



The New York City Department of Education



Quality Review Report

**Science Skills Center High School for Science,
Technology and the Creative Arts**

High School 419

**49 Flatbush Avenue Extension
Brooklyn
NY 11201**

Principal: Denise Jennings

Dates of review: May 19 - 20, 2008

Lead Reviewer: Mary Crampsie

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

Progress made since the last review

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

The Science Skills Center is a high school with 969 students from grade 9 through grade 12. The school population comprises 82% Black, 11% Hispanic, 1% White, and 6% Asian students. The student body includes 4% English language learners and 9% special education students. Boys account for 55% of the students enrolled and girls account for 45%. The average attendance rate for the school year 2006-2007 was 86.1%. The school is not in receipt of Title 1 funding.

The school is located on an overcrowded site with restricted space. Opportunities for sports are restricted due to the physical limitations of the gymnasium.

Part 2: Overview

What the school does well

- School leaders and faculty work hard to gather a range of data to identify and improve the performance and progress of those students in greatest need.
- The inquiry team is effective and the principal has used its findings strategically to inform better curriculum and instruction for the wider student body.
- The principal has made some sensible staffing and scheduling decisions to improve students' personal and academic goals.
- Youth development, guidance and other student support services are aligned around academic and personal development goals.
- The school's efforts to reduce tardiness and increase attendance are beginning to make a difference.
- The school has developed some strong partnerships with outside entities that support the academic and personal growth of students.

What the school needs to improve

- Ensure that there is an objective, constantly updated understanding of the progress of English language learners.
- Ensure that management systems support teachers in the use of school data to inform planning and track student progress.
- Hold teachers accountable for the progress and learning of students in their charge and for making instruction interesting and compelling.
- Establish an environment of mutual trust and respect between all staff.
- Set rigorous and objectively measurable whole-school and interim goals in order to track progress and evaluate the impact of the school's actions on student achievement.
- Review and improve communication systems so that all members of the school community understand and commit to achieving school goals.

Part 3: Main Findings

Progress made since the last review

The school has made little progress in addressing the issues identified in the previous Quality Review report.

Overall Evaluation

This school is an underdeveloped school.

School leaders work very hard to gather a range of achievement data at student, class and grade level. However, they do not yet have an objective understanding of the progress of English language learners. While administration and faculty set goals, these are not yet sufficiently rigorous or objectively measurable and limit their ability to evaluate the impact of their actions on student achievement. Members of the inquiry team work collaboratively and successfully. They focus on the needs of students in the bottom third of achievement, in order to target weaknesses with specific instructional strategies. They track these students carefully to assess the impact of intervention strategies and use what they learn strategically to improve wider student achievement. School leaders are aware of core messages from the data and know what the trends are for groups of interest to the school. They present this data to teachers, but in a variety of formats which are not always easily understood.

The school has begun to address deficiencies in the curriculum. While there has been some improvement, the curriculum continues to be too narrow and does not fully engage students. Problems of scheduling have been addressed, but not completely resolved. There are effective procedures to encourage and monitor attendance. Some teachers support the school leadership's commitment to using data to identify student needs, while others remain resistant. Consequently, in many classrooms instruction is not sufficiently differentiated to meet the needs of students with different levels of achievement.

Training and management systems are in place but are ineffective in improving the degree to which teachers use data to track the progress of students. The principal has introduced a program of formal and informal classroom observations, followed by feedback. Professional development activities include opportunities for inter- and intra-visitations, but are regarded as of variable quality by some teachers. The school usually runs smoothly and attendance is generally good. Effective partnerships with a range of outside entities support the academic and personal growth of students. Links with parents are an area of concern for the school.

There has not been enough progress since the last review. Communications and aspects of organization continue to be weak and strategic appointments have not resulted in improvement. The principal and administration have worked very hard. They have made a number of strategic decisions which have been undermined by difficult relationships with many teachers in the school. This remains the major barrier to school improvement.

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 the student's progress over time.

This area of the school's work is underdeveloped.

The school gathers a wide range of internal and external data to identify and improve the performance and progress of individual students. They gather this from external examinations and from internal subject and other tests. School leaders maintain and regularly update student data based on a range of diagnostic, periodic and predictive assessments. The use of this at classroom and grade level is inconsistent across the school as school leaders do not always articulate key messages from the data.

