



MOORESVILLE GRADED SCHOOL DISTRICT'S Digital Conversion

MARK A. EDWARDS, Ed.D.
Superintendent

Why a Digital Conversion?

- **Close the digital divide**
- **Relevant Instruction**
- **21st Century Readiness**
- **Real World Experience**
- **Instructional Practice**
- **Improve Academic Achievement**
- **Moral Imperative**

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- **Moral Imperative**



What is a Digital Conversion?

- **NOT a technology project**
- **A meaningful instructional tool at the fingertips of every child**
- **450 MacBook Airs for all teachers**
- **4000 MacBook Airs for ALL 4th - 12th grade students**
- **450 MacBooks for ALL 3rd grade students**
- **150 MacBooks on carts for grades K - 2**
- **120 interactive whiteboards in every K - 3 classroom**
- **Online content available virtually 24 / 7**
- **Ubiquitous wireless**
- **Cultural shift / personalized instruction**

Building Public Support

- **Stakeholder buy-in**
- **Public Symposium, Chamber of Commerce, Economic Development, Parents**
- **Organization and planning**
- **Staff Development**
- **Summer Institute, Early release days**

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- **Building the culture**
- **21st Century tools**
- **Data rich & intensive**
- **Capacity building**
- **All in!!!**

Ingredients

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- **21st Century tools**
- **Data rich & intensive**
- **Capacity building**
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Implications

- **Precision: detailed intervention**
- **Competency is evolutionary**
- **Creativity & relevance drive productivity**
- **Connectivity & collaboration “hum”**



A New Way of Learning

A New Way of Learning

From traditional student learning...

rote memory of predetermined facts disseminated by teachers



to Cognitive Science...

students construct meaning by making connections with prior knowledge through multiple resources.

Implementation Team

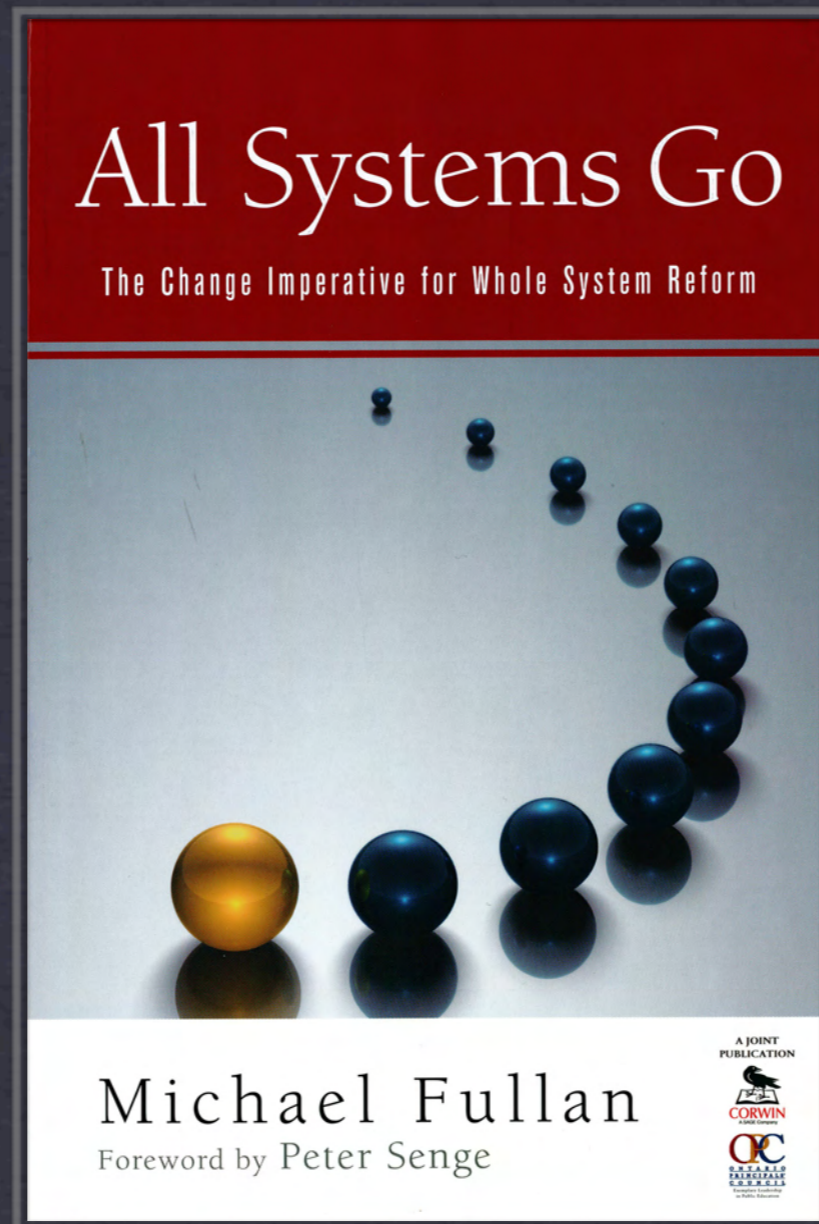
- **Communication**
- **Deployment / Collection**
- **Curriculum / Pedagogy**
- **Professional Development**
- **Discipline / RUP**
- **Data collection**
- **Finance**
- **Visitation**
- **District & School level teams**

Implementation Team

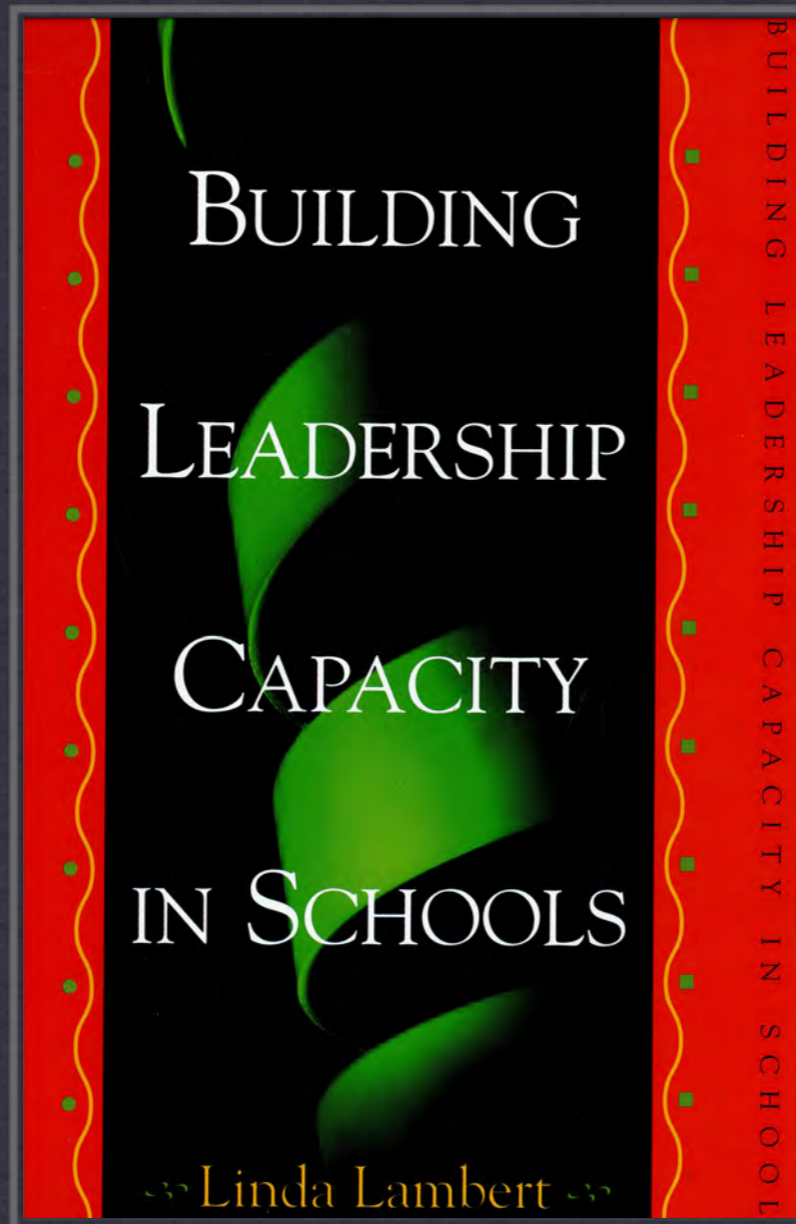
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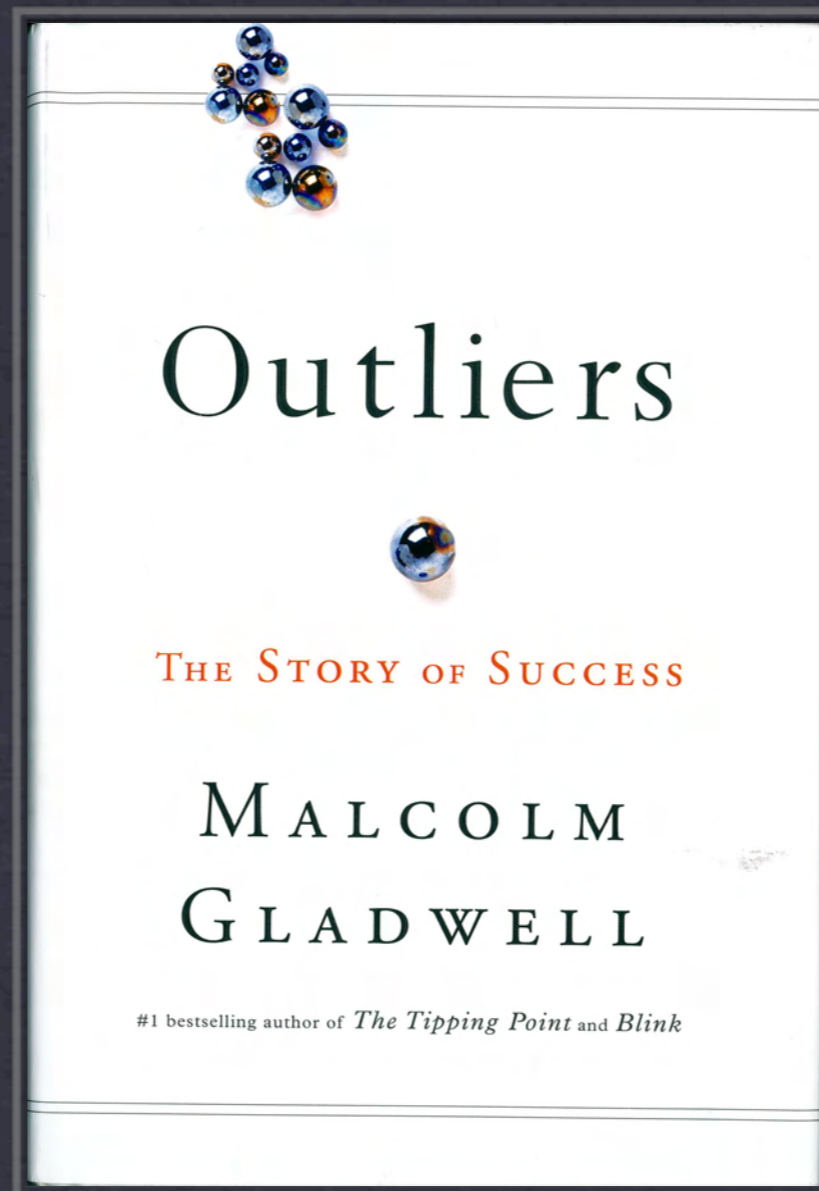
Leaders as Lifelong Learners



