



Quality Review Report

2014-2015

The Science School for Exploration and Discovery

Middle School X224

**345 Brook Avenue
Bronx
NY 10454**

Principal: Sojourner Welch-David

Date of review: February 24, 2015

Lead Reviewer: Sandra Litrico

The School Context

The Science School for Exploration and Discovery is a middle school with 368 students from grade 6 through grade 8. The school population comprises 22% Black, 74% Hispanic, 2% White, and 0% Asian students. The student body includes 31% English language learners and 24% special education students. Boys account for 51% of the students enrolled and girls account for 49%. The average attendance rate for the school year 2013-2014 was 89.0%.

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	Proficient

Area of Celebration

Quality Indicator:	3.4 High Expectations	Rating:	Well Developed
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Findings

The school leader effectively partners with staff, parents and students to create a system of high learning expectations and a culture of mutual accountability for those expectations. There are also high expectations regarding professionalism, planning curriculum and instruction.

Impact

Teacher teams and staff have a unified set of high expectations for all students and provide clear and effective feedback to ensure that all students are independent thinkers who are prepared for college and career.

Supporting Evidence

- School staff effectively communicates with families and provides clear and focused feedback to parents to ensure students are prepared for the next level. There is a culture marked by personalization that supports the holistic social emotional and academic learning of the child. There is a focus on developing the whole child and the school has invested in the socio-emotional needs of all students. In addition, all clinical support staff helps students develop life skills necessary for college and career readiness including time management, peer mediation and goal setting.
- The leader through collaboration with his staff has effectively aligned professional development, family outreach and student learning experiences and supports. To monitor and share best instructional practices, the school conducts inter-visitations, instructional rounds and focused walkthroughs. All feedback is aligned to the Danielson Framework for Teaching components. There is an overwhelming positive environment with common academic and personal behaviors across the school community. The school is in its second year of implementation of the Positive Behavior Intervention System (PBIS). Students take ownership of their learning and responsibility for their behavior and demonstrate their knowledge by teaching it to others.
- Common core aligned rubrics are used to assess student work and set high expectations for all students. Bulletin boards are used to display and highlight exemplar student work. Learning targets and tasks using depth of knowledge language are displayed along with the task and written feedback that includes next steps. The school has adopted E-Portfolio, which allows students to store all their work electronically. As a result, students are taking more ownership of their work. Students also engage in Google classrooms, which enable them to complete assignments on the computer. This program also provides dialogue between students and teachers and student-to-student interaction online.
- Tuesday parent engagement meetings and phone conferences provide parents with the opportunity to discuss their child's progress with their teachers. The parent coordinator coordinates monthly meetings and workshops that are led by administrators and/or teachers.

Area of Focus

Quality Indicator:

1.2 Pedagogy

Rating:

Proficient

Findings

Most classes strategically incorporated numerous practices for multiple entry points and high quality supports and extensions into the curricula so that all students including English language learners and students with disabilities are engaged in meaningful tasks. However only some classes were marked by high-level questioning and student- to- student discussion.

Impact

Most teaching strategies provide a diversity of learners' access in the curricula and most students are able to demonstrate their thinking and participate in high- level discussions.

Supporting Evidence

- The use of technology was evident in all classrooms. Teachers use Smart boards to enhance student engagement. During the 8th grade math lesson, students used the smart board to solve the value for X and show their strategies. The teacher provided time for productive struggle as students worked in groups to simplify equations.
- Some of the classrooms engaged students in high-level discussions and rich conversations. In the English language arts (ELA) classroom, students compared and contrasted the text structures of a poem entitled "Those Winter Sundays" and a chapter from the novel *To Kill a Mockingbird*. Students engaged in accountable talk discussions as they shared their thoughts on how the authors depicted relationships and expressed feelings. Students looked for evidence to support their claims regarding the 'golden rule" and similarities in the theme of each piece. In many classrooms including the 7th grade science lab, the teachers posed good questions but there were missed opportunities for in depth discussions.
- In most of the classrooms, students are grouped according to tiers. In the 6th grade math classroom students were grouped and tiered based on the end of the unit assessments. Each group had a different set of equations and solutions to use as they all created a poster on finding solutions for equations. The teacher modeled for the students and then encouraged students to help each other, which they did naturally during group work time.

Additional Findings

Quality Indicator:	1.1 Curriculum	Rating:	Proficient
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Findings

The school community aligns curriculum to Common Core Learning Standards by implementing and refining instructional programs and resources across grades and subject areas. Student data and work samples are used to adapt curriculum for individual and groups of student to ensure there are appropriate levels of challenge and engagement.

Impact

The instructional shifts and Universal Design for Learning (UDL) are embedded in the curriculum. As a result, students have consistent opportunities to demonstrate critical thinking skills with multiple entry points and supports.

