



NYCDOE

Quality Review: Final Report

The New York City Department of Education



Quality Review Report

**School of Mathematics, Science and Technology
through The Arts**

Intermediate School 318

**1919 Prospect Avenue
Bronx
NY 10457**

Principal: Maria Lopez

**Dates of review: October 25 - 26, 2006
Reviewer: Clive Parsons**

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Part 1: The school context

Information about the school

The School of Mathematics, Science and Technology through The Arts is an intermediate school with just over 400 students enrolled. It admitted students into grade 6 for the first time this year. The school was established five years ago by the present principal. It occupies the fourth and part of the third floor of a building that is shared with another school. The school is divided into three academies. Two academies are vertically formed from grade 7 and grade 8 students. One academy focuses on delivering mathematics, science and technology through art and the other through music. The third academy comprises the new grade 6 students.

Over 75% of students are Hispanic, with nearly 25% Black students. There are very small proportions of students from other ethnic backgrounds. There are fewer recent immigrants than in other schools in the City. Most recent arrivals are from the Dominican Republic, with others from Mexico and Honduras. There is a similar proportion of special education students compared with other schools and a higher proportion of English language learners. Most of these latter students are Spanish speaking. Student attendance is just below that achieved in other schools. The school is eligible for Title 1 funding for over 90% of students, which is much higher than the average.

The school has a smaller proportion of fully licensed and permanently assigned teachers than in other schools, although a higher proportion than elsewhere have taught in the school for more than two years. Teachers are less experienced overall than in other schools, with significantly fewer teachers having more than five years experience in total.

Part 2: Overview

What the school does well

- The principal is highly visible, has the respect of the school community and has good capacity to continue to move the school forward.
- There is a clear vision for the continued development of the school which is driven by data and is becoming increasingly evident in classrooms.
- The school is very data rich and collects a wide range of information about the students' personal and academic progress.
- The principal ensures that there is a very strong focus on improving instruction so that professional development is made a high priority and is driven by data.
- Data is used well to identify which students receive additional support and a good range of intervention programs are available to deliver it.
- Some instruction is of a high quality and results in good student progress.
- The school is extremely well organized, with clarity about systems, roles and expectations for the whole school community.
- The school has integrated grade 6 students very well.
- The school is very rich in educational technology and this is being used effectively in a number of classrooms.
- Good numbers of students pass Regents examinations.

What the school needs to improve

- Ensure that all lessons have clear and measurable learning objectives that are reviewed throughout the course of a lesson.
- Create more opportunities for the development of student self and peer assessment to help secure learning more effectively.
- Make greater use of the high levels of educational technology to support learning.
- Ensure that teachers use the data available to them to differentiate their instruction more consistently and more rigorously.
- Broaden the range of skills available to individual teachers to enable them to rectify specific student needs identified through diagnostic testing.
- Ensure that all teachers complete the move from teacher centered instruction to facilitative learning.

Part 3: Main findings

Overall Evaluation

This is a proficient school with many well developed features.

Data is at the heart of The School of Mathematics, Science and Technology through The Arts. The principal uses data to drive all aspects of its development. The school has the systems and structures in place to enable it to continue to improve provision and outcomes for its students.

The school has managed the introduction of the new grade 6 very well. Grade 6 students make up one of three academies and are semi-self-contained. The school places a strong emphasis on preparing the students for the real world. There is a well considered program for grade 7 and 8 students to aid their transition to high school. A morning program is used well to support personal and social development for all grades. The school also finds many reasons for students to celebrate and have fun. Perfect attendance for example is rewarded through monthly pizza parties, for example.

Emphasis is placed on using technology to support learning for both teachers and students. There is good access to resources which are being used effectively in a number of classrooms. Nevertheless, feedback from both students and teachers highlights a continuing need for increased speed and capacity of the available equipment.

The principal has a good understanding of the school. This includes the areas that need to be developed to ensure that it meets all of the criteria as a well developed school. The areas for improvement contained within this report are very much in line with the school's self evaluation. They are concerned with ensuring that greater consistency is achieved, with the best practice becoming spread more widely.

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 well developed.

A good range of both formal and informal components are used to gather data on the students' academic and personal development. The school creates its own mid-term and final examinations to supplement City and State tests. Monthly assessments are gathered from the Princeton Review. Diagnostic tests and item analysis are used to identify particular student needs. Exit projects are evaluated in all major subjects and the school is moving towards collecting portfolios of student work. Collaborative review, planning sessions and professional development activities around the monitoring of students' work help to ensure greater consistency and increase the reliability of teacher generated data. Data is also collected from the school's alternative learning environment and on attendance and punctuality. Consequently, the school is very data rich and holds a good current picture of each student.

Data is disaggregated to identify the progress of different groups, such as boys and girls or Black and Hispanic students, as well as by class. Students close to a level boundary are of particular interest to the school. Three designations within a level are used to indicate whether students are low and might slip, medium and should be secure or high and could be pushed up to the next level. Comparisons are made with the school's own previous results, as well as with that of other schools, when evaluating overall performance. Comparisons are made between classes and groups of students when exploring patterns and causalities. The school also looks to compare the performance of each student year on year so that a measure of individual progress can be made, even for students not moving up by a whole level.