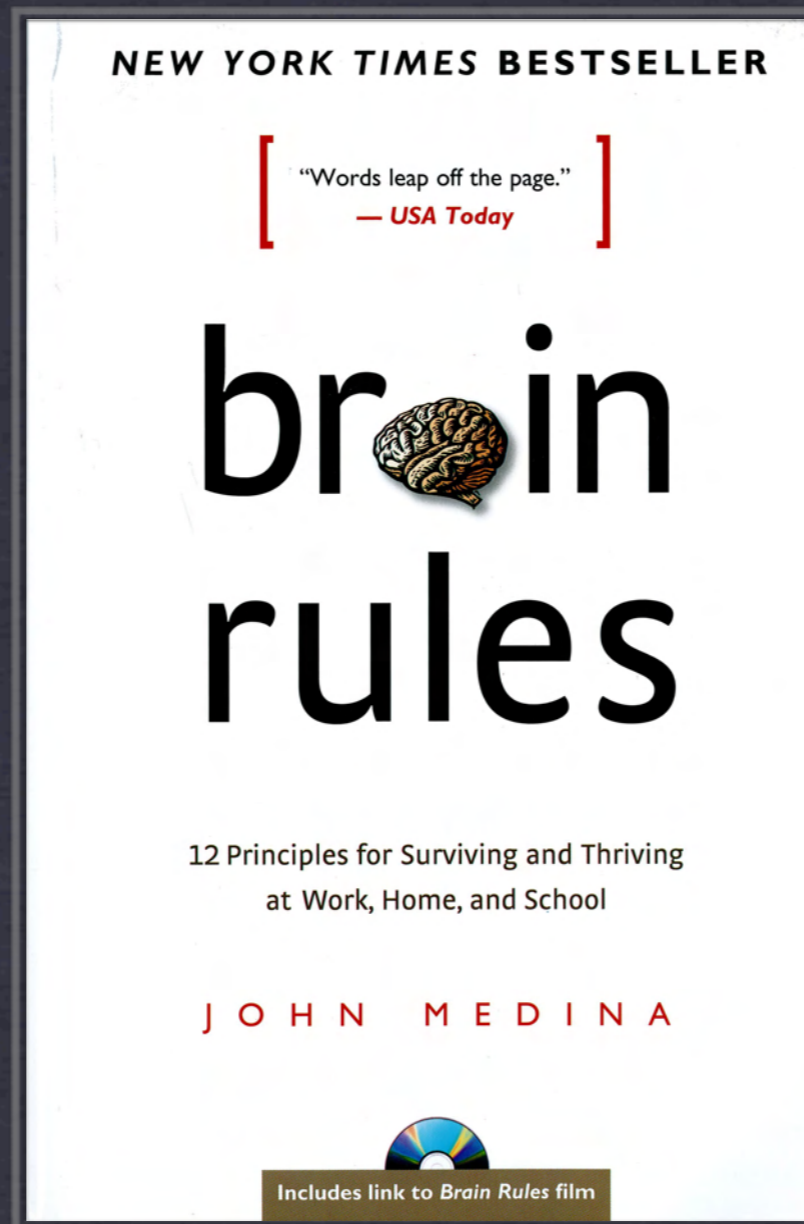
Leaders as Lifelong Learners



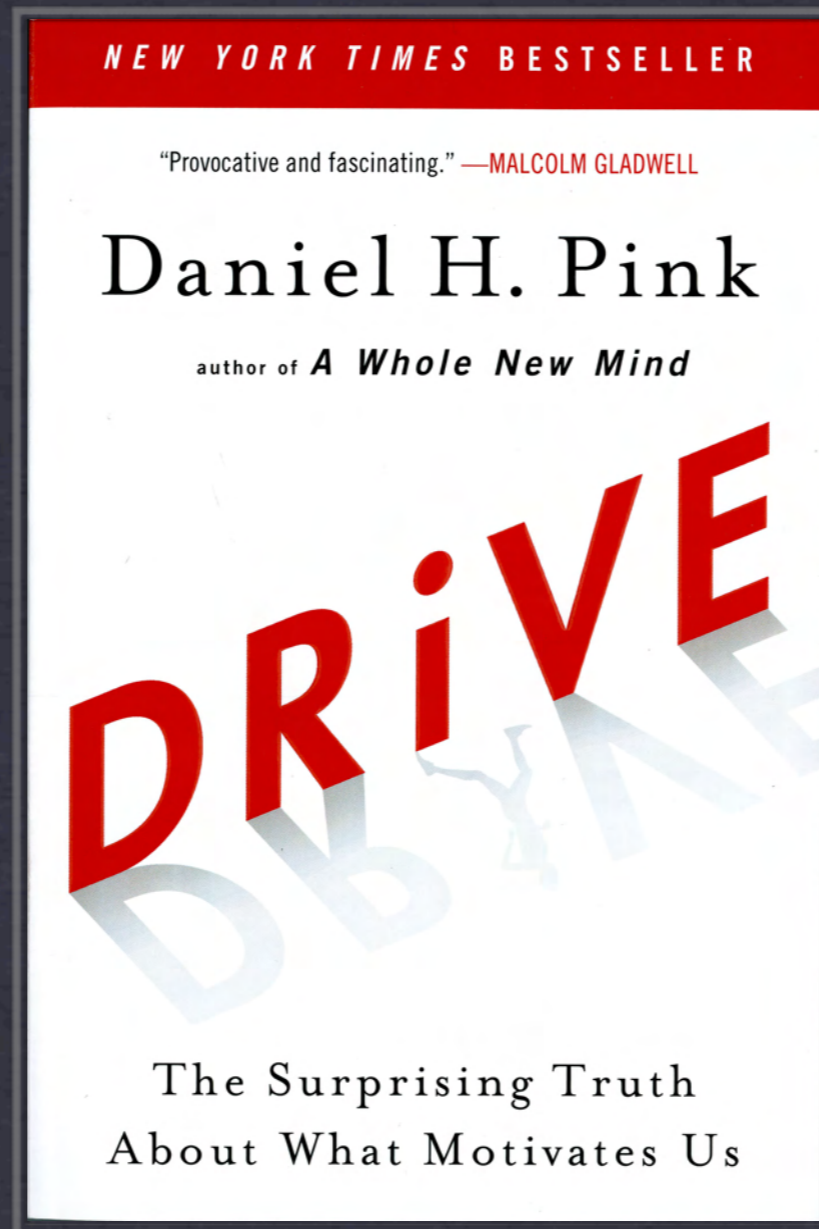
Leaders as Lifelong Learners



Leaders as Lifelong Learners



Leaders as Lifelong Learners



Timeline

Timeline



December 2007 - 500 Teacher MacBooks distributed

Timeline



January 2008 - 400 MacBooks on carts for the English Department at MHS

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August 2008 - 1650 student MacBooks at MHS, 850 student MacBooks at MIS

December 2007 - 500 Teacher MacBooks distributed

Timeline



**August 2009 - 4000 MacBooks to all 4 - 12
grade students**

**August 2008 - 1650 student MacBooks at
MHS, 850 student MacBooks at MIS**

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April 2010- Refresh of all 4500 MacBooks

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August 2011 - Refresh of all 4400 MacBooks with Airs and 1:1 3rd grade

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How Much?

- **Approximately \$1.25 per child per day or the price of a soda**
- **Includes hardware, software and online resources**
- **Local, state and federal funds**
- **New construction, grants and donations**



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Mooreville Graded School District Demographics

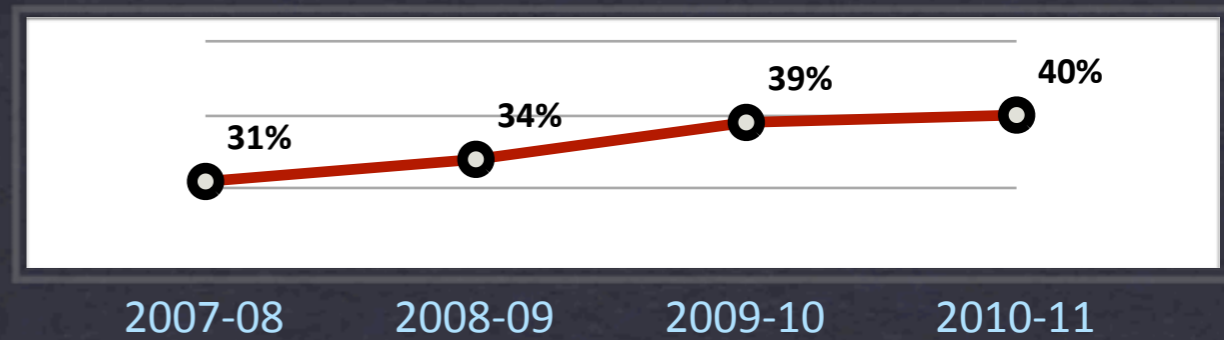
Mooresville Graded School District Demographics



Mooreville Graded School District Demographics

Number of Schools	8
Certified Staff	~ 400
Non Certified Staff	~ 300
Total Students K-12	5600

Students receiving Free/Reduced Lunch has increased in MGSD...