Supporting Evidence

- The school has subscribed to the Common Core aligned New York State (NYS) Expeditionary Learning curriculum for ELA and Connected Mathematics Project (CMP) curriculum for Math since 2013-2014. This year the staff has made purposeful modifications to make the curriculum more accessible to all students across all subject areas. They have also embedded more real life problem solving tasks using Engage NY and informational reading and writing in all content areas. Humanities units include historical art projects and research reports using a variety of sources. Visual and performing arts enrich the curriculum and also support literacy instruction.
- Rigorous learning targets are included in all the curriculum unit plans. Teachers utilize Webb's Depth of Knowledge and Common Core Learning standards to develop these objectives, which guide curriculum development. For example the 8th grade learning targets in module 2A include "I can cite text-based evidence that provides the strongest support for my analysis of literary text", and "I can analyze the development of a theme or central idea throughout the text."
- Units and lesson plans incorporate technology to enhance student engagement. This includes the use of smart boards, laptops, document cameras, ipads and online programs such as I-Ready, which provide multiple entry points and supports to all subgroups. The Google classroom allows students to engage with each other, share their writing and enrich the curriculum through the use of technology. The use of visual displays and "how to" charts are also included in curriculum maps to provide supports for English language learners.

Quality Indicator:	2.2 Assessment	Rating:	Proficient
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Findings

Teachers have established a system of baseline, benchmark and final assessments that are coherent in each subject department and aligned with the school's curricula. Data is used to provide a clear picture of student progress toward goals across subjects, meaningful feedback to students and to adjust curricula.

Impact

There is a clear picture of student progress toward goals across subjects and results are used to provide meaningful feedback to students and to adjust curricular. However, meaningful classroom level instructional modifications need to be refined so that English language learners and students with disabilities demonstrate increased mastery.

Supporting Evidence

- The development of targeted assessments has led to greater vertical alignment within these subject teams across all grade levels and greater alignment of standards, curricular and assessments school wide. Data is used to help teachers determine which concepts they need to emphasize in their instruction and which sub skills students need to be taught in order to show mastery. However, classroom instruction did not consistently reflect the use of data to modify instruction in terms of content, process or product for English language learners or students with disabilities.
- Teachers have customized systems for formative assessments to inform their instruction including the use of various checks for understanding including checklists, quizzes, and exit tickets. They are continuing to strengthen their use of assessment data to ensure that the needs of subgroups are met. They use these results to tier students and reteach when necessary.
- Formative and Summative assessments are embedded into all curricula documents and used to identify students learning needs and to monitor student's progress. Dates for the mid and end of unit tests associated with Expeditionary Learning and CMP3 curricula are indicated on assessment calendars, which are generated by the teachers. They administer NYS and NYC common core aligned assessments in all content areas. Technology assessments from Ready and I-Ready programs give additional information on student progress.
- Teachers' conference with individual students and goals are created and monitored for growth. The principal said that sharing this data with students has contributed to the improvement of academic climate in the school.

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

School leaders provide ample meeting time through strategic use of common preps and training on protocols for facilitation and looking at student work. Teachers set a high bar for professional collaboration and effective distributed leadership.

Impact

Strong professional learning communities have taken root with increased levels of distributed leadership that results in deep investment in school improvement, improved communication across grades, and increased teacher participation in decisions that impact student success.

Supporting Evidence

- Teacher teams meet weekly and have developed structures including agendas, protocols, minutes and supplemental materials to support progress toward goals. The focus of these meetings revolves around student data and improved teacher pedagogy. During the ELA/humanities curriculum team meeting, teachers used the Gap Analysis protocol to look at student work. The task asked students to respond to questions based on their close read of *Lyddie* (chapter one). After reviewing three different levels of student work, teachers were able to find gaps in student learning and identify implications for teacher planning and design. They decided to rewrite some of the questions, include graphic organizers as a support for some students and create more challenging tasks for higher level students.
- A team leader sets the agenda, maintains team documents, facilitates the meetings and shares information with the administration. Teachers take turns with the facilitation of each meeting. One teacher presents the task and student work and participants pose questions and give recommendations to improve the lesson and/or modify instruction. Teachers discuss current student thinking, desired student thinking and implications for teachers.
- After reviewing the state ELA assessment results teachers discussed patterns and trends. One major strategy that was identified as a school wide concern was the student's ability to cite textual evidence that is relevant to support written responses to questions. Modifications to the maps were made and scaffolds and supports such as RAFT (Restate question, Answer, For example, Furthermore, Therefore) were added to help students stay focused and have a clear model to follow.
- The principal has established a systems improvement cabinet, which includes teacher leaders. They work collaboratively to monitor and assess specific systems in the school.