

# ▶ John M. Morehead STEM Academy



## A Message from the Principal

To our Morehead STEM Academy families:

John M. Morehead Science, Technology, Engineering and Mathematics (STEM) Academy is the county-wide, K-6 (K-8 by 2012-2013) magnet for math, science and environmental studies. This is our annual School Progress Report and is intended to inform you about our students' academic progress, our staff and our school environment.

On the End-of-Grade math test, our composite proficiency rate was 92 percent. This means that the vast majority of our students in grades three through five were considered at or above grade level in math, an increase of 6.5 points from the previous year—outstanding progress! In addition, we made High Growth in math. Well done to our students and staff.

On the End-of-Grade reading test, 76.1 percent—more than three-fourths—of our third- through fifth-grade students demonstrated proficiency in reading. While we made Expected Growth across all grade levels in reading, we are certainly targeting High Growth for this school year.

Our composite proficiency rate on the End-of-Grade science test was 88.7 percent, which means that more than four-fifths of students were at or above grade level, an increase of nearly 23 percent from the previous year.

I am happy to report that for the third consecutive year, we made Adequate Yearly Progress, the standard set for schools by the No Child Left Behind Act. This serves as evidence that Morehead is on the right path.

So what are we doing to continue this progress and improve our students' academic achievement? Our staff is working collaboratively, meeting three times a week in grade-level teams. During these

*(Principal's message continued on next page)*

## 2009-2010 KEY FACTS

Data effective as of spring 2010

### Grades

Pre-K - 5 (2009-2010)

K - 6 (2010-2011)

John M. Morehead STEM Academy is a full Math, Science and Environmental Studies magnet.

### School Population

- Students: **667**
- Classroom Teachers: **41**
- Support Staff:
  - 1 Assistant Principal
  - 2 English as a Second Language Teacher
  - 1 Speech Pathologists
  - 1 Exceptional Children Teachers
  - 3 Academic Facilitators
- 0.6** Talent Development Teachers
  - 1 Counselor
- 38** Other

### Student Demographics

- African-American..... **69.6%**
- White..... **5.8%**
- Hispanic..... **13.8%**
- Asian..... **6.3%**
- Other..... **4.5%**
- Economically ..... **65.6%** disadvantaged students

### Additional Facts\*

- Per-pupil expenditure ..... **\$4,746**
- Teacher-to-pupil ratio ..... **1:18**
- Student-mobility rate ..... **7%**

*\*Click here for more information.*

## CONTACT INFORMATION

### Principal

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### Zone: Northeast

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*(Principal's message continued)*

meetings, we review the standards for each course, identify meaningful and engaging learning experiences and develop common assessments to evaluate student performance. Most importantly, we use data regularly to make instructional decisions and guide our use of flexible grouping, a strategy that supports and challenges all students. New this year, we have two teachers of English as a Second Language to support students in reading.

As the math, science and environmental studies magnet program for CMS, we also offer a number of programs to integrate areas of STEM into other subjects. Students have weekly access to our environmental science and engineering labs. These classes allow students to explore through hands-on experiences and examine STEM concepts and problems. All of our students maintain a STEM notebook, an inquiry-based method of understanding STEM concepts. In addition, students participate in a number of school-wide math and science events

including Science Olympiad, School Gardening, STEM Fair, Math Olympiad, Odyssey of the Mind, Lego League and eCyberMission.

As you know, the success of our students depends greatly on our teachers and staff. At Morehead, all of our teachers are highly qualified. Twelve percent of our instructional staff members are National Board-certified and 43 percent hold advanced degrees. Our staff is dedicated, our students are focused and hard-working and our parents and community are supportive. With this team working together, I am confident that we will see continued growth at Morehead.

Sincerely,  
Chris Triolo  
*Principal*

[– Click to view our School Quality Review](#)

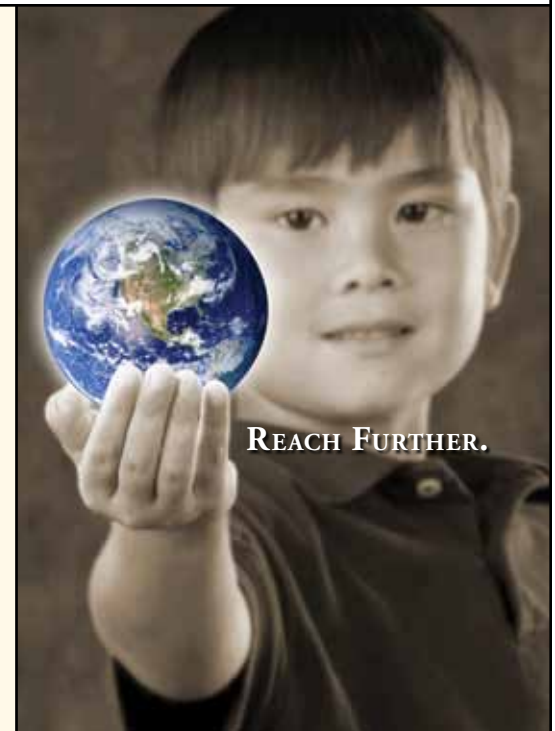
[– Click to view our School Improvement Plan](#)

## What is the School Progress Report?

In 2006, we introduced the *Charlotte-Mecklenburg Schools Strategic Plan 2010* outlining our vision and strategy to educate our students to compete locally, nationally and internationally.

The plan outlines seven areas of concentration: high academic achievement; effective educators; adequate resources and facilities; safe and orderly schools; freedom and flexibility with accountability; world-class service, and strong parent and community connections. This report summarizes how our school performed in the 2009-10 school year in making progress on these seven goals. On the final page, you will also find an explanation of federal and state accountability measures.

Educators and parents have a common goal of preparing our children to compete in an ever-growing global community. Working together requires frequent dialogue between school and parents, so please feel free to contact the principal or any staff member at our school.



REACH FURTHER.



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## PROGRESS REPORT

CMS 2010 Strategic Plan Goals	Key Performance Measures	CMS 2010 Goal	CMS Elem. Schools 2009 - 2010	Our School 2008 - 2009	Our School 2009 - 2010
<p><b>High Academic Achievement</b></p> <p>▶ Because of federal privacy regulations, the actual values for these measures are not shown if the percentage is greater than 95 percent or less than 5 percent.</p> <p>Disparity between socioeconomic groups is shown as a positive percentage when non-economically disadvantaged students outscore economically disadvantaged students; a negative percentage indicates the reverse.</p> <p><i>Data effective as of 8/27/10</i></p>	▶ Students performing at or above grade level overall <sup>1</sup>	—	75.2%	77.6%	<b>84.7%</b>
	▶ Students performing at or above grade level in reading	95%	70.2%	73.5%	<b>76.1%</b>
	▶ Students performing at or above grade level in math	88%	82.3%	85.4%	<b>91.9%</b>
	▶ Students performing at or above grade level in science	80%	68.6%	66%	<b>88.7%</b>
	Disparity between racial/ethnic groups in reading	10%	33.5%	14.9%	<b>20.1%</b>
	Disparity between racial/ethnic groups in math	10%	22.9%	16.7%	<b>18.8%</b>
	Disparity between racial/ethnic groups in science	10%	36.8%	22.9%	<b>42.9%</b>
	Disparity between socioeconomic groups in reading	10%	31%	17.9%	<b>12.8%</b>
	Disparity between socioeconomic groups in math	10%	19.1%	15.7%	<b>5.3%</b>
	Disparity between socioeconomic groups in science	10%	32.2%	12.6%	<b>6.6%</b>
<p><b>Effective Educators</b></p> <p><a href="#">Click to view teacher survey results</a></p>	Teachers deemed highly qualified, having appropriate educational backgrounds and state certification(s) for the grade levels and subjects they are teaching	99%	100%	100%	<b>100%</b>
	National Board-certified teachers	18%	15%	4%	<b>12%</b>
	Teachers with graduate degrees	38%	38%	41%	<b>43%</b>
	Teachers' average years of experience	11.1	10.6	7.4	<b>8.4</b>
<p><b>Adequate Resources &amp; Facilities</b></p>	Student/Computer Ratio	5:1	4:1	3:1	<b>3:1</b>
	Teachers who indicate satisfaction with school facilities	—	72.7%	—	<b>65.1%</b>
<p><b>Safe &amp; Orderly Schools</b></p>	Passed the CMS safe school audit	100%	69%	YES	<b>YES</b>
	Parents who indicate this is a safe school <sup>2</sup>	70%	96.8%	97.5%	<b>97.9%</b>
	Students who indicate this is a safe school <sup>2</sup>	80%	91.8%	94.9%	<b>89.9%</b>
	Teachers who indicate this is a safe school <sup>1,2</sup>	—	90.4%	88%	<b>88.8%</b>
	Number of incidents resulting in in-school suspensions <sup>1,3</sup>	—	0.6	0	<b>0</b>
	Number of incidents resulting in out-of-school suspensions <sup>1,3</sup>	—	7.2	8.7	<b>8.7</b>
<p><b>Freedom &amp; Flexibility with Accountability</b></p>	Principal has been granted additional freedom and flexibility <sup>1</sup>	—	56%	NO	<b>NO</b>
<p><b>World-Class Service</b></p>	Parents who indicate satisfaction with the responsiveness of staff at this school <sup>2</sup>	80%	88.6%	85.2%	<b>97%</b>
<p><b>Strong Parent &amp; Community Connections</b></p> <p><a href="#">Click to view parent survey results</a></p>	Parents who indicate satisfaction overall with this school <sup>1,2</sup>	—	88.4%	86.8%	<b>92.4%</b>
	Number of volunteer hours <sup>4</sup>	Increase by 25% district-wide	235	44	<b>28</b>
	Number of business and community partnerships	Increase by 25% district-wide	580	16	<b>7</b>