The inquiry team focuses on the lowest achieving students and is effective in gathering and understanding the data. As a result, cabinet members understand trends in the data, including those which affect sub groups. Data revealed that a large number of special education students failed to achieve in line with expectations last year, so they have taken action to address this. The school is proud of the achievement of individual English language learners. The allocation of resources, including bilingual adults, helps support these students' learning, but leaders do not have a sufficiently objective understanding of these students' performance and progress. School leaders are aware that boy's achievement is also an issue and have introduced programs, such as Public Color, which are designed to develop self esteem.

School leaders provide data to teachers, who keep it in assessment folders in their classrooms. These are updated regularly and include data on learning styles and multiple intelligences, which is used to inform instruction. Leaders identify problems in relation to specific areas of the curriculum such as algebra, but are not yet able to predict outcomes with any certainty. The school collects and analyzes data from other schools in relation to attendance, in order to compare performance. Management systems and structures to support teachers in the use of school data to inform planning have been put in place, but have proved ineffective. Training has taken place but perceptions of its usefulness vary.

Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use data to understand each student's next learning steps and to set suitably high goals for accelerating each student's learning.

This area of the school's work is underdeveloped with proficient features.

Cabinet members work well together and there is effective collaborative work in the inquiry team. The amount of common planning time has been improved, although scheduling problems still prevent grade teachers from planning together. As a result, collaboration at grade level is weak and prevents rigorous and objectively measurable goal setting. Teachers use data effectively to highlight the needs of groups of students. For example Acuity revealed gaps in student knowledge: "Things we thought they knew, but didn't."

The administration responds flexibly to needs which data analysis identifies. For example, a group of special education students in the general education population, identified as failing, were rescheduled as a discreet class. Planning and instruction are now effective in motivating and engaging them, and students benefit from the close liaison between the school and their parents. In contrast, outcomes from the collaborative team teaching

classes are inconsistent. Long-term and interim goals in students' individual education plans are expressed in terms that are too general, lack rigor and are not easily measurable. Science teachers encourage student self assessment using tools such as School Island, but this has not taken root more widely.

Whole school goals and expectations are not shared effectively with all members of the school community. The result is that some teachers are motivated and working well, while others do not focus on the needs of students. Nevertheless, students believe that their teachers want the best for them and that they have high expectations. While the Learning Environment Survey indicates that parents are dissatisfied with communication systems at the school, the two parents who met with the reviewer were wholly positive and supportive of the work of the school.

Quality Statement 3 – Align Instructional Strategy to Goals: The school aligns its academic work, strategic decisions and resources, and effectively engages students around its plans and goals for accelerating student learning.

This area of the school's work is underdeveloped.

The core curriculum provides interim data about progress and the achievement of students. However, the curriculum is inadequate and the principal has tried to address this by introducing advanced placement courses in biology and English. The curriculum lacks breadth, does not engage students who also report that courses do not meet their needs. They would like more technology, sports and a wider range of electives. The gym is inadequate as it has large pillars obstructing any free flow sport, and any activity requiring height is in danger of setting off the sprinkler system. However, there is a dance studio, and the wonderful high energy dance program has been recognized as one of the best in the City.

The cabinet tries to hold teachers accountable for the progress and learning of students, but with varying degrees of success. A teacher was late for his lesson and did not offer an explanation or apology. Another had made an informal arrangement with a colleague to cover her lesson without informing the administration. High levels of sickness and personal tragedies amongst staff have had a negative impact on teacher attendance.

Students respond well to classes that are well planned and structured and are clearly engaged and motivated. The differentiated instruction in these classes is excellent, but in a high proportion of classes the work is the same for all students, and worksheets are uninspiring. School leaders are aware that the lack of uniformity in the school grading policy is a weakness and there is resistance to the use of technology. Work on the development of common rubrics and strategies such as word walls, have been more successful.

The principal has made some good budgeting and staffing decisions such as purchasing the Wilson program and employing an additional teacher to work with English language learners. She has also responded effectively to the outcomes of the inquiry team. She has been less successful in ensuring that there is an environment of mutual trust and respect between staff. Too many staff are resistant to change and do not support leaders efforts to raise achievement. School leaders monitor attendance and tardiness carefully and have established effective procedures which address any issues. Corridor displays and charts celebrate and reward regular attendance. As a result, tardiness has improved, students generally move quickly to lessons and attendance is in line with expectations.

Quality Statement 4 - Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school's collaboratively established goals for accelerating the learning of each student.

