Mooresville Graded School District:

Digital Conversion Success for Every Child, Every Day
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Like many districts across the country, North Carolina’s Mooresville Graded School District (MGSD) faced declining performance data, a growing opportunity and digital divide, and a meager budget compared to other districts across the state. With a graduation rate of just 64% and a college attendance rate of 74%, their students were unprepared for today’s global economy and digital marketplace. MGSD realized they needed to transform teaching, learning, and technology integration in their schools to meet the needs of the 21st century and to ensure success for all students.

At a Glance:

**CHALLENGE:**
MGSD sought to prepare students for today’s global economy and digital workplace, but faced declining performance data, a growing opportunity and digital divide, and a meager budget.

**SOLUTION:**
MGSD transformed teaching, learning, and technology integration through digital conversion powered by Blackboard classroom solutions.

“Blackboard is one of a very few, very important educational partners for us,” says Edwards. “They provide the glue that holds our digital conversion together. The folks at Blackboard, like our other partners, understand that what we’re after is measurable academic improvement, not just a technology system. That’s what makes the partnership work for the district, our students, their parents, and our staff.”

**RESULTS:**
- MGSD’s academic composite improved to 89% from 73% over five years
- Mooresville High School’s overall composite on state end-of-course exams has improved to 91% from 68%
- Graduation rate improved to 93% from 64%
- Attendance rate improved to 97% from 94%
- Suspensions have declined by 64%
- AP Class enrollments and exams taken have increased more than 200%
- Scholarship dollars awarded have increased more than 300%
- College attendance rates have jumped to 88% from 70%
- Students in grades 3-8 have demonstrated steady improvement year over year on the overall composite for students testing proficient on state end-of-grade exams
- Current North Carolina State rankings of 115 districts:
  - 3rd in academic composite performance
  - 2nd in graduation rate
  - 102nd in per student spending per year ($7,562)
CHALLENGE:
Declining Academic Performance and Growing Digital and Opportunity Divide

Mooresville, North Carolina, is a small city 30 minutes outside Charlotte serving approximately 6,000 students. The city’s school district, MGSD, ranks 102nd of 115 school districts in the state for spending per student per year and is a Targeted Assistance Title I District. While MGSD has always been viewed as a good school system, there was certainly room for improvement.

In 2006, Mooresville’s graduation rate was 64%, and in 2007, the academic composite at Mooresville High School was 68%. At the same time, students who qualified for free and reduced lunch jumped to 40% as more families struggled with economic downturn and unemployment. Like many districts across the nation, MGSD faced a growing digital and opportunity divide among students. Many Mooresville parents work in global industries in and around Charlotte. Other local families have seen their economic standing collapse as North Carolina’s traditional industries—lumber, textiles, tobacco, and furniture—have moved abroad. Both sets of families know that technological proficiency is critical to their children’s success. “Mooresville is a bedroom suburb of Charlotte, North Carolina,” says Jody Binkley, parent of an MGSD student. “We want to see our children find employment at the global companies around us. And we all understand that our children need that kind of education from the time they enter school.”

SOLUTION:
Digital Conversion Powered by Blackboard Solutions

In 2007, under the direction of newly hired Superintendent Mark Edwards, Ed.D., MGSD developed a strategic plan with an ambitious mission: “Prepare every student, every day to be a successful and responsible citizen in a global workplace and community.”

The plan called for implementing a “digital conversion” to transform both district pedagogy and learning technology. MGSD’s digital conversion profoundly changed the nature of teaching and learning as the district moved from a paper-based world to primarily a digital world, in which every student and teacher has access to a personal computing device and the Internet anytime, anywhere. As Edwards explains, “MGSD’s digital conversion is about ‘rethinking school’ from the ground up, enabled by today’s technologies and guided by the demands of the 21st-century workplace.”

CAREFUL SELECTION OF STRATEGIC PARTNERS

Establishing the correct technology is key to academic success and community engagement. It is also critical for cost control and system efficiency. MGSD diligently and strategically chose
its technology solutions, including its partners and learning management system (LMS), which serves as the central hub for all things teaching and learning. Edwards stresses the importance of their decision regarding their LMS: “Learning management system functionality was one of our most important planning considerations.”

