



The New York City Department of Education



Quality Review Report

**Academy for Environmental Science Secondary
School**

Middle School/High School 635

**410 East 100 Street
New York
NY 10029**

Principal: David Grodsky

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Reviewer: Barry King

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

The Academy is a neighborhood school taking most of its students from its immediate locality in East Harlem. It has undergone various changes in mission and grade level over the course of time. Its designation as a grade 6 through 12 school started in 2005, after a period when it was a high school only. It has 712 students enrolled but they are not evenly spread through the grades, since numbers decline from grade 9 through 12 as students drop out. Raising retention and graduation is a major goal of the school.

Approximately two-thirds of the students are Hispanic and one-third is Black. Other ethnic groups are represented in very small numbers. A little fewer than 10% are special education students and almost 5% are English language learners. The main language spoken other than English is Spanish. Over 90% of students are eligible for Title 1 funding, which is higher than the City average. The students' attendance over the past four months has been 89.1%, which is above the City average for 2005.

The building is shared with a school for gifted and talented students, which occupies the top floor. The school is a Beacon site for use as a community base.

Part 2: Overview

What the school does well

- The staff provide friendly personal support for the students, which is appreciated by them.
- The principal's measured leadership is resulting in step-by-step improvements to the school, such as recruiting staff with a willingness to improve their practice.
- The school has a professional development team that is valued by the teachers.
- Teamwork and collaboration in planning are becoming stronger features of the way the school runs.
- The goals in the Comprehensive Education Plan are based upon an accurate interpretation of data, support the school's improvement and are regularly reviewed.
- Budgeting, staffing and scheduling decisions, and partnerships with outside bodies, are aligned to the needs of the school.
- A new and supportive parent/teacher association has been established.
- Policies to improve attendance have been successful.

What the school needs to improve

- Use data more effectively throughout the school to analyze students' performance.
- Set clear, measurable goals for improving students' achievements and communicate these to the relevant stakeholders.
- Improve teaching to make it more engaging for the students and better differentiated to meet their needs.
- Align the curriculum more fully to the needs of the students.
- On the basis of higher expectations than currently exist, clarify and establish basic routines of behavior, appearance and preparedness that all students must follow.
- Improve communication between the administration and staff and students and, as part of this, ensure the school's leaders have a stronger physical presence around the school.

Part 3: Main findings

Overall Evaluation

This is an undeveloped school.

The school has performed poorly in recent years. The new principal and the leadership team he has put together are making steady improvements based upon an accurate evaluation of how well the school is doing. Professional development is now much stronger following the recruitment of more coaches. The hiring of many new teachers has brought more commitment to improving instruction. Tangible improvements are seen in renovations to the building. A start has been made in generating more parental support. Attendance is getting better.

However, there is still a long way to go. The changes have so far had little impact on the students' achievement. The faculty does not gather and use data adequately to identify the progress of students and set clear and well judged goals for them. Instruction is not differentiated. Lessons, and the classrooms in which they take place, do not interest and engage the students sufficiently. The curriculum, though improved, still has deficiencies. Communication between the administration and other staff is not good enough. Basic routines that underpin effective learning are not in place. These are challenging issues that need addressing urgently, but the school's track record of improvement and its accurate understanding of its current weaknesses demonstrate that it has the capacity to do this.

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 does not have a well-embedded culture of gathering data to assess students' performance. At the classroom level, especially in the higher grades, there is too much focus on what students have covered rather than how well their skills and understanding have progressed. The school diagnoses achievement through periodic testing, but does not adequately generate its own data on the students' day-to-day progress that would inform goal setting and the alignment of instruction. Since at the student level there is insufficient data gathered, accurate assessments of class and grade performance cannot be aggregated.

The school has a satisfactory knowledge of the proficiency of its English language learners but has the same lack of detailed knowledge of the progress of its special education students as of those in general education. The progress of different ethnic groups is not systematically analyzed.

The use of data is, however, improving, and this is best seen in the work of the school's leaders, who use data to make accurate assessments of the school's overall performance. The administration is focused on the extent to which its goals set out in the Comprehensive Education Plan are reached. For example, it has a priority to raise

attendance and gathers data that indicates how well students are responding. The administration, recognizing the poor performance of the school in the past, pays attention to how well it is improving year by year. The leaders use data to analyze the performance of individual subjects, and have taken soundly judged action on the basis of this. However, the comparison of the school's performance against similar schools is not done methodically.

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.

The setting of goals is a weak feature of the school's work at the level of the individual student. This reflects the lack of adequate data on which to determine the goals and the associated instruction. Learning objectives in lessons do not focus strongly on specific outcomes and are not customized for individuals or groups of students to reflect their existing levels of mastery. The administration has made arrangements to reduce the isolation of teachers and to encourage them to work collaboratively in setting goals, but this aspect of the school's work is at an early stage of development.

The Comprehensive Education Plan contains well-focused priorities and has clearly measurable goals set in realistic timeframes. These goals drive the administration's decisions on how to improve the school. However, they do not drive the work of the school as a whole, since the whole-school goals have not been communicated to the faculty. Staff say that they are not clear about the direction the school is taking. The lack of specific goals of the right sort for individual students means that the school is only at the beginning of the process of establishing well-grounded and agreed goals for each class, for which teachers can aim and be held accountable for reaching. The school regularly informs parents of their children's progress and has established a parent/teacher association that is enthusiastic about its work, but it knows it has a long way to go in getting parents to work in close partnership to support the school's intentions. The school uses the data that it has to establish goals and programs for students in greatest need of improvement but the goals are not sharp enough. For example, those set for special education students vary significantly in precision. The school is taking steps to establish goals and associated provision for English language learners but these are not yet in place. With the exception of the work in a few classes, expectations are low. Students are not challenged sufficiently in their academic work and lack of clear goals means that they proceed at too leisurely a pace. More generally, the basic routines that students should observe in their behavior, appearance and preparedness for lessons are poorly established.

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.

The school has recently taken steps to bring the curriculum into line with its mandate and has realigned important elements of it to meet the needs of students better, for example in mathematics. However, much work still has to be done. Curriculum plans are not firmly in

place for all subjects and all grades. There is still weak provision for specific groups of students, for example the English language learners. Despite the school's name, practical work in science is severely hampered by the lack of any laboratories, although a bid has been successful in securing funding to improve this. The range of, and participation in, after-school activities is felt by staff and students to be too small.

The quality of classroom instruction is not adequately aligned to students' needs, with little differentiation to connect with their past learning. Much of the teaching does not engage the students sufficiently through approaches that excite their imagination or get them actively involved in discussion. Some classrooms are poorly organized and untidy. Classroom management does not consistently enforce basic classroom routines.

Budgeting, staffing and scheduling decisions are soundly based and the school is, step by step, moving from a very low base to provide a better education. For example, it has replaced defunct computers in the information technology room. Changes in staff deployment have been made to help to enable teachers to work in both middle and high school grades. Scheduling now allows better opportunities for collaboration.

Students appreciate the friendly support they get from teachers and feel that they have someone to turn to if they are in difficulty. They do not, however, feel that their persons and property are safe enough in the building. Their behavior is generally satisfactory but they have not been taught how to adopt scholarly attitudes towards their work and they do not have them.

Raising attendance has been a priority, particularly since large numbers of students have not attended in the afternoon. The school has implemented many policies to deal with this, such as appointing a full-time attendance teacher and adjusting lunch arrangements, and this has brought afternoon attendance much closer to that for the morning.

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 proficient

Changes in staffing over the past 18 months have allowed the recruitment of teachers more willing to reflect upon their methods of instruction and realign them. Professional development has been much strengthened by the appointment of a cadre of coaches, whose support the teachers appreciate. The professional development of teachers is aligned to the need to improve the use of data to set goals and align instruction, but the impact of this is inconsistent between teachers and slower than the school's leaders would like. The principal has a good grasp of the quality of teaching and what needs to be done to improve instruction and the records of his lesson observations are clear and evaluative. However, the program of formal and informal lesson observations conducted by the principal and his assistant principals is not extensive enough given the limitations in instruction techniques. Good teamwork exists in the school at the senior level, in the way the principal collaborates with other members of the administration and the coaches to review progress and take decisions. This does not yet extend to the staff as a whole, who feel that they are not listened to enough. As one said, 'we are not all in this together'.

The principal is respected by the staff for his thoughtful approach to considering and implementing change. He has, in an incremental way, made a perceptible difference to what the school provides. Of necessity, he has had to spend much time on urgent

matters. This has had the effect of creating the feeling among staff and students that he and his two assistants do not have enough physical presence around the school. Teachers also feel that communication to them about important matters is not full or swift enough. The day-to-day running of the school is not as smooth as it should be as students and staff do not all share clear expectations of how the students should move around the school and present themselves in class. The school has a satisfactory range of partnerships with outside bodies to support its goals.

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 proficient.

The administration keeps watch over the school's progress and uses data to redefine its goals and adapt its policies. For example, the policies to improve attendance have been modified in the light of their impact. As a further example, it has proved slower than expected to create a culture in which data are regularly used by teachers to analyze their students' progress and this has led to the move from three to six marking periods as a way of injecting more data into the planning process. The Comprehensive Education Plan is a 'living document' in the sense that it sets the course that the school is taking and the school has used it as a benchmark for monitoring progress. Interim and final assessments of students' performance are used to evaluate the effectiveness of strategies to improve achievement.

However, this diagnostic approach to performance does not permeate to all levels of the school. The faculty's lack of awareness of the goals in the Plan means that teachers do not use it as a way of measuring their own contribution to the school's improvement. At the level of the individual student and classroom, data is not generated to give an accurate record of the development of students' skills and understanding. In turn, this means that classroom teachers do not emulate the approach of the senior team in using data to refine goals and instruction. An exception to this is the evaluation of intervention strategies for students at risk of falling behind, where a closer oversight is kept of their progress.

In summary, the school has good models of using data to drive goal setting and provision at the senior level in the school but this approach is not embedded throughout it.

Part 4: School Quality Criteria Summary

SCHOOL NAME: Academy of Environmental Science Secondary School (MS/HS 635)	∅	✓	+
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	