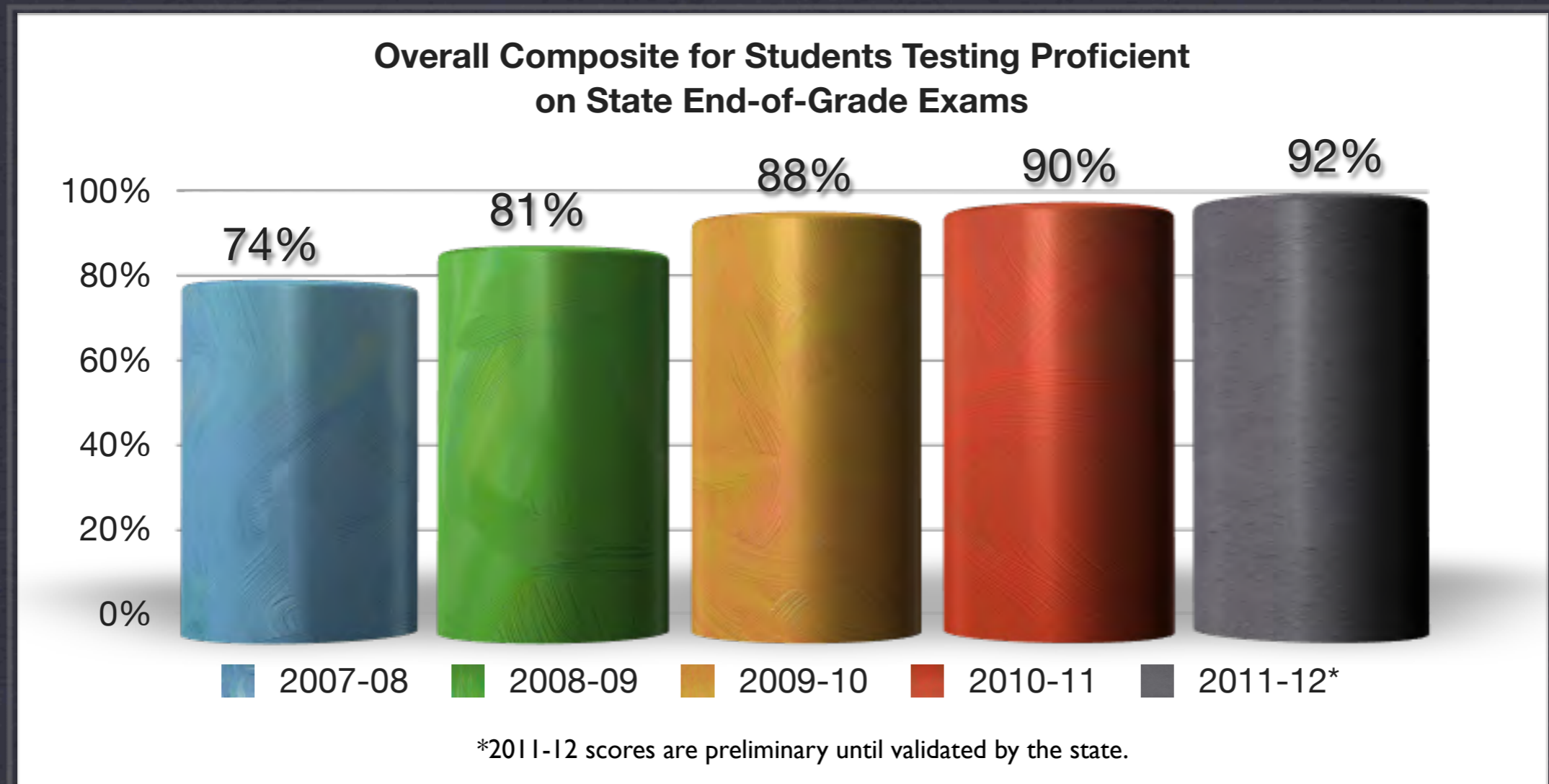


Asian	2%
Multi Racial	3%
Hispanic	8%
African American	17%
Caucasian	70%

MGSD 3rd Grade Data

Park View, Rocky River, & South Elementary

- Park View: Expected Growth
- Rocky River: High Growth
- South: High Growth



MGSD 3rd Grade Data by Subgroup

Erasing the Gap

	All Students	Asian	Black	Hispanic	Two or More Races	White	Economically Disadvantaged	LEP	Students with Disabilities
% Proficient 2010 - 11	84.2%	> 95.0%	81.4%	68.4%	64.3%	87.6%	75.7%	66.7%	57.7%
% Proficient 2009 - 10	81.8%	76.9%	62.5%	70%	70.8%	86.7%	71.4%	59.1%	48.0%
% Proficient 2008-09	71.0%	80.0%	34.9%	47.6%	66.7%	79.6%	48.3%	10.0%	32.7%
% Proficient 2007-08	68.3%	85.7%	35.2%	52.9%	50.0%	76.5%	48.9%	37.5%	35.5%
4-year Growth	15.9%	9.3%	46.2%	15.5%	14.3%	11.1%	26.8%	29.2%	22.2%

MGSD 3rd Grade Data by Subgroup

Erasing the Gap

READING

	All Students	Asian	Black	Hispanic	Two or More Races	White	Economically Disadvantaged	LEP	Students with Disabilities
% Proficient 2010 - 11	84.2%	> 95.0%	81.4%	68.4%	64.3%	87.6%	75.7%	66.7%	57.7%
% Proficient 2009 - 10	81.8%	76.9%	62.5%	70%	70.8%	86.7%	71.4%	59.1%	48.0%
% Proficient 2008-09	71.0%	80.0%	34.9%	47.6%	66.7%	79.6%	48.3%	10.0%	32.7%
% Proficient 2007-08	68.3%	85.7%	35.2%	52.9%	50.0%	76.5%	48.9%	37.5%	35.5%
4-year Growth	15.9%	9.3%	46.2%	15.5%	14.3%	11.1%	26.8%	29.2%	22.2%

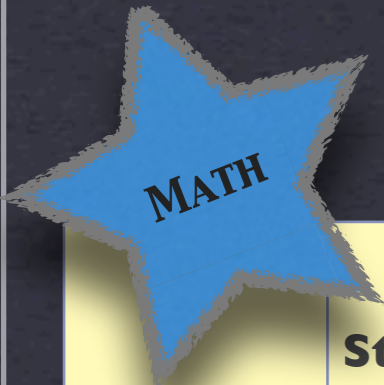
MGSD 3rd Grade Data by Subgroup

Erasing the Gap

	All Students	Asian	Black	Hispanic	Two or More Races	White	Economically Disadvantaged	LEP	Students with Disabilities
% Proficient 2010 - 11	> 95.0%	> 95.0%	93.2%	94.7%	92.9%	> 95.0%	94.1%	93.3%	92.3%
% Proficient 2009 - 10	94.3%	> 95.0%	82.1%	90.0%	83.3%	> 95.0%	88.5%	90.9%	77.3%
% Proficient 2008-09	90.2%	> 95.0%	79.4%	81.0%	77.8%	93.0%	80.5%	60.0%	60.0%
% Proficient 2007-08	80.0%	71.4%	50.7%	70.6%	60.0%	87.7%	61.3%	50.0%	58.1%
4-year Growth	15.0%	23.6%	42.5%	24.1%	32.9%	7.3%	32.8%	43.3%	34.2%

MGSD 3rd Grade Data by Subgroup

Erasing the Gap



	All Students	Asian	Black	Hispanic	Two or More Races	White	Economically Disadvantaged	LEP	Students with Disabilities
% Proficient 2010 - 11	> 95.0%	> 95.0%	93.2%	94.7%	92.9%	> 95.0%	94.1%	93.3%	92.3%
% Proficient 2009 - 10	94.3%	> 95.0%	82.1%	90.0%	83.3%	> 95.0%	88.5%	90.9%	77.3%
% Proficient 2008-09	90.2%	> 95.0%	79.4%	81.0%	77.8%	93.0%	80.5%	60.0%	60.0%
% Proficient 2007-08	80.0%	71.4%	50.7%	70.6%	60.0%	87.7%	61.3%	50.0%	58.1%
4-year Growth	15.0%	23.6%	42.5%	24.1%	32.9%	7.3%	32.8%	43.3%	34.2%

East Mooresville Intermediate

Grades 4 - 6

- School of Distinction
- Expected Growth

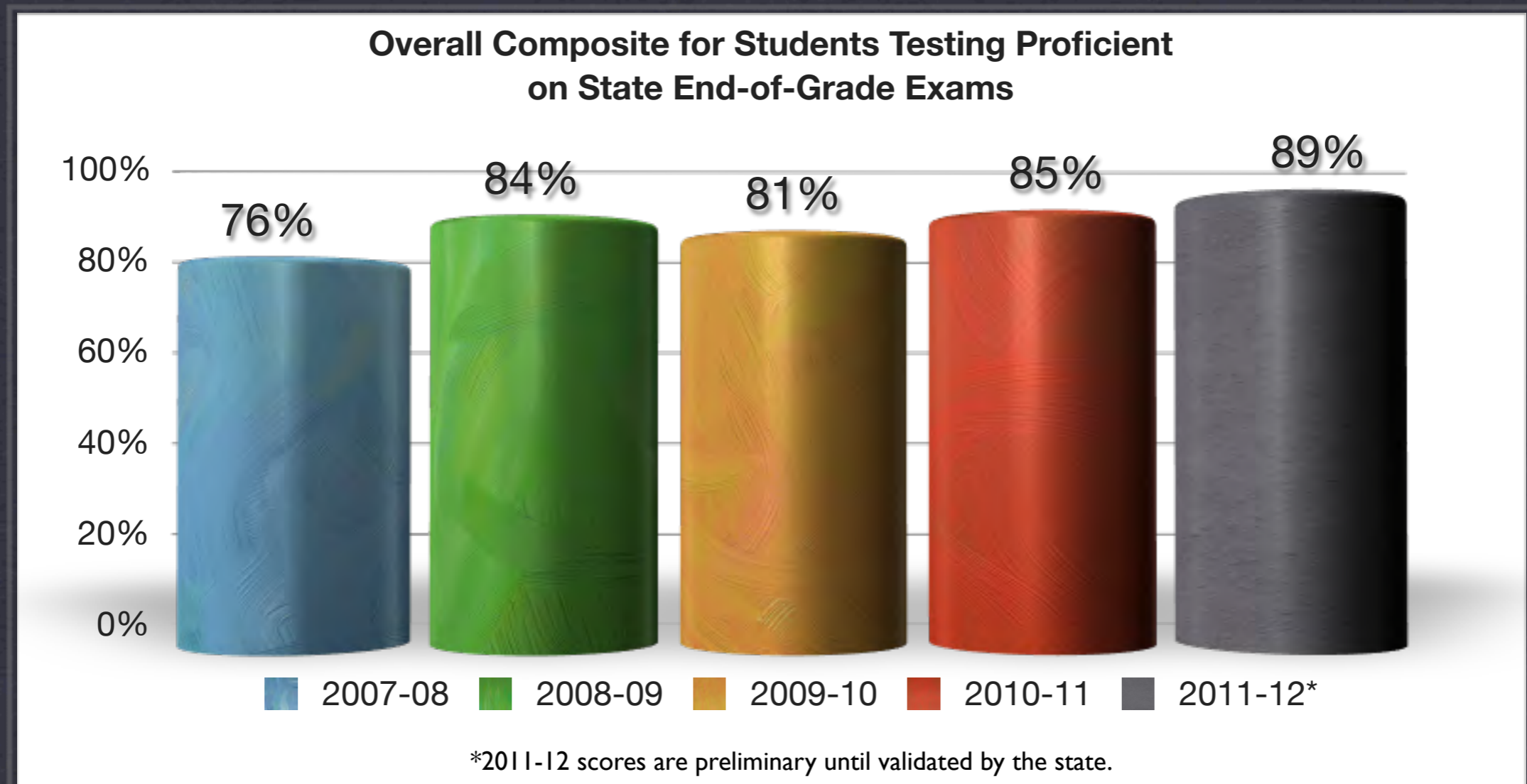
■ 2007-08 ■ 2008-09 ■ 2009-10 ■ 2010-11 ■ 2011-12*

*2011-12 scores are preliminary until validated by the state.