This area of the school's work is underdeveloped with proficient features.

The principal has established a program of formal and informal classroom observations with feedback and a differentiated strategy for improving the quality of teaching. She has introduced the California professional teaching standards and teachers set professional goals at the beginning of the academic year. Professional development is encouraged, but there is no formal system to analyze its effectiveness and teachers suggest the quality of training is variable. Opportunities for intervisitations have been increased but some teachers are unconvinced of its usefulness. Systems to support new teachers are in place and appreciated. There is a helpful "New Teacher Guide". The principal has also tried to set up a mentoring system.

Youth development is a strength of the school. Students spoke enthusiastically about the opportunities offered by the SPARK program. Effective work with boys and girls builds their self-esteem and offers an exciting range of internships and placements. These include Friday night film screenings at the Museum of Modern Art and free Kaplan SATs preparation courses. The guidance team is effective in providing support for troubled students. The school generally runs smoothly, although teachers suggest that the start to the academic year is often "rocky" and feel that lessons are interrupted too frequently by announcements. Students expressed some concern about discipline and wanted more access to guidance. Effective partnerships with a range of outside agencies such as the Yale Child Study, Robotics team and Enrichment Special Programs support the academic and personal growth of students.

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

This area of the school's work is underdeveloped.

Plans to improve student outcomes are not incisive enough and interim goals are not objectively measurable. They do not contain time frames which would assist in measuring outcomes. The school's plans to improve teacher outcomes include goals, although there are a high number of disciplinary procedures. Teachers use periodic assessments and diagnostic tools such as Acuity to change plans for groups of students such as special education students. Teachers and administrators look at pass/fail rates and create plans to change their instruction. However, school leaders are aware that they need to achieve much greater consistency across the school.

The conscientious work of the inquiry team has led to successful initiatives such as credit recovery classes, common planning time, gender-specific mentoring classes and the expansion of extra-curricular classes. The principal now intends to set up four inquiry teams with sixteen teachers, each tracking the achievement of 250 students to measure the effectiveness of interventions for individuals and some groups of students. It is too soon to judge the impact of this.

The principal has a vision that every student can go to Harvard or certainly qualify for college. However, school leaders struggle to articulate a sufficiently clear vision for the future development of the school which is understood and shared by the wider community.

Quality Statement 4 – Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school’s collaboratively established goals for accelerating the learning of each student.					
To what extent does the school . . .	Δ	➤	✓	+	◇
4.1 use frequent observations of classroom teaching by the principal and other available information to develop a differentiated strategy for improving the quality of each teacher’s instruction?		X			
4.2 make professional development decisions strategically, based on data, to help meet the improvement goals of students and teachers?		X			
4.3 provide frequent opportunities for teachers to observe each other’s classroom instruction and to meet together in teams to plan, share effective practices, and evaluate one another’s instruction in an open and reflective professional environment?		X			
4.4 develop effective procedures for the induction and support of teachers who are new to the profession or the school?		X			
4.5 align youth development, guidance/advising and other student support services around stated academic and personal development goals?			X		
4.6 consistently implement clear procedures that enable the school to run smoothly and encourage effective student learning, and effectively address discipline related incidents?		X			
4.7 create effective partnerships with outside entities that support the academic and personal growth of the students?			X		
Overall score for Quality Statement 4					
		X			

Quality Statement 5 – Monitor and Revise: The school has structures for evaluating each student’s progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.					
To what extent do . . .	Δ	➤	✓	+	◇
5.1 the school’s plans for improving student outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?	X				
5.2 the school’s plans for improving teacher outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?		X			
5.3 teachers and faculty use periodic assessments and other diagnostic tools to measure the effectiveness of plans and interventions for individual and groups of students in key areas?		X			
5.4 teachers and faculty use the information generated by periodic assessments and other progress measures and comparisons to revise plans immediately in order to reach stated goals?		X			
5.5 school leaders track the outcomes of periodic assessments and other diagnostic measures and use the results to makes strategic decisions to modify practices to improve student outcomes?		X			
5.6 school leaders and staff use each plan’s interim and final outcomes to drive the next stage of goal setting and improvement planning?		X			
5.7 the principal and school community have a clear vision for the future development of the school and implement procedures and systems to effect change?	X				
Overall score for Quality Statement 5					
	X				

◇	Outstanding
+	Well Developed
✓	Proficient
➤	Underdeveloped with Proficient Features
Δ	Underdeveloped