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 well developed.

The Comprehensive Educational Plan is constructed through collaborative activity involving wide ranging members of the school community. It is appropriately based on data. Each teacher is required to set student goals. They also identify directly with the principal those students who are expected to move up a level by the end of the year. The principal has very high expectations which are communicated clearly to all. This happens during orientation sessions for students and their parents and for staff, for example. The school report card is sent home four times per year, once more than is common practice. A number of activities and workshops are held for parents in order for them to become more informed and able to support their child's learning more extensively. Other workshops are targeted at improving the parents' own skills. Despite this, parental involvement within the school remains lower than the school desires.

Data is used well to identify the specific needs of individual students. The school continually explores ways of fine tuning this identification and making it ever more focused and specific. A matrix of students, their needs and the intervention provided has been developed. This is enabling students to be tracked as well as keeping all staff informed. A good range of effective intervention programs are then available to meet the individual needs identified. Teachers also set goals for immediate achievement in class. Sometimes these will include the key questions to be asked and answered and the specific outcomes intended. When used most effectively this is also enabling teachers to monitor progress towards the achievement of the goals as they are reviewed throughout the course of the session.

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 proficient.

The curriculum is matched well to the stated aims of the school. One of the grade 7 and 8 academies operates through music and the other through art. The school is confident of matching students to each academy even better now that the additional grade 6 year is in place. The curriculum has been developed to enable meaningful interim data on student

progress to be generated. Budgeting decisions, including staffing and scheduling are driven by the needs identified. Extension is offered for students at higher levels through mathematics and earth science Regents preparation. This enables good numbers of students to pass these examinations. The school places appropriate emphasis on attendance through direct contact with parents and the use of rewards. It recognizes that this is a major factor in enabling the lowest attaining students especially to progress and move into level 2. Students confirm that there is an adult within the school to whom they could turn should the need arise.

Teachers are held accountable for improving instruction and the principal ensures that there is a very strong focus on this. Consequently faculty meetings and collaborative activities focus on instruction. Administrative matters tend to be communicated in writing to enable this to happen. Some instruction is of a high quality, enabling good examples of 'accountable talk' to develop in some classes for example. Opportunities are not always taken for this to develop further into self and peer assessment so as to help secure learning even more effectively. Teachers are using the data available to them to group students and to differentiate the support and challenge provided to them. Again, however, there is some inconsistent practice between classrooms. The school has also recognized that classroom instruction is not always aligned fully with the expected standards.

Some good use is made of computers, projectors and smart boards to support learning. There remains tremendous scope to develop this further and to engage students more extensively in their learning. The principal has recognized that the first step must be to ensure that the equipment available is up to the task.

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.

The school has a smaller proportion of fully licensed and permanently assigned teachers than in other schools. The principal is very concerned to hire staff with the skills and expertise to support the continued development of the school. Professional development is given a high priority within the school. Priorities are based on the needs identified through the teachers' own assessment of need as well as data, including from direct classroom observation. A schedule of differentiated professional development is drawn up for the year ahead. Opportunities are provided for teachers to observe each other to model and share effective practice. Collaborative planning and review also support congruent practice. The school has recognized the need for more effective monitoring, however, to ensure that professional development is translated into classroom practice and is consequently reflected in the students' work.

The principal is highly visible in and around the school. She has the respect of the school community and parents are pleased with the openness with which they are received and made welcome. The school is extremely well organized, with clarity about systems, roles and expectations for staff, students and parents. The principal has a clear vision for the continued development of the school. This is soundly based on the monitoring and evaluation of data. This vision is becoming increasingly evident in classrooms. There is good capacity to continue to move the school forward.

The school has well established relationships with a wide range of external partners, including community-based organizations. These provide direct support for staff, students

and their families and have a positive impact on the school's work. They also provide additional connections to other support agencies.

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 school has appropriate groups and committees with responsibility for monitoring progress toward achieving its goals. They evaluate a wide range of data and other information as it becomes available. For example, the outcomes from a recent learning walk indicated that a number of teachers had not managed their classrooms sufficiently to demonstrate good organization for learning. The school's cabinet decided that this would require sustained effort to achieve and allocated specific members to work with the teachers involved. In this way many actions are sufficiently timely to ensure that they can have the required impact.

The students are also monitored regularly, through monthly progress reports for example. These outline aspects of personal development as well as academic progress for each student and are discussed at grade level meetings. The impact of academic intervention for students most in need or at risk is monitored on a regular basis. Not all teachers have yet developed a sufficiently wide range of strategies to follow this up more routinely and consistently in class, however.

The principal has identified that there is sometimes a delay in getting information back to teachers in order to impact on their practice quickly enough. Similarly, she is concerned that there is a time lag between teachers getting data or receiving professional development and seeing the impact in lessons. For example, not all teachers have completed the transition from teacher centered instruction to facilitative learning for students. Consequently the very effective practice of setting immediate learning goals and monitoring students' progress over time remains too inconsistent as yet to guarantee good progress for every student.

Part 4: School Quality Criteria Summary

SCHOOL NAME: School of MSTA (IS 318)	∅	✓	+
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	