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Mooreville Intermediate

Grades 4 - 6

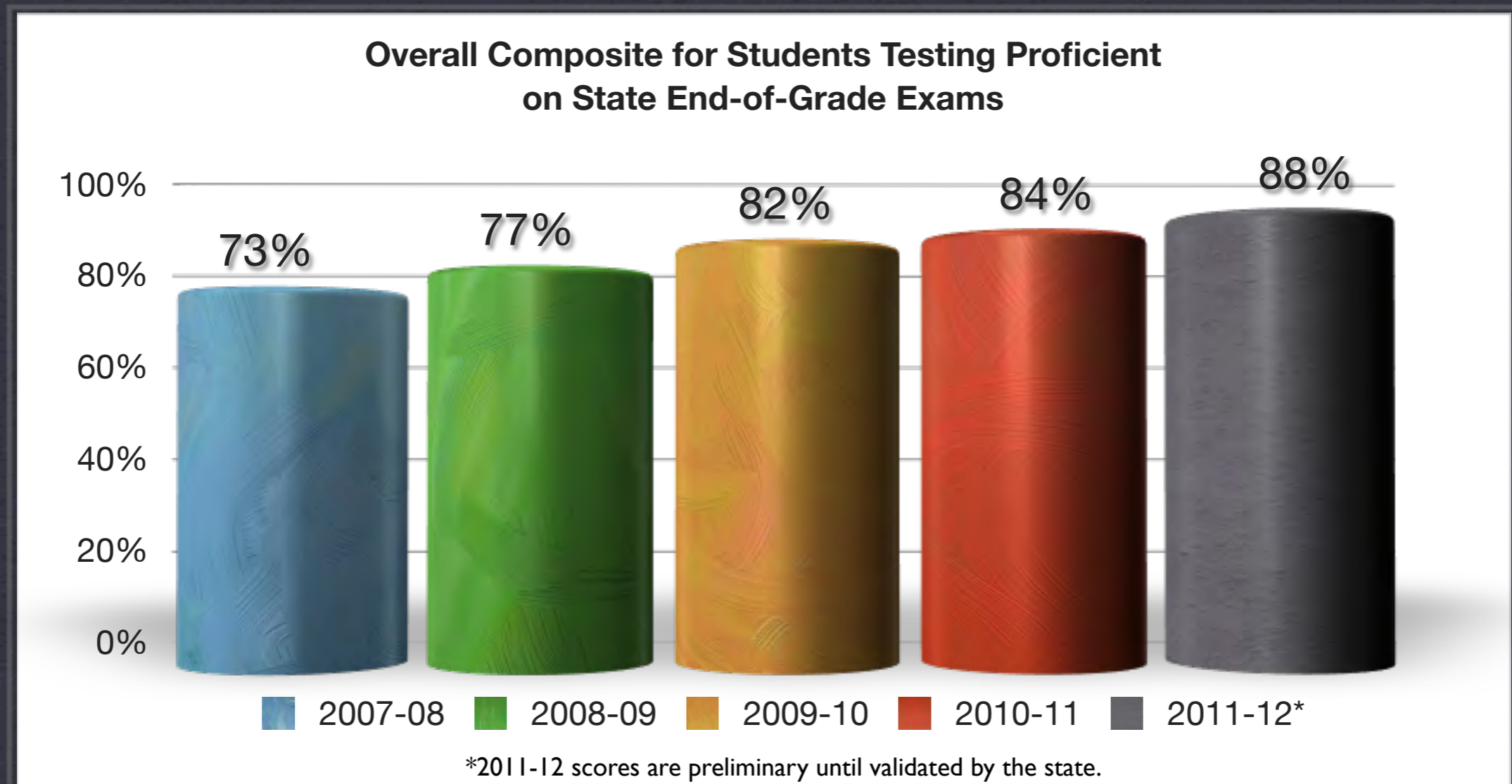
- School of Distinction
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Mooreville Intermediate

Grades 4 - 6

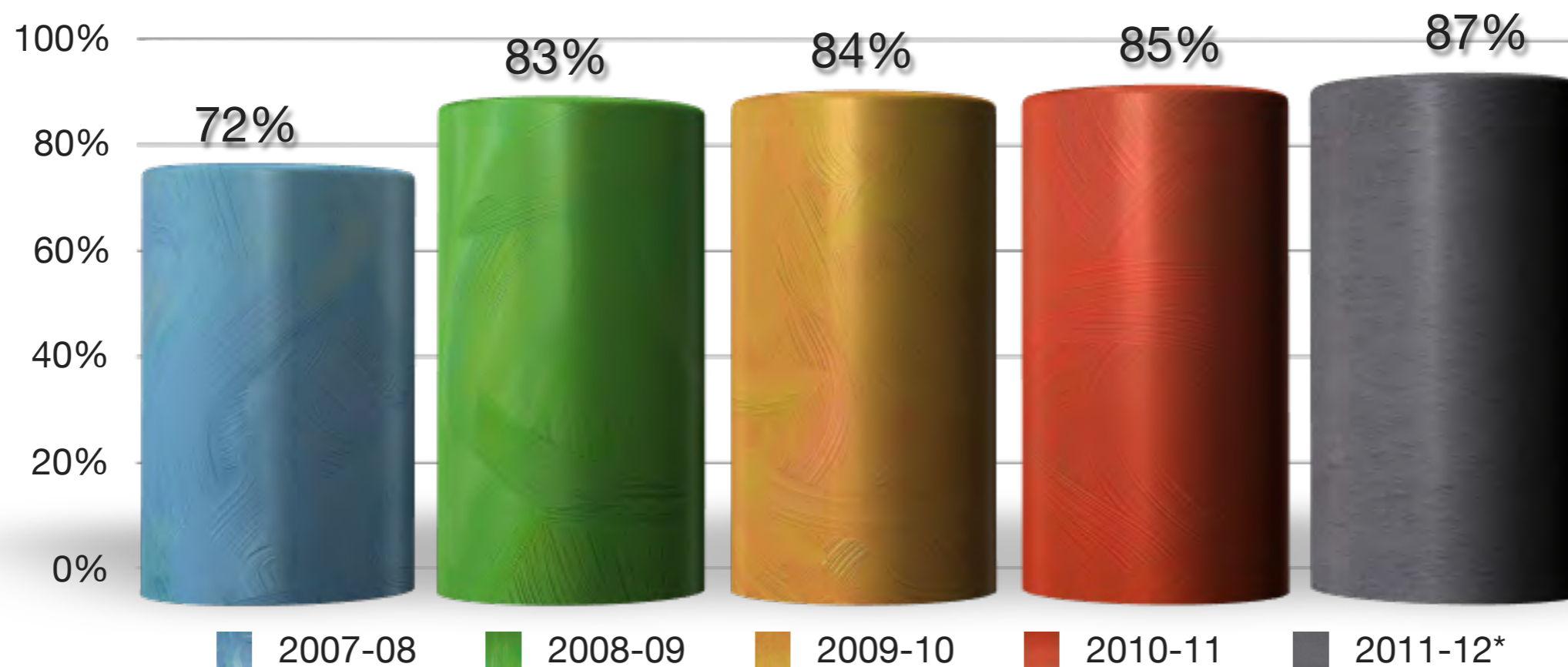
- School of Distinction
- High Growth



Mooreville Middle School

- School of Distinction
- High Growth

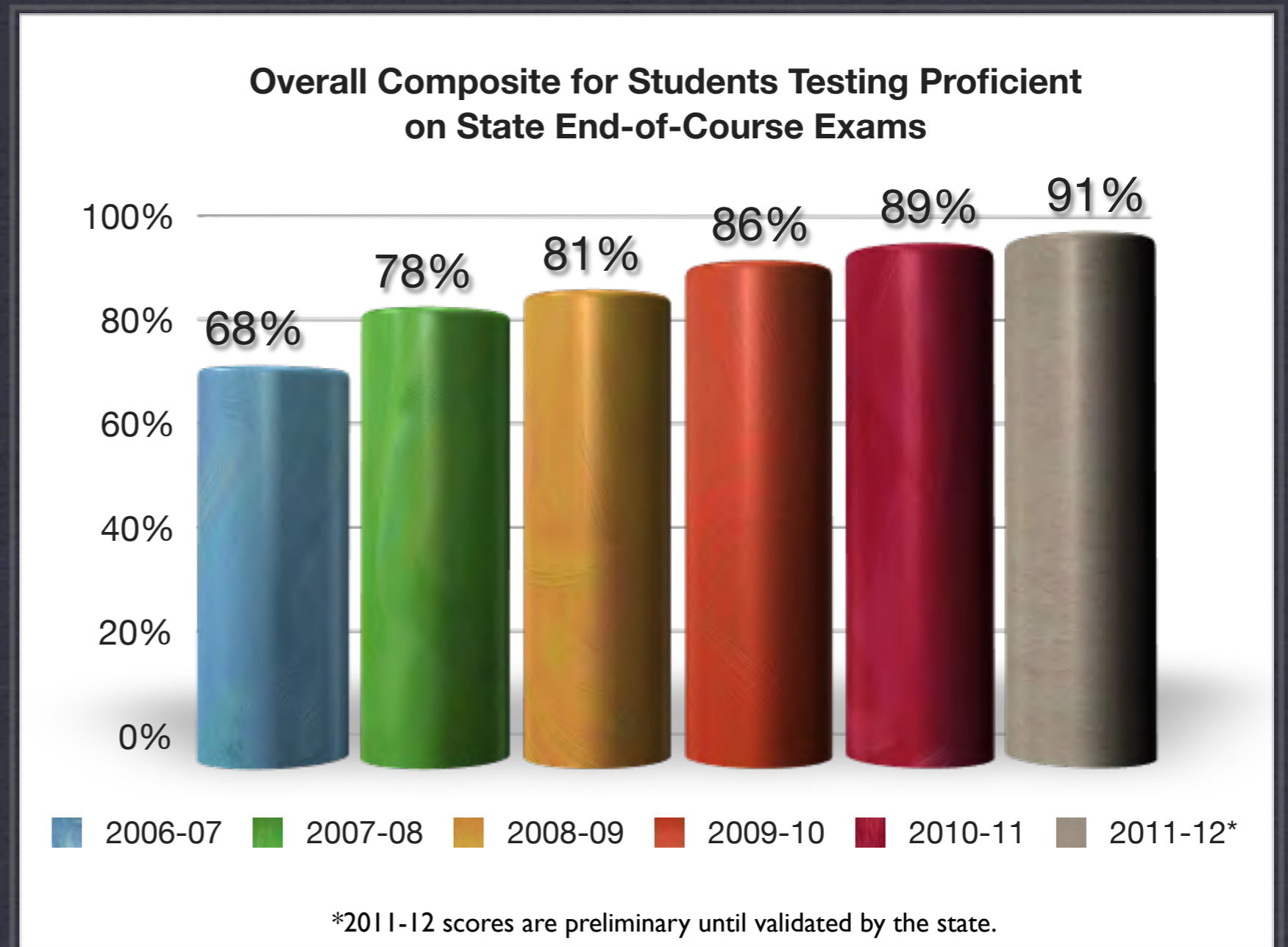
Overall Composite for Students Testing Proficient on State End-of-Grade Exams



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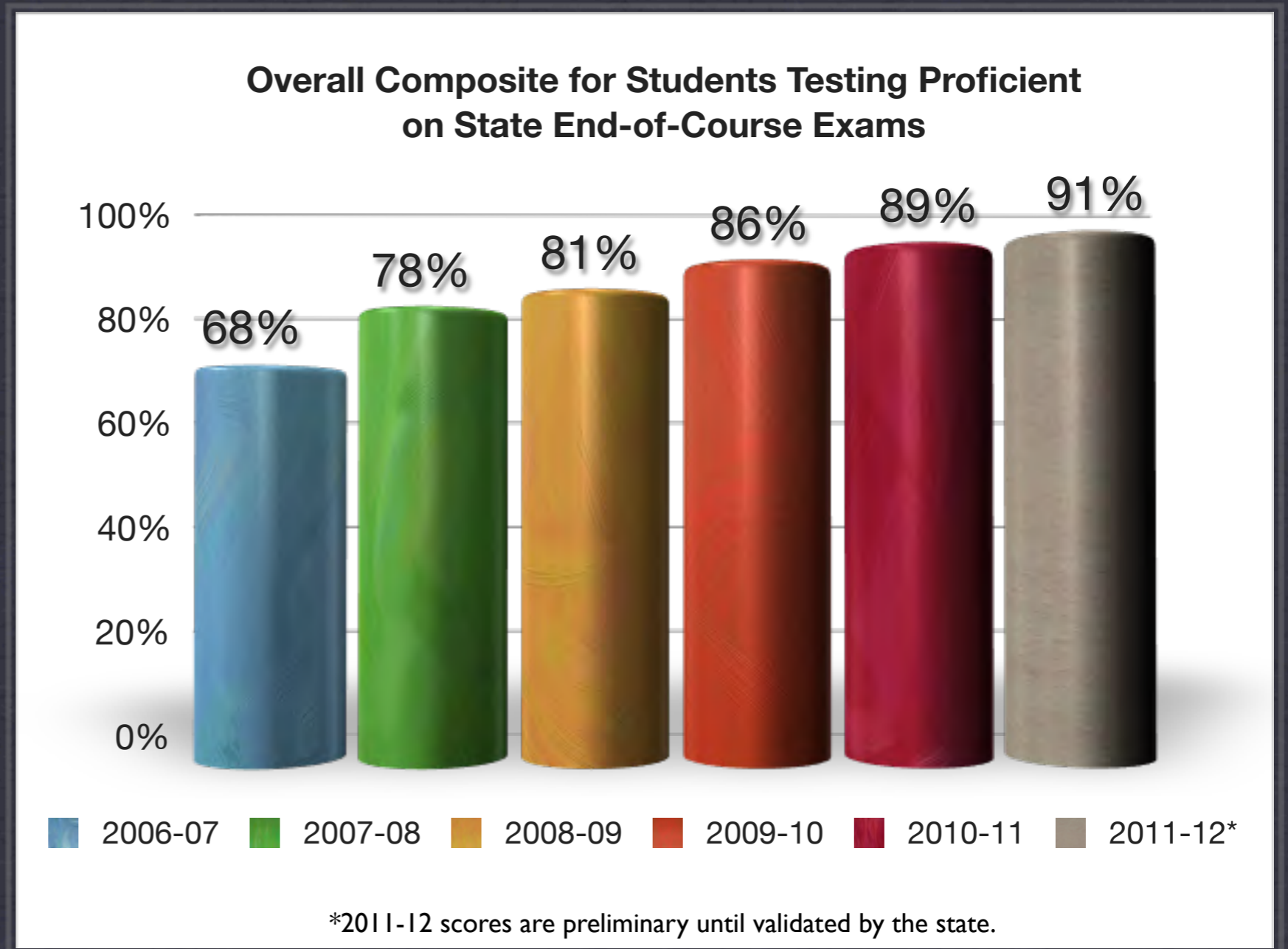
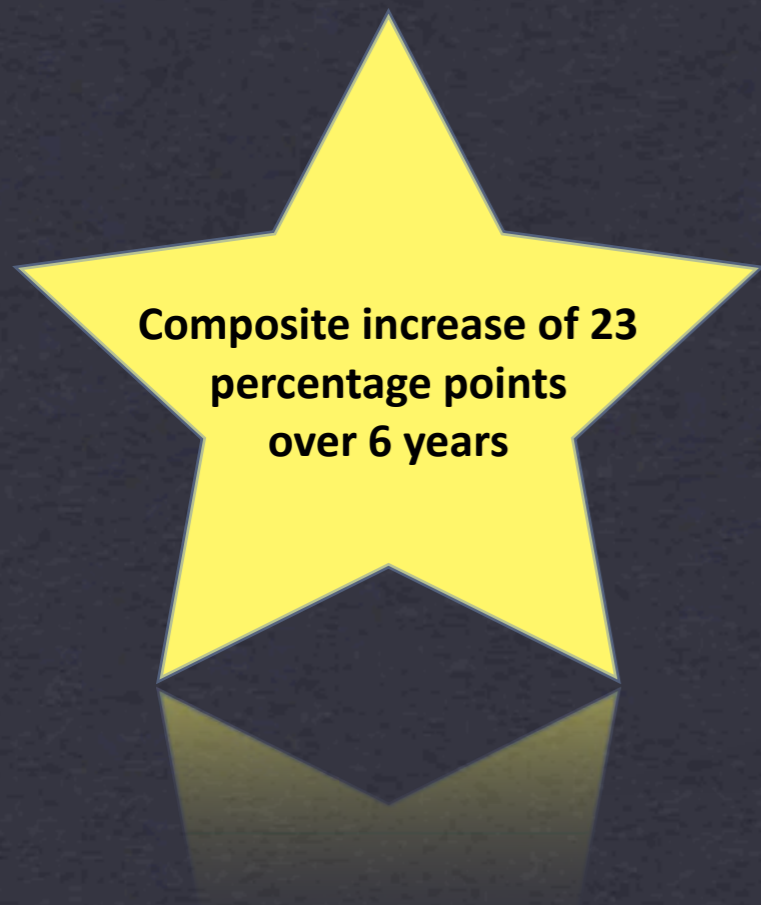
Mooreville High School

- School of Distinction
- High Growth



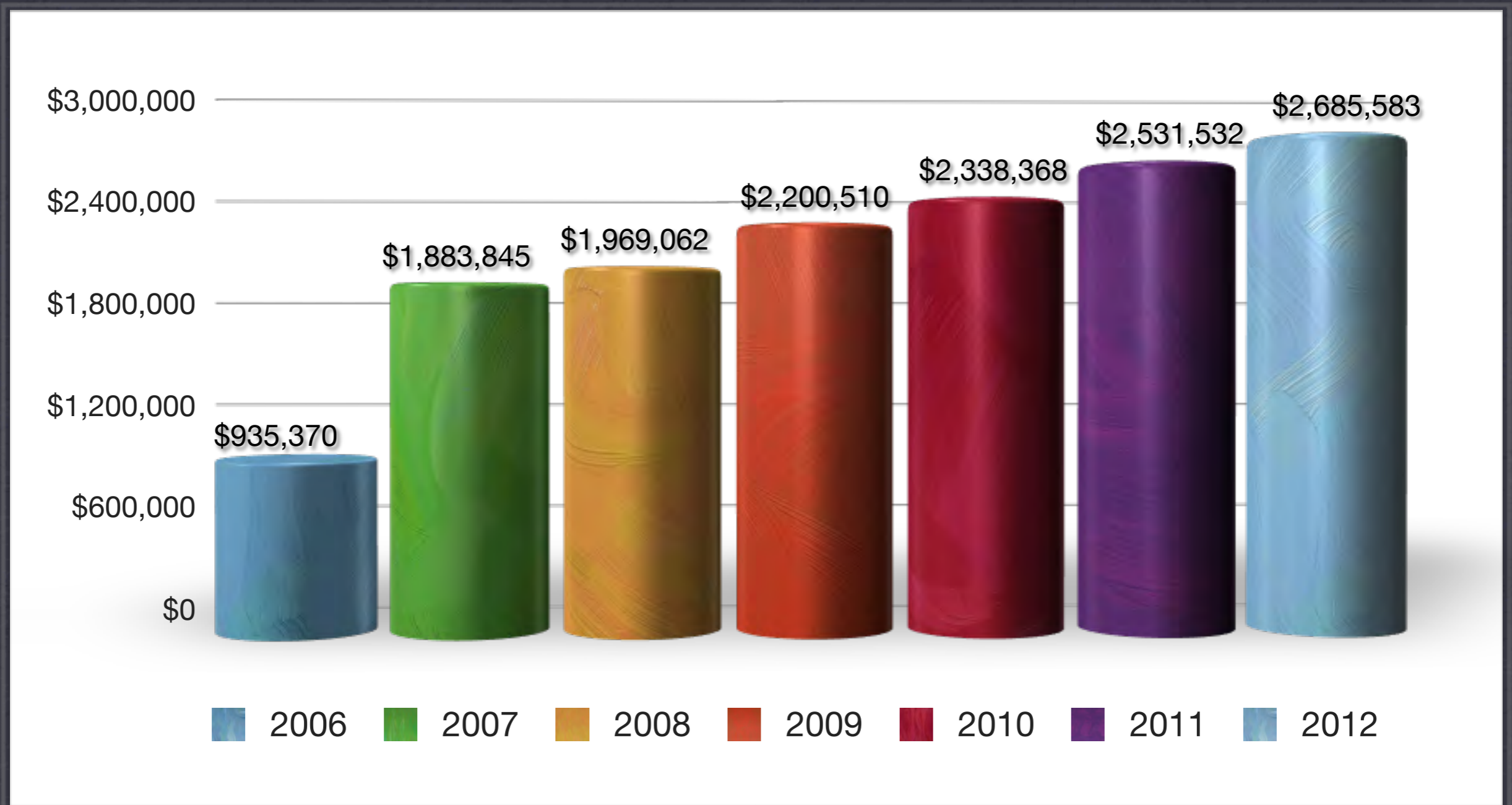
Mooreville High School

- School of Distinction
- High Growth



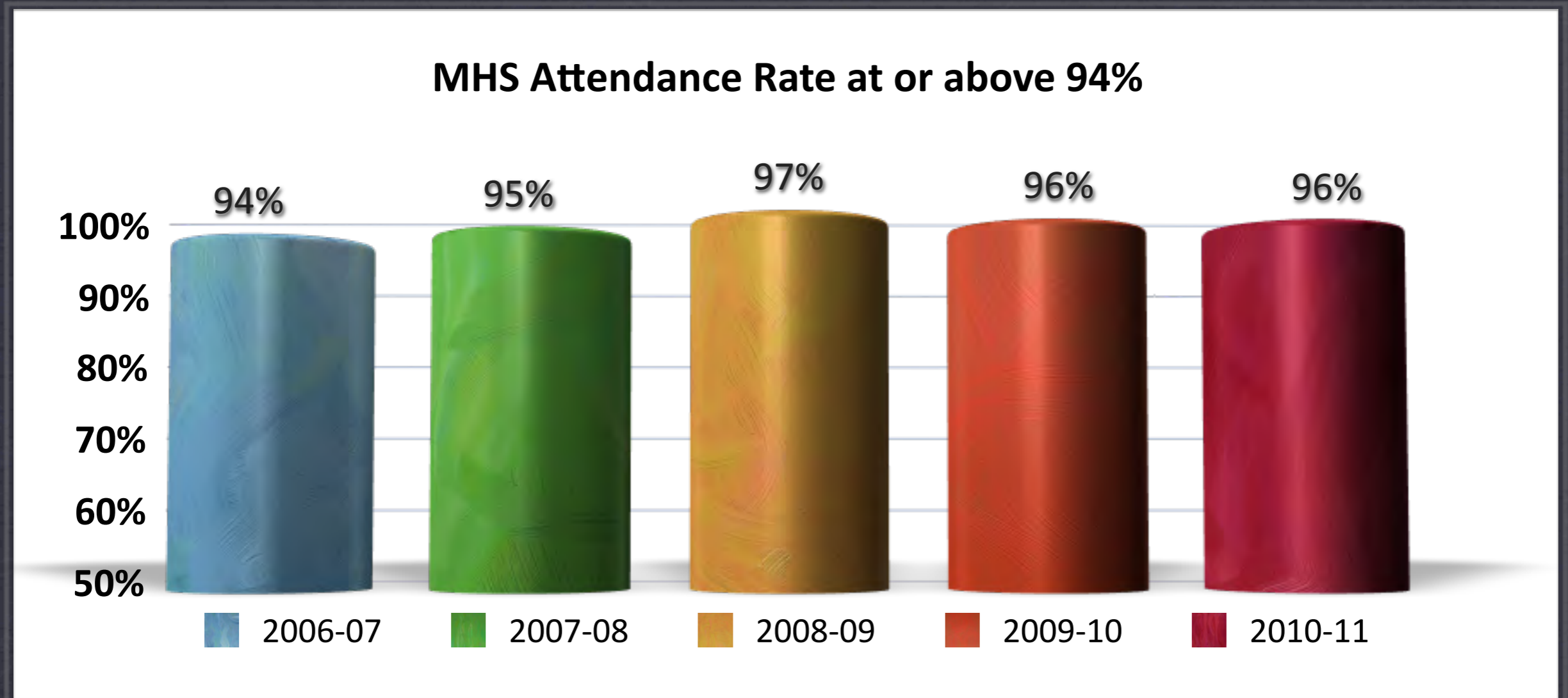
Mooreville High School

Total Scholarships Received



Mooreville High School

Getting Students Excited About School!

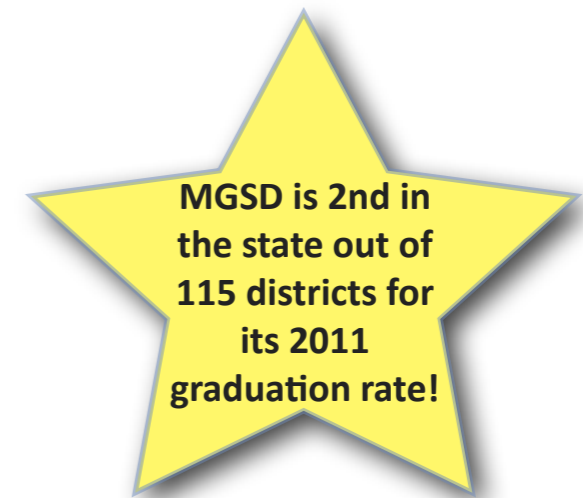


Out of School Suspensions have decreased by 64%

Mooreville Graded School District

Getting Students Across the Line!

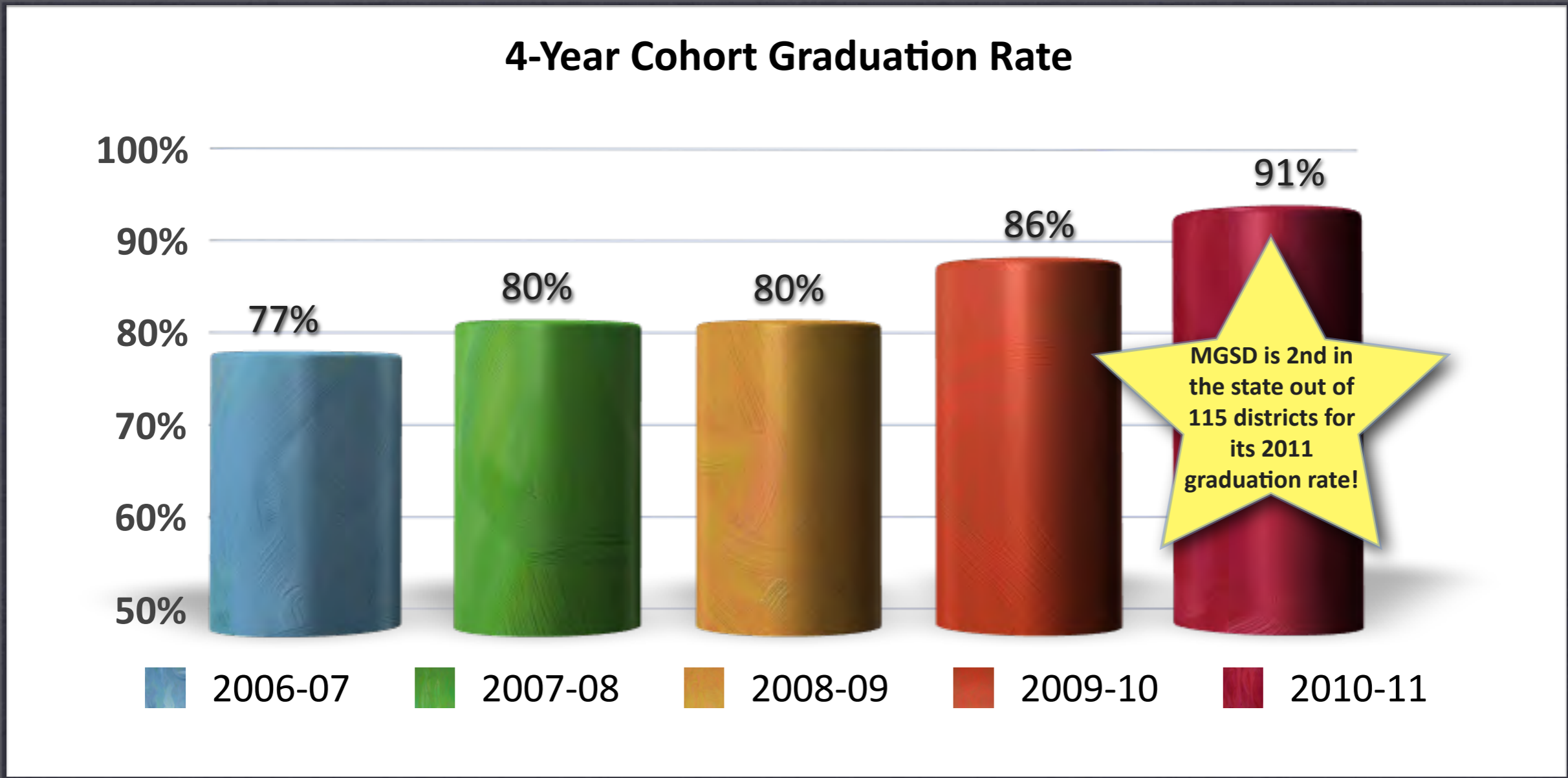
4-Year Cohort Graduation Rate



■ 2006-07 ■ 2007-08 ■ 2008-09 ■ 2009-10 ■ 2010-11

Mooreville Graded School District

Getting Students Across the Line!



Mooreville Graded School District

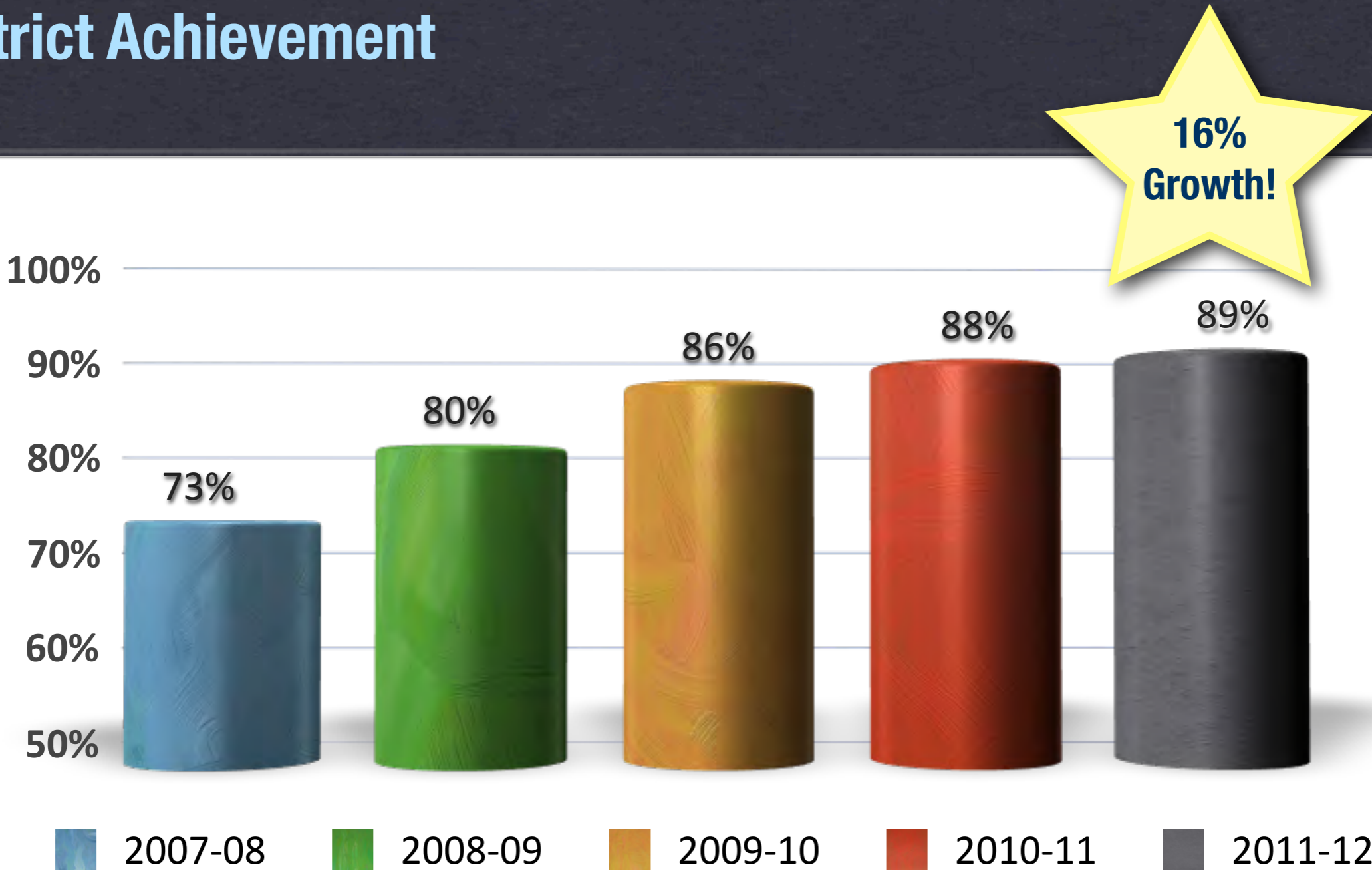
District Achievement



*2011-12 scores are preliminary until validated by the state.

Mooreville Graded School District

District Achievement



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Mooreville Graded School District

District Achievement

	District	Percent Proficient using EOG Reading, Math, Science; EOC	Per Pupil Expenditure (state ranking)	District Enrollment Numbers
1	Chapel Hill Carrboro	90%	8979 (39)	11,504
2	Polk County	89%	9604 (22)	2363
3	Camden County	88%	7989 (73)	1891
	Mooreville City	88%	7463 (100)	5622
4	Carteret County	87%	8486 (55)	8166
5	Transylvania County	86%	8419 (57)	3595
	Watauga County	86%	9034 (38)	4292
	Union County	86%	7304 (105)	38,282
	Yancey County	86%	9307 (29)	2360
	Currituck County	86%	8694 (45)	3893

Formula: Number of Proficient Test Scores on Reading Grades 3-8, Math Grades 3-8, and EOCs divided by the total number of tests taken in school year 2010-2011.

Mooreville Graded School District

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Digital Conversion in action...

How technology has transformed learning, improved performance and saved a district money.

In the 2006-2007 school year Mooresville Graded School District, located in a blue-collar former mill town in suburban Charlotte, NC, decided it was time to transform Mooresville from acceptable to outstanding.

In the fall of 2007 they launched a project called Digital Conversion with the aim of closing the digital divide, improving academic performance, and preparing students for the 21st century workplace.

The fact that Mooresville's funding is below average (101st out of 115 school districts in the state) did not stop them from implementing a ubiquitous computing program.

Mooresville Graded School District Before/After Digital Conversion

Category	2006-2007	2009-2010
End of Course/End of Grade pass rate	70%	86%
Graduation Rate	77%	86%
Students Going to College	74%	86%
Short Term Suspensions	549	310
Dropouts	5.3%	2.3%
Attendance	94%	96%
Free/Reduced Lunch	31%	39%

The district has recognized savings in many areas, including furniture costs (students work on laptops at large tables instead of at traditional desks), textbooks, and supplemental materials like maps, dictionaries, and graphing calculators.

They have also turned repairing laptops into a technical education program for students, reducing both tech support costs and turnaround times substantially.

Mooresville is one of many examples of academic success and cost-savings that have resulted from properly implementing technology. See the Project RED report for many more examples.

“ We knew that our Digital Conversion was the right move...based on the need to create a relevant experience in our schools that will prepare students for their future.”

– Mark Edwards, Ed.D., Superintendent
Mooresville Graded School District



*“Project RED is
nothing less than a
blueprint for remaking
American education.”*

– Angus King
Former Governor of Maine

THE TECHNOLOGY FACTOR

Nine Keys to Student Achievement and Cost-Effectiveness



The Greaves Group · The Hayes Connection · One-to-One Institute

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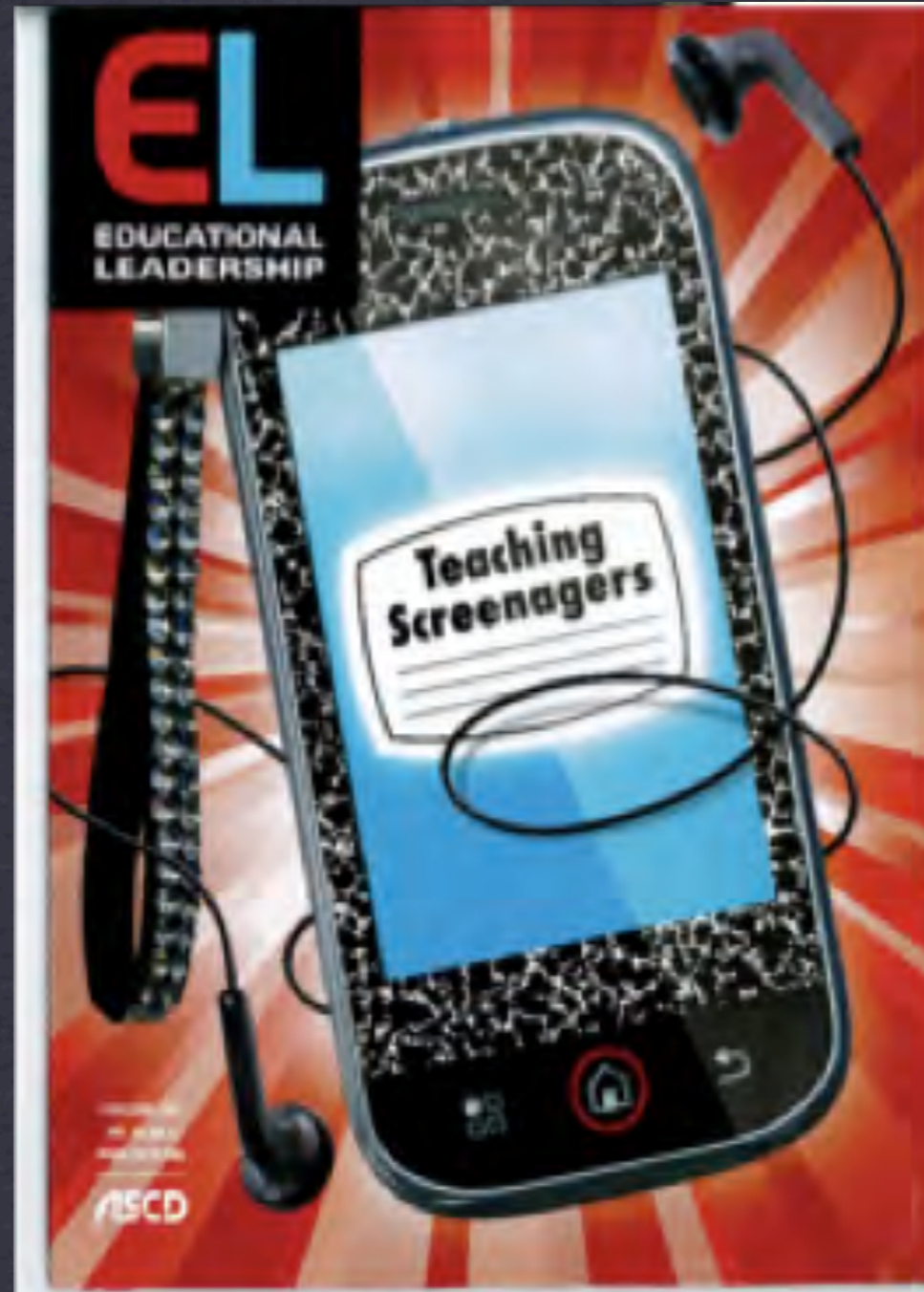


