

Quality Review Report 2011-2012

The Science School for Exploration and Discovery

Middle School 224

345 Brook Avenue

Bronx

NY 10454

Principal: Sojourner Welch-David

Dates of review: March 26 – 27, 2012

Lead Reviewer: Yolanda Torres

Part 1: The school context

Information about the school

The Science School for Exploration and Discovery is a middle school with 363 students from grade 6 through grade 8. The school population comprises 24% Black, 72% Hispanic, 1% White, 1% American Indian, and 2% Asian students. The student body includes 36% English language learners and 12% special education students. Boys account for 55% of the students enrolled and girls account for 45%. The average attendance rate for the school year 2010 - 2011 was 87.0%.

Overall Evaluation

This school is developing.

Part 2: Overview

What the school does well

- The principal's positive leadership has raised the tone of the school culture by providing a safe learning environment where staff, students, and families feel supported professionally, academically and emotionally. (1.4)
 - Close to a year after assuming leadership, the principal has injected motivation and structure, is addressing student misbehaviors, and is focusing on building relationships and trust, resulting in a sense of community amongst all stakeholders. Staff members feel supported, communication is open, and expectations are clear. Teachers feel empowered, leading to more collaboration and teamwork, thus contributing to an amicable teaching and learning environment.
 - Parents appreciate the principal's open door policy and sensitivity to their family needs. The principal's positive changes to the school have impacted the trust parents have in the school and they, along with the students, feel comfortable sharing their concerns and ideas for continuous improvement of the school. The principal ensures that all students participate in school-wide activities to promote inclusiveness and responsibility. School leaders, teachers, and service providers work with cohorts of students in need of social emotional support resulting in improved student attitudes and a positive perspective towards their individual learning.
- School leaders have made informed and strategic organizational decisions in support of the school-wide goals. (1.3)
 - Organizational and instructional decisions address the professional needs of teachers to forge ahead in the attainment of the school goals, resulting in structured planning sessions, focused lesson delivery, and improved student work products. Newly hired coaches and consultants meet with teachers to plan and provide instructional help to enhance student learning. Each teacher has an individualized plan with progress monitored by school leaders, thus helping pave the way towards professional improvement. In spite of coaches assigned to classrooms due to vacancies, school leaders have creatively managed to have them continue to support teachers with their plans and lesson delivery. In addition, the introduction of technology, such as a computer lab and I-pads for science experiments, provides students with opportunities to use technology as a learning tool resulting in the initial development of students' inquiry skills.
- Teachers and coaches work in collaborative teams to analyze data, share good practices, and plan lessons, in order to make instructional decisions that meet the needs of different cohorts of students. (2.2)
 - Teachers work across grades with the support of coaches in the analysis of data to develop lessons enriched with teaching practices and strategies to meet students' instructional needs. Teachers' data conversations with the principal result in the sharing of instructional outcomes they experience as they teach and adjust their practice.

- Formative assessments such as rubrics and exit slips provide teachers and students with opportunities to reflect on teaching and learning, understanding the impact of lessons, and allowing for suitable adjustments. As students produce their work, teachers' feedback further helps in students' academic mastery.
- School leaders use a research-based professional development tool as a framework to provide teachers with meaningful and frequent classroom observation feedback for improved practice. (4.1)
 - Observational feedback serves as the springboard to the enhancement of teacher development. By school leaders conducting frequent classroom visitations to inform teachers, they can provide meaningful feedback on how classroom practice is improving and influencing student academic performance. Administrators also observe student transitions and teacher interactions with student movement to ascertain teacher impact on the behaviors of students. School-wide bulletin boards display student work that is analyzed and assessed by teachers via rubrics and conferrals, providing school leaders another lens on teachers' instructional impact on student learning. During lunch-and-learns and common planning time, there is evidence of a paradigm shift in teacher language as they dialogue about instructional practices leading to more focused lessons that support student intellectual growth.
- Students and parents benefit from guidance and advisement support from school staff and after school external partners for the improvement of the students' academic and social emotional needs. (4.4)
 - School leaders make sure that families are informed of the school-wide expectations to ensure a genuine focus on academics, attendance, and behavior. Student conduct and class section sheets serve as guidance support structures for students' adherence to school policy. School leaders, teachers, and service providers, use the assessed areas in discussion with students, thus providing opportunities for self-reflection around individual improvement.
 - The school contributes to students' academic and social emotional growth by having "all teachers build relationships via one-on-one conversations and de-escalating issues with students in order to know who they are," and how to better support them. In addition, a variety of partnerships with community based organizations enhance students' skills in public speaking, sports, arts, and entrepreneurship, thereby providing outlets and safety nets that help students excel emotionally.

What the school needs to improve

- Ensure that the alignment between the curricula and the Common Core Learning Standards tasks is consistently rigorous and cognitively engaging for all students. (1.1)
 - School leaders and teachers who met during the summer and deconstructed the curriculum maps in place from the prior school year, honed in on the essential questions, and looked at resources, materials,

and assessments to align to the CCLS expectations. Because of this work and the Acuity assessment results, they developed school-wide skills-of-the-week in English language arts, math, and science. Discussions around the alignment between the curricula and the CCLS tasks take place at common planning sessions accompanied by professional development opportunities for teachers to immerse in the understanding of the Depth of Knowledge (DoK), and ways to incorporate words from DoK into their planning in order to produce rigorous student outcomes. However, although school leaders ensure teacher usage of data to target students in all ranges and modify tasks when necessary to meet students at their level of understanding by scaffolding and providing extra support, the quality and continuum of rigorous tasks and work products were inconsistent from classroom to classroom, thereby resulting in uneven levels of student cognitive engagement.

- Establish a consistent approach to the differentiation of instruction based on data and employ questioning techniques to meet students' needs at multiple entry points. (1.2)
 - School leaders and teachers meet regularly to discuss data and the modalities of lesson deliveries to specific cohorts of students in order to ascertain if there is sufficient addressing of students' instructional needs based upon the reviewed outcomes. Teachers request exit slips from students to gain a notion on their learning and wonderings. This feedback provides teachers and school leaders with vital information that guides them towards adjusting their lessons and/or taking different steps in the enhancement of lessons and planning of professional development. In spite of these structures, most teachers still struggle with strategies and questioning techniques, and the evidence of multiple entry points or multi-faceted instruction is limited, consequently, they still do not yet adequately address the differentiated needs of student subgroups.
 - Teachers meet frequently to analyze and discuss student work during common planning time. As they discuss the tasks, they collaboratively discern via review if student work provides a clear picture of the impact of their teaching strategies, questioning, and routines. Although there are rich discussions amongst teachers on their observations based on the student work brought to task, the level of work reflects inconsistent outcomes and is not well aligned to classroom discussion and expectations.
- Formalize the setting of learning goals for and by students that are precise and measurable so that there is student ownership and clarity on next steps towards mastery and independence. (3.2)
 - Teams of teachers collaboratively develop goals for students based on assessment results and share the data with school leaders and colleagues to ensure decisions reflect the prioritized goals to improve student achievement. Every teacher focuses on a cohort of students via inquiry to enhance students' learning. During gap analysis weekly meetings, teachers share backgrounds on students and their work, and provide wonderings as to students' interpretation of the task vis-à-vis established instructional goals for improvement. Although teachers discuss the implications for classroom practice, next instructional steps,

and takeaways at these meetings, the system to set data-informed goals for cohorts of students does not translate into consistent results in the acceleration of student learning. Therefore, learning goals are not yet suitably matched to the needs of students or lead to student progress towards meeting and owning set goals.

- Ongoing data analysis drives the organization of student flexible groups and setting of their learning goals. While students convene to work in these groups and are aware of their general struggles with specific content areas, they are not cognizant of their differentiated learning goals as a means to develop intellectual independence and mastery.
- Refine the current professional development opportunities to promote ongoing teacher reflection for the improvement of classroom practice that maximizes students' intellectual growth. (4.3)
 - Strategic professional development takes place in support of teachers' needs and for practices missing in classroom instruction, but is not differentiated. School leaders hold individual meetings with teachers to challenge their thinking around their teaching practice. However, teachers are at the developing stage in transforming the reflective theory into practices that would lead to increased student academic progress.
 - School leaders encourage teachers to engage in the vision of discovering the power of teaching and learning from within as a community of learners and leaders. Although staff members are challenged to evaluate and become instructionally assertive in their work, they are at the developing stage of this process and not yet sufficiently immersed in ongoing and meaningful self-reflection for self-improvement.
- Sharpen curricular improvement monitoring for instructional coherence from classroom to classroom in order to meet students' needs as well as the CCLS expectations. (5.1)
 - The principal assesses and compares teacher instructional practices across grades and content areas to ensure coherence. Teachers participate in ongoing learning walks to learn from each other. Student work on bulletin boards provides school leaders and teachers a scope and sequence of the school-wide learning continuum. While there is evidence of student work juxtaposed with rubrics that align with the CCLS expectations, and administrative monitoring of instruction, there is still a lack of consistency amongst practices so that instructional congruence does not yet permeate throughout the building.
 - Teachers use the Department of Education bundles and rubrics in support of students' mastery of the CCLS. As students are assessed, results are analyzed to ascertain students' areas of strength and those in need of focus. School leaders are beginning to reflect on the organizational decisions to see if there is an alignment between school-wide needs and the instructional expectations inclusive of what teachers need to learn in support of student achievement. Yet, these structures are still at the developing stage.

Part 3: School Quality Criteria 2011-2012

School name: The Science School for Exploration & Discovery	UD	D	P	WD
Overall QR Score		X		
Quality Statement 1 – Instructional and Organizational Coherence: The school has a coherent strategy to support student learning that aligns curriculum, instruction and organizational decisions.				
<i>To what extent does the school regularly...</i>	UD	D	P	WD
1.1 Design engaging, rigorous and coherent curricula, including the Arts, for a variety of learners and aligned to key State standards?		X		
1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best, and ensure that it is: aligned to the curriculum, engaging, and differentiated to enable all students to produce meaningful work products?		X		
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	
1.4 Maintain a culture of mutual trust and positive attitudes toward learning that support the academic and personal growth of students and adults?			X	
Quality Statement 2 – Gather and Analyze Data: School leaders and faculty consistently gather, analyze and share information on student learning outcomes to understand school and student progress over time.				
<i>To what extent does the school ...</i>	UD	D	P	WD
2.1 Gather and analyze information on student learning outcomes to identify trends, strengths, and areas of need at the school level?			X	
2.2 Align assessments to curriculum, use on-going assessment practices and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom level?			X	
2.3 Use grading policies and tools to enable school leaders and teachers to organize, aggregate, and analyze student performance trends to inform instruction and curriculum?			X	
2.4 Engage families in school decision-making, activities and an open exchange of information regarding students progress toward school and class expectations?			X	
Quality Statement 3 – Plan and Set Goals: School leaders and faculty consistently engage the school community and use data to set and track suitably high goals for accelerating student learning.				
<i>To what extent does the school ...</i>	UD	D	P	WD
3.1 Establish a coherent vision of future development that is reflected in a short list of focused, data-based goals that are understood and supported by the entire school community?			X	
3.2 Use collaborative and data informed processes to set measurable and differentiated learning goals for student subgroups, and students in need of additional support?		X		
3.3 Ensure the achievement of learning goals by tracking progress at the school, teacher team and classroom level?		X		
3.4 Communicate high expectations to staff, students and families, and support students and families to achieve them?			X	

Quality Statement 4 – Align Capacity Building: The school aligns its leadership development and structured professional collaboration around meeting the school’s goals and student learning and emotional needs.

<i>To what extent does the school...</i>	UD	D	P	WD
4.1 Use the observation of classroom teaching and the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection, with a special focus on new teachers?			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	
4.3 Provide professional development that promotes independent and shared reflection, opportunities for leadership growth, and enables teachers to continuously evaluate and revise their classroom practices to improve learning outcomes?		X		
4.4 Integrate child/youth development, guidance/advisement support services and partnerships with families and outside organizations with the school-wide goals to accelerate the academic and personal growth of students?			X	

Quality Statement 5 – Monitor and Revise: The school has structures for monitoring and evaluating progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.

<i>To what extent does the school...</i>	UD	D	P	WD
5.1 Evaluate the quality of curricular, instructional and organizational decisions, making adjustments as needed to increase the coherence of policies and practices across the school, with particular attention to the CCLS?		X		
5.2 Evaluate systems for assessing students, organizing data, and sharing information with student and families, making adjustments as needed to increase the coherence of policies and practices across the school?		X		
5.3 Establish and sustain a transparent, collaborative system for measuring progress towards interim and long term goals and making adjustments during the year and over time?		X		
5.4 Use data to regularly evaluate the effectiveness of structured professional collaboration, capacity building and leadership development strategies?		X		

Quality Review Scoring Key							
UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed