



NYCDOE

Quality Review: Final Report

The New York City Department of Education



Quality Review Report

The Academy of Environmental Science

Middle - High School 635

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

Principal: David Grodsky

Dates of review: April 30 - May 2, 2008

Lead Reviewer: Peter Williman

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Part 1: The school context

Information about the school

The Academy of Environmental Science Secondary High School is a middle-high school with 644 students from grade 6 through grade 12. The school population comprises 33% Black, 65% Hispanic, 1% White, and 2% Asian students. The student body includes 6% English language learners and 10% special education students. Boys account for 54% and girls account for 46%. The average attendance rate for the school year 2006-2007 was 87.8%. The school is in receipt of Title 1 funding with 68% eligibility.

Part 2: Overview

What the school does well

- The principal has a calm purposeful leadership style which sets a tone to the school.
- The principal has a clear understanding of the stages and priorities necessary to secure constructive school development.
- The principal modifies strategic plans effectively in the light of qualitative and quantitative school data.
- The administration has a high profile around the school and this promotes good relationships, respect and a positive environment for learning.
- The administration and faculty demonstrate very clear commitment to promoting the social and academic welfare of students in greatest need of improvement.
- Budgeting, staffing and scheduling decisions are effectively applied to support the school's priorities.
- Formal and informal professional development is aligned to the school's development plans and effectively supports teachers new to the school.
- Strategies to promote improved attendance in school and classes together with punctuality are contributing to positive gains.
- Effective and relevant partnerships are in place to support students' academic and social development.

What the school needs to improve

- Formulate the recording and analysis of data to be systemic, accessible and systematic to inform planning at all levels and to guide instruction.
- Establish realistic, objectively measurable, interim and final goals in all school plans, based upon student data and including clear time frames.
- Develop more compelling and engaging lessons through the differentiation of instruction to meet the learning styles and needs of students.
- Ensure that goals at school, grade, classroom and student levels are clearly and relevantly communicated to constituent community members.
- Further develop curriculum plans to enable closer monitoring of student progress and achievement during instruction.

Part 3: Main Findings

Progress made since the last review

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

Overall Evaluation

This school is underdeveloped with proficient features.

The Academy of Environmental Science has continued the momentum of its development from the time of the previous review. Progress has been made towards achieving some of the improvement points, while others remain as ongoing themes. The high profile of the principal and his assistant principals around the building results in generally orderly and respectful behavior. Their management styles and interpersonal skills have strengthened relationships for both staff and students. Parents feel more welcome. Closer monitoring is improving attendance and punctuality. Improved decoration in hallways promotes respect for the environment. The new sports field provides new interests and challenges for students. Students anticipate the benefits of the newly completed science laboratories. The unexpected decision, in the fall, to phase out the middle school disrupted morale and strategic planning. However, the principal has begun to modify his focus for whole school plans. This reflects his calm purposeful leadership to move the school forward through improved achievement and instruction, guided by data.

At school, grade and classroom levels, new and traditionally available data is starting to be used to identify learning deficits and the behavioral and social needs of students. The administration and coaches consistently emphasize and support the use of data to inform instruction. The inquiry team is now in a position to report some strategies and this is supportive of this initiative. However, data is not yet systematically used or easily accessible. Assessment data is not recorded in a routine or consistent manner. Analysis does not clearly reveal patterns, trends and the needs of all students. The principal responds to qualitative and quantitative data to guide whole school priorities. However, plans and goals at the level of the school, grade and classroom, are not based sufficiently on known data. Achievement of goals is not measurable. As a result, progress cannot be evaluated objectively.

The administration and faculty are highly committed to improving the progress and welfare of students who are most at risk. Professional development focuses on matching instructional practices, learning styles, assessment data, and students' needs. The principal and coaches are improving teachers' understanding of differentiation. However, lessons, particularly in the high school grades, are not yet demonstrating the impact of these initiatives. Curriculum plans do not detail content and assessment processes sufficiently. As a result, students are not sufficiently engaged in active learning and they are not fully aware of their goals and the quality of their efforts.

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 with proficient features.

The school is beginning to integrate traditional middle and high school assessments with new City and State assessment data to understand student progress and achievement. The high school scholarship reports indicate levels of progress to students and the administration. These are of variable and inconsistent quality. Formal and informal support and professional development has enabled teachers to begin extracting useful information from predictive and item analysis assessments. As a result, there is regular, short-term retrospective overview of progress. The use of assessment data is not yet systemic or fully developed. Teachers investigate individual student data to identify deficits in student learning. Results of assessments are not analyzed sufficiently to provide overviews of progress and achievement overall or by class and grade. Recording of student progress data in classrooms is not consistent and takes many forms that are not universally compatible. As a result, data is not easily accessible to facilitate analysis. The principal draws focused reports, for example of lower achieving special education students. However, there is insufficient systematic analysis to identify patterns and longitudinal trends. Broad differences in gender and the variable performance of ethnic groups are recognized, but these and other groupings are not routinely monitored. Comparisons with similar schools are anecdotal in character. The principal recognizes this is an area for further exploration.

The administration has initiated more effective review and monitoring of special education students and individual education plan records. As a result these students' needs are better understood and result in more appropriate services. This initiative is a part of a whole school focus on students who are at risk. English language learners who are failing have been identified as a group whose performance is in need of improvement. However, these reviews are not yet school-wide or systematic.

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.

The principal knows his school's strengths and needs well. He has two clear overarching goals to improve student achievement. These are for teachers to use data to inform instruction and second, for teachers to use data to differentiate instruction to meet student needs. The faculty is aware of these through professional development, but parents are not. Teachers are beginning to use the Acuity and item analysis assessments to inform their work. However, lessons, particularly in the high school do not reflect the priority of data led, relevant, and challenging instruction. There is greater focus, therefore, on curriculum content and insufficient focus on student needs. Plans to achieve the key goals are not fully documented and formulated with timeframes for accomplishment. As a result, there are no measurable goals based on previous data of student achievement at school, grade, classroom, or student level. There are, therefore,

no benchmarks for success. “We are beginning to have that conversation”, was an honest comment. Students are not systematically given goals through, for example, rubrics, or individual goals. Consequently, students are not fully aware of next steps in their learning. High expectations are not set on a week-by-week basis. Students are made aware of deficiencies in credits. Incentives in the form of pizza parties and ‘Student of the Month’ celebrations are, however, motivational for students.

The principal has led a concerted and generally successful effort to focus on those students in greatest need of improvement. The inquiry team is now in a position to report some beneficial strategies to raise the achievement of these students from their more intensive focus on students with behavioral and learning difficulty. The number of students in the middle school scoring at level 1 has reduced significantly. Lower-achieving students in each grade and in each significant category have been identified for targeted support. A grade six team focuses very effectively on the needs of eight students to determine strategies to assist their progress. This also reflects the principal’s continued policy of fostering collaborative planning. There is a weekly scheduled forty-five minute meeting for professional development and grade or department discussions. This initiative supports his goals and is responsive to the issues arising from the Learning Environment Survey.

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 with proficient features.

The principal has underpinned his drive to move the school forward by ensuring that budgeting, staffing and scheduling decisions clearly support school goals. Expenditure on new science laboratories, a stimulating new playground and redecoration of hallways have increased motivation, strengthened the culture of respect and enhanced academic and social activity. The very high profile of the administration around the school supports this culture. Students report that attitudes have improved this year and that teachers fulfill their roles while often being ‘like friends.’ The principal has been adept in hiring new staff to meet school development needs. The very effective impact of the work of the recently hired assistant principal, working with the attendance teacher, is demonstrated by data indicating improving attendance and punctuality.

Students report that they enjoy the full range of opportunities that the curriculum offers, within and beyond the school day. Art rooms demonstrate stimulating and challenging work. There are opportunities for wind, string and piano instruction. Community-based organizations and teachers provide effective academic and club activities after school. However, there are discontinuities in programs that compromise the impact of the curriculum. For example, the schedule for Spanish lessons skips a year. Faculty members have worked collaboratively to develop curriculum maps and calendars. However, this is a work in progress, as these are not fully developed in content or associated assessment. Teachers are held accountable through the results of the school’s assessments and the more frequent State and City assessments. While they are beginning to use the latter data to address deficits in learning, the use of differentiated student grouping, challenge, and learning styles is at a very early stage particularly in the high school grades. Lessons are often didactic in format and in some cases do not follow the curriculum.

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 proficient.

From a very low start last year, the improvement in professional development underpins the school's key responses to the last review. Priorities are based on the principal's demonstrably analytical observations. Coaches deliver well-focused sessions to model the use of data to differentiate instruction through responses to learning styles, student engagement, and variable challenge. This work is at an early stage and is not yet evident in the generality of lessons. Some teachers are using grouping and accountable talk to engage students interactively in their own learning. Peer intervisitation is not systematic but is strengthening instructional skills, in particular for teachers new to the school and the profession. The confidence and growth in skills of these teachers is a tribute to the support they receive.

Clear expectations of behavior are effectively conveyed to students and a dress code has been established. The administration deals immediately with discipline issues. Hallways are generally calm. Classrooms are not always tidy but are orderly and students are attentive in lessons. Counseling has increased significantly to address social-emotional issues. Partnerships are well matched both to support this priority and to promote students' skills and confidence in the transition to college.

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 with proficient features.

Planning at school, grade, and department levels is not documented or articulated to identify specific stages of progress, or matched to measurable criteria for success. As a result, monitoring and evaluating progress of initiatives and reaching student achievement targets is not possible. Indicators of improving teacher instruction come from observations, but these are not integrated into individual plans for development and associated improvement in student achievement. Teachers use periodic school, City, and State assessments to gauge the impact of their work retrospectively and to consequently revise plans and instruction to meet deficits in students' learning. The principal's recognition of the urgency to modify instructional practices has resulted from his overview of student data. Equally, this has led to closer investigation of the practices that address the needs of the lowest-achieving pupils and, very specifically, special education students. Broad plans and some specific strategies are suitably in place, as a result, to remedy these issues.

The principal has a clearly staged strategy to develop school renewal and build student achievement. To this end, he had focused his energies on moving the school forward based on the early grades in the middle school. In the new circumstances, he is rightly revising his vision towards a high school focus. He is very equal to this leadership task in his management skills and personality. However, at present there are not sufficient sharply defined goals, clear communication, or instruction based on student needs to support the strategy. The principal is fully aware of this.

Part 4: School Quality Criteria Summary

SCHOOL NAME: The Academy of Environmental Science	Δ	▷	✓	+	◇
Quality Score		X			

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

To what extent do school leaders and faculty provide . . .	Δ	▷	✓	+	◇
1.1 an objective, constantly updated understanding of the performance and progress of each student, classroom, grade level?		X			
1.2 an objective, constantly updated understanding of the performance and progress of special education students?		X			
1.3 an objective, constantly updated understanding of the performance and progress of English language learners?		X			
1.4 an objective, constantly updated understanding of the performance and progress of ethnic groups, gender groups and all other categories of interest to the school?		X			
1.5 a measurement of performance and progress based on the school's own past performance, and among students, classrooms, grades and subject areas?		X			
1.6 a measurement of performance and progress based on comparisons with similar schools?		X			
1.7 training, management systems and structures that support teachers in the use of school data to inform planning and instruction and to track the progress of students?		X			
Overall score for Quality Statement 1		X			

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 students learning.

To what extent do school leaders and faculty . . .	Δ	▷	✓	+	◇
2.1 engage in collaborative processes to set rigorous, objectively measurable goals for improvement, and to develop plans and timeframes for reaching those goals?	X				
2.2 focus 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 identify and improve the performance and progress of those students in greatest need of improvement?			X		
2.4 share whole school goals with all members of the school community to rigorously improve the performance and progress of students?		X			
2.5 convey consistently high expectations to students and their parents/caregivers?		X			
2.6 regularly provide students and their parents/caregivers with information about the goals set for each student, and about each student's progress and performance, and how they can improve?		X			
2.7 invite and enable parents/caregivers to provide useful information to teachers and the school about the learning needs and capacities of their children?		X			
Overall score for Quality Statement 2		X			

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.

To what extent does the school . . .	Δ	▷	✓	+	◇
3.1 select core curricular approaches that facilitate and provide meaningful interim data about progress towards goals and focus on raising the achievement of students?	X				
3.2 provide a broad and engaging curriculum, including the arts, to enhance learning both within and outside the school day?		X			
3.3 hold teachers accountable for the progress and learning of the students in their charge, for making instruction interesting and compelling, and for creating a positive safe and inclusive learning environment?		X			
3.4 ensure that teachers use school, class and student data to plan for and provide differentiated instruction that meets the specific needs of all the students in their charge?	X				
3.5 make budgeting, staffing and scheduling decisions strategically, based on data, to meet the school's academic goals for all students?		X			
3.6 ensure that there is an environment of mutual trust and respect between all staff and students to support personal and academic development?		X			
3.7 ensure that there are effective and consistently applied procedures to encourage and monitor student attendance and tardiness?		X			
Overall score for Quality Statement 3		X			

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