The Greaves Group · The Hayes Connection · One-to-One Institute

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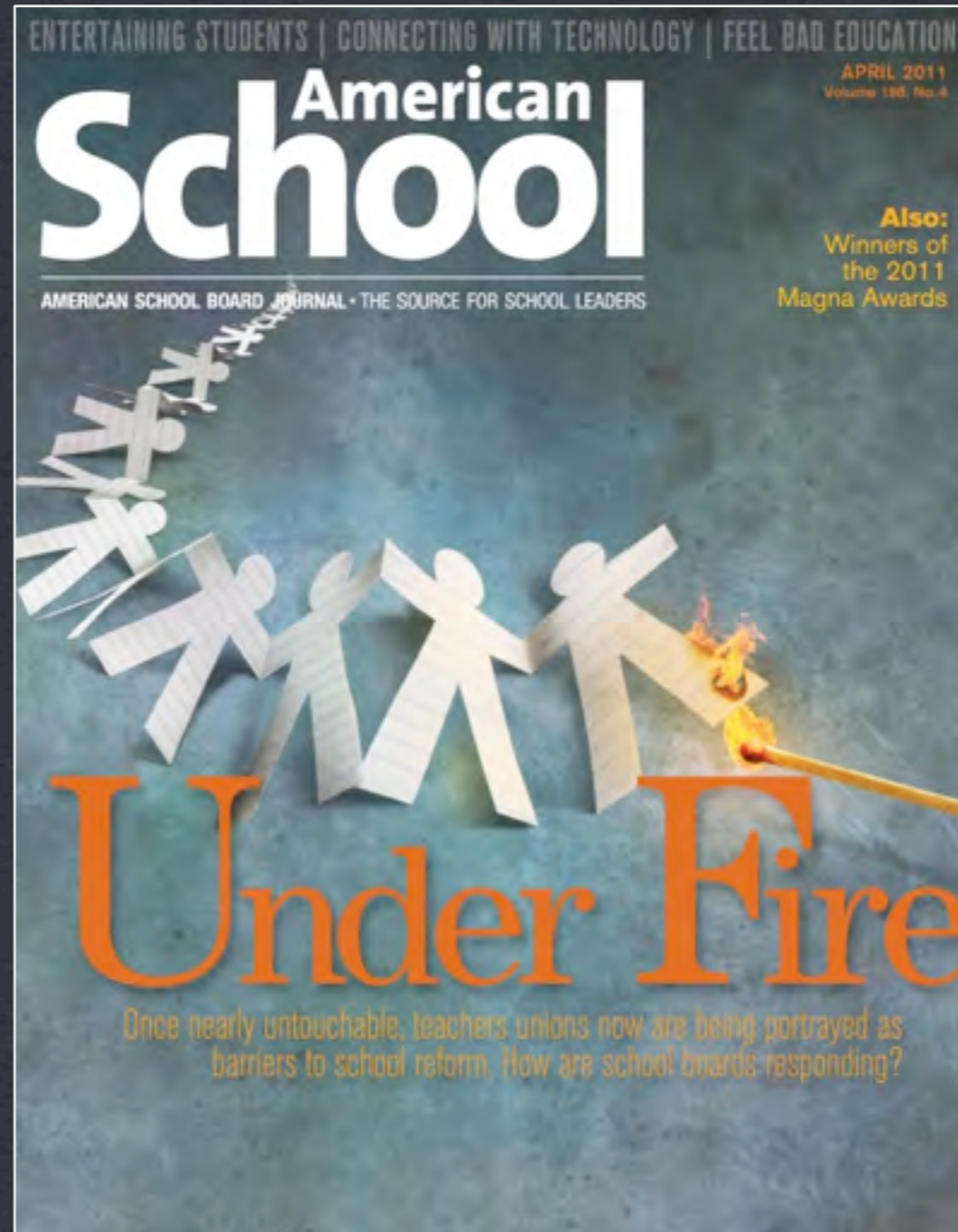
Mooreville Graded School District

In the News



Mooreville Graded School District

In the News



Mooreville Graded School District

In the News

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DA District Administration

SOLUTIONS FOR SCHOOL DISTRICT MANAGEMENT

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SUPERINTENDENT
MARK EDWARDS
9652203072 DU 0604

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www.DistrictAdministration.com June 2011

Mooreville Graded School District

In the News



FILTERING: ACLU stands up for LGBT content

EDUCATION WEEK

Fall 2011
www.digitaldirections.org

DD

DIGITAL DIRECTIONS
Smart Strategies for Ed-Tech Leaders

Building the Digital District

In Mooreville, N.C., a 1-to-1 initiative is showing significant achievement gains

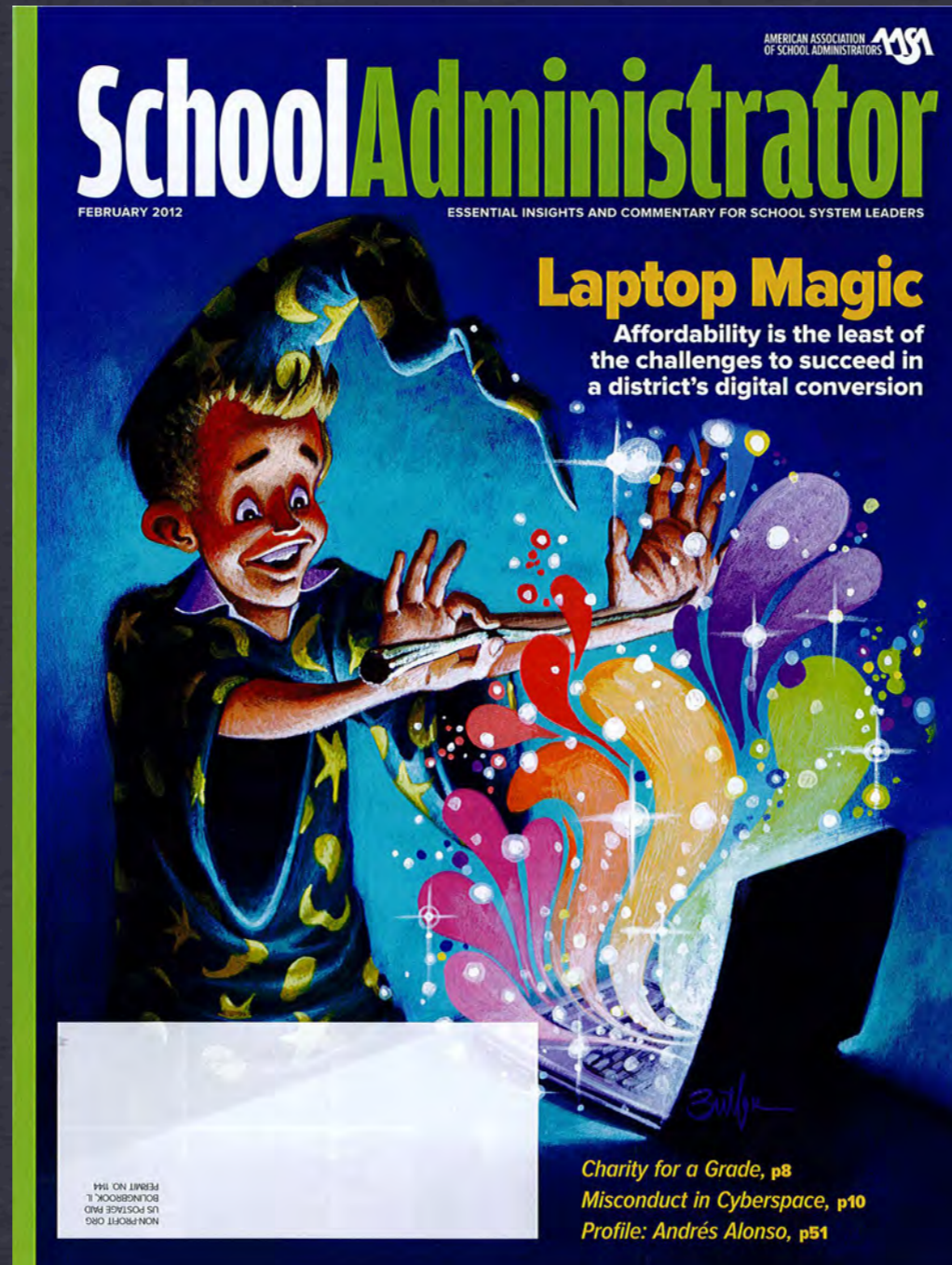
Mooreville Graded School District

In the News



Mooreville Graded School District

In the News



Mooreville Graded School District

In the News

REPORT AIR DATE: April 8, 2011

North Carolina School Engages Tech Generation With Digital Learning Tools



SUMMARY

John Tulenko of Learning Matters, which produces education stories for the NewsHour, reports on a North Carolina school district switching from textbooks to all-digital learning materials.

http://www.pbs.org/newshour/bb/education/jan-june11/technology_04-08.html

Mooreville Graded School District


In the News

The New York Times

Education

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GRADING THE DIGITAL SCHOOL

Mooreville's Shining Example (It's Not Just About the Laptops)



February 13, 2012

http://www.nytimes.com/2012/02/13/education/mooreville-school-district-a-laptop-success-story.html?_r=1&hpw=&pagewanted=all

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Apple 2.0 | Big Tech | Tech Tumblr | Innovation Nation | Startups | Brainstorm Tech | Video | Tablet View

Apple 2.0

Covering the business that Steve Jobs built

About those 4,400 MacBooks in Mooreville, N.C.'s schools

By Philip Elmer-DeWitt February 13, 2012: 5:33 AM ET

Recommend 40 | Tweet 57 | 15 | 4 | Email Print

For once, an educational success story that's not really about the computers

Kudos to the *New York Times*' Alan Schwarz for seeing beyond the Apple (AAPL) angle -- those 4,400 MacBooks, the school district's cutesy slogan (iBelieve, iCan, iWill), the fact that the DOE's director of educational technology worked for Apple for eight years -- in his **front page story** Monday praising the Mooreville (N.C.) Graded School District as a "shining example" of what digital technology can do for students and teachers.



Fifth graders in Mooreville. Photo: Jeremy M. Lange for the New York Times

It is not, as his headline proclaims, just about the laptops that were issued three years ago to 4,400 students in grades 4 through 12. The district's success in raising its attendance, its reading scores and its graduation rate has less to do with the computers than with how the school system is using them. As Schwarz puts it:

February 13, 2012

<http://tech.fortune.cnn.com/2012/02/13/about-those-4400-macbooks-in-mooreville-n-c-s-schools/>

Partners

- **Apple**
- **SAS**
- **Brenthaven**
- **Cisco**
- **Blackboard / Angel Learning**
- **Discovery Education**
- **Knovation**
- **BrainPop**
- **Follett**
- **FileWave**
- **Pearson**
- **iStation**
- **Mooreville Foundation for Excellence in Education**

Every Child, Every Day!



www.mgsd.k12.nc.us

Every Child, Every Day!



www.mgsd.k12.nc.us