students and families have not taken ownership of their roles in improving attendance and hence, academic achievement.
- Evaluate teaching practices via the observation process for further support of teachers in order to provide actionable feedback with specific next steps and enhance professional development to further impact student work. (4.1)
 - School leaders conduct frequent cycles of informal observations using the Danielson Framework for Teaching. Feedback to teachers is provided in a timely manner verbally and in writing and captures strengths and next steps for improvement. However, precise and targeted feedback regarding clear expectations for teacher practices across all content areas does not yet sufficiently provide clear learning targets based on an analysis of student data. Additionally, while the school is making good strides in providing teachers with targeted professional development, with attention to rigorous academic vocabulary enhancement as part of lesson planning, target support to move student outcomes to a higher level is not yet strategically aligned to professional goals for teachers, thus missing out on providing even higher levels of support for teacher learning and impacting student achievement.

Part 3: School Quality Criteria 2013-2014

School name: The Environmental, Science, Mathematics, and Technology School	UD	D	P	WD			
Overall QR Score			X				
Instructional Core							
<i>To what extent does the school regularly...</i>	UD	D	P	WD			
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?			X				
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?			X				
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?			X				
School Culture							
<i>To what extent does the school ...</i>	UD	D	P	WD			
1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults?			X				
3.4 Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations?			X				
Systems for Improvement							
<i>To what extent does the school ...</i>	UD	D	P	WD			
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?			X				
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?			X				
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?			X				
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning?			X				
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?			X				
Quality Review Scoring Key							
UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed