



The New York City Department of Education



Quality Review Report

Science Skills Center High School

High School 419

**49 Flatbush Avenue Extension
Brooklyn
NY 11201**

Principal: Denise Jennings

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Reviewer: Dee Wheatley

Content of the report

Part 1: The School Context

Information about the school

Part 2: Overview

What the school does well
What the school needs to improve

Part 3: Main Findings

Overall evaluation
How well the school meets New York City's evaluation criteria

Part 4: School Quality Criteria Summary

Part 1: The school context

Information about the school

Science Skill Center High School has 982 students enrolled in grades 9 through 12. Its numbers have risen substantially over recent years.

The majority of the students are Black (76%), which is well above the proportions in similar and City schools. Around 11% of the students are Hispanic, which is less than is found in other schools. Approximately 5% of the students are White and 5% are Asian. Two percent of the students are English language learners, the majority of whom are from Bangladesh. Five percent of the population are special education students. The school is not Title 1 eligible.

The attendance has dropped in recent years but is still above the City average and in line with that of similar schools.

Part 2: Overview

What the school does well

- Relationships are positive for the most part and the students like the school.
- The building runs smoothly despite significant overcrowding.
- The extra-curricular programs provide considerable enrichment to the curriculum.
- The support for special education students is effective although there is some variation in the quality of the teaching for them in mainstream classes.
- The guidance system works well in supporting students who are troubled.
- The school government representatives are excellent ambassadors for the school.

What the school needs to improve

- Improve the consistency in good quality teaching throughout the school.
- Develop the use of data to compare the school's overall performance, and that of particular groups, and differentiate the instruction effectively to meet needs.
- Enable the teachers to meet on a regular basis to share performance data, discuss achievement and plan strategies to promote the learning of those not making expected progress.
- Raise the expectations of student engagement and learning in class, providing clear rubrics, and consequences for misbehavior.
- Develop a shared vision for the development of the school involving the key stakeholders, and use it to shape the priorities within the Comprehensive Education Plan.

Part 3: Main findings

Overall Evaluation

This is an undeveloped school.

The school is safe and relationships are positive for the most part. However, overall it is not currently providing a satisfactory education for its students. Although there are some examples of good achievement and instruction, these are not sufficiently consistent throughout the school. The use of achievement data to drive improvements in instruction is still at an early stage of development. Lessons do not always engage the students and expectations of application to work are not high enough, which slows the learning. There is currently too little time for teachers to monitor and plan the learning jointly. There is also a lack of cohesiveness in the staff body regarding improvement strategies which is impacting on the school's development. More concerted action is needed by the senior team to address weaknesses.

How well the school meets New York City's evaluation criteria

Quality Statement 1 – Gather Data: School leaders and faculty consistently gather data and use it to understand what each student knows and is able to do and to monitor student progress over time.

This area of the school's work is undeveloped.

The school has substantial achievement data, at student, class and grade level, from external examinations such as the Regents and Advanced Placement tests, and it generates considerable further data through internal subject and other tests during each marking period. There is appropriate analysis of the data in regard to special education students and for the identification of individuals who are achieving below the grade level expectations. Overall, however, the use of the data to compare performance or drive instruction is at a very preliminary stage and is not yet effective. The school has identified some groups who are underachieving, but overall the school is not systematic enough in analyzing the data to identify whether all its key sub-groups, including its ethnic groups, its English language learners or its higher achievers, are performing as well as they could. The analysis of the school's overall effectiveness is not fully effective with relatively little use of key summative data to compare the school's performance with similar or City schools or to any trends or fluctuations against its own previous performance.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use available data to understand each student's next learning step. Through collaborative planning and student and parent engagement, they set high goals for improving teaching practice and accelerating each student's learning.

This area of the school's work is undeveloped.

While there are whole school goals and plans for improvement, these are limited in scope and effectiveness. There is the focus on individuals who are below benchmarks, as indicated above, but the goals and plans are not consistently applied to identified weaker groups. Although the school has identified that there are weaknesses in key areas such

as boys' achievement, and in some subject areas, such as United States history, these have not been identified as improvement priorities, with goals and action plans. Further, the collaborative processes in the school are weak, partly because the staff does not have sufficient time to meet and plan together on a regular basis. The overcrowded accommodation is a factor in this, necessitating staggered scheduling of student arrival and lunch arrangements. This means that opportunities for meetings of key staff groups, for example, subject staff, are very limited, with consequent impact on collaboration.

The students confirm that the guidance team provides good support for those who are troubled. Particular attention is given to the students in greatest need, for example, the special education students. A good new process has been set up by the assistant principal to ensure close support and monitoring of these students by the special education team, which includes a guidance counselor. The English as a second language teacher works effectively with newly enrolled English language learners. These students feel well supported by the English as a second language teacher. As with the special education students, the teaching of these students in mainstream classes is not of a consistently high enough quality. Sometimes these students struggle to comprehend the technical language used in other subject areas and often have to rely on other students for help.

Expectations of parents are appropriate for the most part. There is good liaison with the parents of special education students. Information for parents, including the regular reports, is satisfactory. However, the home school behavior contract lacks sufficient clarity and should be redrafted. The parents on the executive board are very committed to the school and are currently engaged in carrying out satisfaction surveys of parents to inform the school's self-evaluation processes.

Goals and plans are in place but are not yet driving all the members of the school community in a cohesive way. There is not a clear vision of the school's development which is shared, and being worked toward, by all. For example, currently, there are divisions amongst the staff, and lack of commitment by some teachers to the improvements which the administration is attempting to implement.

Quality Statement 3 – Align Instruction: The school aligns its instructional activity and resources, and student engagement around its focused plans for accelerating learning for each student.

This area of the school's work is undeveloped.

Three different curriculum pathways provide generally appropriate choices for students of different aptitudes. However, the curriculum is not wholly adequate at present to support the designation as a science school. Achievement in science is better than in other core areas for the most part but the high achievement in science, mathematics and technology which might be the reasonable expectations of parents, is not manifested at present. There are too few Advanced Placement courses overall, and insufficient science programs at both Advanced Placement and lower levels. For example there is no physics available to grade 9 or 10. However, the school plans to increase the number of Advanced Placement classes next year. The lack of an English curriculum this year is unsatisfactory. New teachers in particular, have found it very difficult to cope without a proper curriculum framework and the extra planning this necessitated. The school augments the curriculum well with extra curricular programs, such as college access programs, which enhance the achievement of many.

The teachers are not sufficiently accountable for the quality of instruction, and achievement. There is not enough expectation and challenge in the instruction, although there are examples of strong teaching, particularly in science. Currently, subject teachers

have common planning time for less than 40 minutes every two weeks, which is insufficient to enable the in-depth discussion required to track progress, and refine instruction strategies to improve learning. Hence, the use of data to differentiate and tailor the teaching to the needs of the different ability groups in their classes is undeveloped overall.

Budgeting, staffing and scheduling decisions are, for the most part, driven by the needs of the students. For example, there has been appropriate reallocation of resources and staffing to improve the support of special education students. Further, achievement data is used appropriately to place students in classes. For example, those who enter the school below grade level in English and mathematics are scheduled for double periods to bring them up to expected levels. Successful grant applications, augmented by school funds, have supplemented technology resources but these are still not sufficient for a school of this size and designation.

Instruction does not engage the students sufficiently, overall. There are examples of better teaching in Advanced Placement classes for instance in mathematics and science, and in some electives, such as forensics. Expectations of concentration and application are not high in many classes, however. Occasionally, objectives are not clear, and classroom environments are not satisfactory overall. Rubrics are often not displayed at all or cannot be read easily. Strategies for differentiating work are limited, with consequent impact on the progress of students.

The staff know and respect the students and the students are positive about the care that the teachers, and the guidance staff, provide. They feel safe in the school. The representatives of the student government are excellent ambassadors for the school, being confident, articulate and clear aspirants to college.

Student attendance is given appropriate priority, triggering immediate follow-up. However, there is a considerable problem with tardiness to class throughout the day. The students often stand in the corridors chatting with relatively little sense of urgency about getting to class. The expectations and follow-up on this are not rigorous enough.

Quality Statement 4 - Build and Align Capacity: The development of instructional leadership, staff, and capacity are aligned around the school's collaboratively established goals for accelerating the learning of each student.