<sup>1</sup>Not a CMS 2010 goal

<sup>2</sup>Based on responses to surveys; multiple survey items may have been used to create a composite

<sup>3</sup>Incidents per 100 students

<sup>4</sup>Per 100 students

## CMS Accountability Measures

The learning of students in public education is measured in multiple ways. There are assessments given at regular intervals by CMS—tests that we use to measure how students are learning as the school year progresses. Other tests are required by the state and given once or twice a year, such as End-of-Course and End-of-Grade tests. Some of the state test results are also used to calculate district progress on the federal standard of Adequate Yearly Progress for each student. This page provides brief explanations of some of the measures and tests used in CMS.

### ▶ Adequate Yearly Progress (AYP)

Our school **DID** make AYP  
(17 of 17 goals met)

The federal No Child Left Behind Act requires that every school make Adequate Yearly Progress (AYP). AYP is an all-or-nothing standard: Every target must be met.

State test results are used to set AYP targets. There are separate targets for the school as a whole and for nine subgroups of students: white, black, Hispanic, Native American, Asian, multiracial, economically disadvantaged students, students with limited English proficiency and students with disabilities. Subgroups of students are measured separately so that an overall score for a class or a school does not mask poor results within a subgroup.

Some schools are more diverse than others, so the number of subgroups varies by school. Therefore, the number of AYP targets varies by school, too. Some schools may have only a few targets to meet; others may have the maximum, which is 41. School attendance and graduation rates are also measured for AYP.

For a more complete overview of AYP, visit [www.dpi.state.nc.us/nclb/abcayp/overview/ayp](http://www.dpi.state.nc.us/nclb/abcayp/overview/ayp)

For details of AYP results for our school and its student groups, visit <http://ayp.ncpublicschools.org>

### ▶ ABC Designation

Our school's designation: **School of Distinction (DID meet growth expectations)**

Proficiency:	2008-09	2009-10
	77.6%	84.7%

The North Carolina ABCs program was introduced more than a decade ago to help schools improve. It uses two basic measures to assess a school's performance: the Average Growth of students (at right); and the Performance Composite, which measures how well students performed against a state-set standard of academic achievement.

Schools are given one of seven designations. In descending order, they are: Honor School of Excellence, School of Excellence, School of Distinction, School of Progress, No Recognition, Priority School, and Low Performing.

For more information about ABCs, visit <http://abcs.ncpublicschools.org/abcs>

### ▶ Average Growth

State Standard	Our School:	2008-09	2009-10
80		83.7	82.6

Did our students meet the state's expectation for academic growth? Each student is expected to perform as well (or better) on the End-of-Grade assessment as he or she did, on average, during the previous two years. Average Growth for a school is calculated by comparing actual performance to expected performance and then averaging the difference across all students and all subjects. The score above reflects the combined growth rate of all of our students. To make expected growth, a school must have a score of 80 or higher.

### ▶ Amount of Growth for Students in the Lowest-Achieving Group

Our School 2008-09: 82.9      **Our School 2009-10: 83.5**

Are we helping our low achievers catch up? Historically, some economically disadvantaged and minority students have trailed their classmates in academic achievement. This is called the achievement gap, and closing it is one of the biggest challenges in public education. If the lower-achieving students at a school show academic growth at a faster rate than higher-achieving students, the achievement gap is narrowed. When the score for this measure is higher than the Average Growth for the school, the school is closing the achievement gap.

### ▶ Students Making or Exceeding a Year's Worth of Growth

State Standard	Our School:	2008-09	2009-10
60%		66.9%	57.4%

Did our students learn as much as they were expected to learn this year? As described above, the state sets expectations for each student based on individual performance for the previous two years. Across the state, about half of students typically meet or exceed this growth expectation. To earn the high-growth designation, a school must meet the average-growth standard described above and also have more than 60% of its students make expected growth.

### ▶ Positive Responses to Student Survey Items

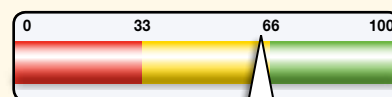
Our School's Results:	2008-09	2009-10
Safety	94.9%	89.9%
Encouragement	99.4%	97.7%
Engagement	98.4%	95.9%

Is our school environment conducive to learning? This measure is subjective—it is taken from a student survey.

[Click to view student survey results.](#)

### ▶ Return-on-Investment Index

CMS Elementary School Index: 50.9      **Our School Index: 63.8**



Return on Investment is calculated by comparing students' academic growth to the per-pupil expenditure. This measure is intended to help parents and community members understand how money is spent in our schools. [Click here for more information.](#)

For more information on our school's performance, visit <http://pmd.cms.k12.nc.us>