This area of the school's work is undeveloped.

The process for the selection of staff is appropriately focused on teacher knowledge and expertise but does not include particular focus on the use of data. A wide range of professional development opportunities have been provided in regard to effective teaching and learning, including a focus on differentiation. However, it is clear that neither the time provided for this, nor the approaches used, have been effective in enabling the staff to explore the implications sufficiently or commit to using them in their teaching. This is contributing to the continued weaknesses and inconsistencies in the teaching.

The principal, and assistant principals, observe lessons and give clear feedback on weaknesses, particularly in regard to class management issues. However, this is not wholly effective in raising the work ethic in several classes. Walkthroughs by the administration are not rigorous enough in evaluating the impact of the teaching on the learning in the classes observed. In addition, the teachers do not have sufficient opportunities to engage in inter-visitations to share practice and learn from each other.

Goals and plans are revised in response to assessment and other data to some extent but overall this process is not effective at present.

The principal is dedicated in approach. She is knowledgeable and draws well on the research to inform school improvement strategies. However, she and the senior team do not provide sufficient clarity about the use of data to drive improvements in instruction, and to raise expectations. As seen above, there is much to do, too, to provide cohesiveness in the staff body. This includes ensuring that staff who are resisting improvements are clear that the first priority for everyone must be the quality of learning of the students.

The school runs smoothly by and large. It is friendly and safe. However, students move slowly and they lag in corridors between classes. Good enrichment of the learning is provided through a wide range of extra-curricular opportunities which become increasingly available as the students move up the school. Students speak enthusiastically of the opportunities they have been provided. For example, one boy attended a bio-medical symposium in Texas, while an entrepreneurship grant enabled another to start a business. Several students are enabled to take up internships during the summer. The students are proud that the school came 11th in the National Robotics competition last year.

Quality Statement 5 - Monitor and Revise: The school has built-in structures for evaluating each student's progress throughout the year, recognizing weaknesses in its improvement plans and teaching practices, and flexibly adapting plans and practices to meet its goals for accelerated learning.

This area of the school's work is undeveloped.

The Comprehensive Education Plan has been adapted and provided with some key priorities which make it more accessible and focused. However, while the goals are reasonably ambitious, they do not focus sufficiently on priorities arising from self-evaluation data. For example, boys' under-achievement is not explicitly addressed in the Comprehensive Education Plan even though the data clearly shows it is an issue. The quality of the benchmarks provided also varies across the subjects.

The reviewing of plans and goals is not incisive enough overall. However, there is evidence of developing practice, such as the adjustments to the grouping and scheduling of students falling below expectations.

Overall, the school's monitoring and evaluation of quality is unsatisfactory owing to lack of time for teacher collaboration and review, and not enough rigorous follow up of the expectations that have been made of staff and students.

Part 4: School Quality Criteria Summary

SCHOOL NAME: Science Skills Center High School (HS 419)	∅	✓	+
Quality Score	X		

Quality Statement 1 – Gather Data: School leaders and faculty consistently gather data and use it to understand what each student knows and is able to do and to monitor student progress over time.	∅	✓	+
1.1 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> • each student, classroom, grade level, 		X	
1.2 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> • ethnic groups, English Language Learners, special education students* 	X		
1.3 The school uses available data and generates its own data to provide an objective, constantly updated understanding of the performance and progress of: <ul style="list-style-type: none"> • all other categories of interest to the school* 	X		
1.4 Performance and progress are measured based on comparisons with similar schools, with the school's own past performance, and among students, classrooms, grade levels, academic subject areas, ethnic groups, and other groupings of interest within the school.	X		
Overall score for Quality Statement 1	X		

* These criteria are partially aspirational as of now because schools do not have routine access to all of this data. The NYC DOE plans to provide schools with enhanced access to the necessary data in 2007.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use available data to understand each student's next learning step. Through collaborative planning and student and parent engagement, they set high goals for improving teaching practice and accelerating each student's learning.	∅	✓	+
2.1 Using data, school leaders and faculty engage in a collaborative process to set demanding, objectively measurable goals for immediate and long-range improvement, and to develop plans and timeframes for reaching those goals.	X		
2.2 Goals and plans focus on the school as a whole and on each student, classroom, grade level, academic subject, and group of students whose performance or progress has been identified by the school as a particular focus area.	X		
2.3 Particular attention is given to improving the performance and progress of students in greatest need of improvement.		X	
2.4 High expectations are conveyed to students and parents/caregivers. Students and their parents/caregivers are regularly invited to provide information about each student's performance and how to improve. This information is central to setting challenging goals and developing, evaluating, and revising plans.		X	
2.5 Goals and plans for improving student performance and progress drive the activity of all members of the school community: leaders, staff, students, parents, and other partners.	X		
Overall score for Quality Statement 2	X		

Quality Statement 3 – Align Instruction: The school aligns its instructional activity, resources, and student engagement around its focused plans for accelerating learning for each student.	∅	✓	+
3.1 The school selects the curriculum based on how well it aligns with or implements the mandated curriculum and on the curriculum's capacity to generate meaningful interim data about progress towards goals and to support the school's high expectations and improvement plans.	X		
3.2 Teachers are accountable for improving instruction and student outcomes. They plan and differentiate their instruction based on the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.	X		
3.3 Budgeting decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.		X	
3.4 Staffing decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes.		X	
3.5 Scheduling decisions about the use of teacher and student time are guided by the needs that emerge from examining student data and by the focused plan the school develops to improve student outcomes.		X	
3.6 Instructional programs actively engage students.	X		
3.7 Staff know and respect students and respond to their academic needs, as well as their personal needs that affect academic performance. Each student knows and trusts an adult on the staff who is concerned about him or her.		X	
3.8 Student attendance and engagement are high priorities. High rates and patterns of absences trigger immediate intervention.	X		
Overall score for Quality Statement 3	X		
Quality Statement 4 – Build and Align Capacity: The development of instructional leadership, staff, and capacity are aligned around the school's collaboratively established goals for accelerating the learning of each student.	∅	✓	+
4.1 Leaders, faculty, and staff are selected based on their high expectations for student performance and progress and based on their commitment and capacity to use data, compare outcomes within and across classrooms and schools and develop and revise plans and methods to improve performance and progress.	X		
4.2 Professional development decisions are driven by the needs revealed by student data and by the focused plan the school has developed to improve each student's and group of students' outcomes. Professional development is designed to help leaders, faculty, and staff use data, self- and peer-assessments, and collaboration with peers to achieve goals for improved school and student outcomes. Professional development and self- and peer-evaluation are aligned and overlap.	X		
4.3 The principal frequently observes classroom teaching and has a considered strategy for improving the quality of each teacher's instruction. Teachers frequently observe and support each other's classroom instruction with the goal of improving student outcomes.	X		
4.4 Planning, evaluation of results, and revision of plans takes place in teams. Leaders and faculty inform each other of their goals and results, candidly evaluate themselves and each other, and use what is learned to drive improvement.	X		
4.5 The principal is respected and has capacity to effect change.		X	
4.6 The school runs smoothly. Procedures are clear, communicated to all, and are generally followed.		X	
4.7 The school aligns youth development and support services around stated academic goals. Partnerships with outside bodies are routinely used to achieve academic goals.		X	
Overall score for Quality Statement 4	X		
Quality Statement 5 – Monitor and Revise: The school has built-in structures for evaluating each student's progress throughout the year, recognizing weaknesses in its improvement plans and teaching practices, and flexibly adapting plans and practices to meet its goals for accelerating learning.	∅	✓	+
5.1 All school plans and other interventions include frequent interim goals and diagnostic assessments of progress designed to reveal in objectively measurable ways whether the plan is being effectively implemented and reaching stated goals.	X		
5.2 Comparisons of student progress within and across classrooms and schools are used in making interim diagnostic assessments and measuring the progress of plans and interventions.	X		
5.3 Information generated by periodic assessments and diagnostic measures of progress and comparisons is used to revise plans immediately in order to reach stated goals. Interim and final goals are modified when data objectively demonstrate that revision is required.	X		
5.4 Each plan's interim and final outcomes drive successive phases of goal setting and improvement planning, and each successive phase is characterized by agile and flexible realignment of practices and resources to improve student academic outcomes.	X		
Overall score for Quality Statement 5	X		