In 2008, MGSD selected the Blackboard Learn ANGEL Edition learning management system to power their digital conversion, connecting students and teachers through their devices. “Blackboard is one of a very few, very important educational partners for us,” says Edwards. “They provide the glue that holds our digital conversion together. The folks at Blackboard, like our other partners, understand that what we’re after is measurable academic improvement, not just a technology system. That’s what makes the partnership work for the district, our students, their parents, and our staff.”

“We’ve been very careful to build a system that is as simple as possible for teachers, students, administrators, and parents to use,” says MGSD Chief Technology Officer Scott Smith, Ed.D. “Efficiency and ease-of-use are critical to establishing technological excellence. They drive engagement across the entire community of users, and system excellence of this nature also helps drive academic performance. System efficiency comes partly from being strategic about the technology partnerships a district cultivates. MGSD has only six or seven key technology partners, and they’ve been able to deliver everything we need, particularly with Blackboard serving as the key point of integration. Our partnering strategy has also enabled us to keep costs low both in terms of implementing an excellent system and maintaining it over time. Essentially, we are able to pay for the technology by reallocating and redirecting funds for purchasing textbooks, professional development materials, and other print costs. In addition, staff positions were repurposed to best utilize personnel to support digital conversion.”

In addition to carefully selecting key technology partners, Smith advises districts to “look at your budget creatively. MGSD is delivering excellent results with little impact to our budget because of the way we’ve reallocated resources and funding from previous instructional practices, especially the reliance on textbooks and other printed materials. We spend less per student than almost any other district in North Carolina, so I think we’ve proven that a 21st-century learning environment is affordable for even the most constrained districts. It’s a matter

**MGSD DIGITAL CONVERSION TIMELINE**

- **July 2007:** Digital Conversion Planning Team began meeting every two weeks; design and creation of district-wide strategic plan commenced
- **August 2007:** 400 MacBook® computers delivered on carts to English department at Mooresville High School
- **December 2007:** MacBooks® distributed to all teachers
- **January 2008:** Professional development began
- **July 2008:** First annual MGSD’s summer institute to prepare teachers for Blackboard’s LMS Solutions
- **August 2008:** 2,400 MacBooks® distributed to Mooresville High School and Mooresville Intermediate School students; 80 interactive whiteboards installed in all K-2 classrooms
- **November 2008–March 2009:** Distribution of MacBooks® on carts phased to grades 4–6
- **July 2009:** Second annual MGSD’s summer institute to continue professional development on Blackboard’s LMS Solutions and to help teachers transform their pedagogy
- **August 2009:** MacBooks® distributed to all students in grades 4-12, interactive whiteboards installed in every K-3 classroom
- **August 2010:** Distributed MacBooks® on carts to grade 3; Grades 3-12 now 1:1
- **Ongoing:** Just as it should be, Scott Smith says, “Professional development never ends at Mooresville.”
- **January 2014:** New district-wide strategic plan approved to carry forward digital conversion
of vision, commitment, and preparing students for a far different world from the one in which we attended school.” Edwards agrees, “MGSD is not an affluent district, but we have addressed the budget challenge by carefully repurposing resources—a strategy all schools can follow.”

MGSD has worked with Blackboard to build its technology ecosystem leveraging Blackboard’s classroom and communication solutions that deliver:

- Leading-edge learning management
- Mass-communication email, voice, and text message delivery
- Formative assessments (assignments, collaboration, tests/quizzes)
- Collaboration and communication
- Parent portal to check grades, assignments, and calendar, and to communicate with teachers
- Easy and efficient grading workflows for teachers
- Personalized learning
- Easy-to-develop blended or flipped learning classrooms
- Rich media and digital curriculum integration and management
- Sustained, continuous, and ongoing professional development for teachers and administrative staff
- Data-driven decision making using reports
- Safe, secure learning environment
- Education continuity
- Web 2.0 communications (wikis, blogs, discussion, email, chat)
- Student body engagement: Facilitation of clubs, sports teams, student government, student surveys, announcements, student body elections (class officer elections, even the prom queen)
- Online Professional Learning Communities (PLCs) across the districts
- District, class, organization, and club calendars

“Blackboard is not our only technology partner, but the company’s LMS technology and Connect platforms are the points of integration,” says Smith. “One of the core values of our digital conversion is simply that community and business partnerships are important for success. Each of our technology partners has helped us generate a community-wide conversation. The Blackboard platforms are where that dialogue and engagement come together.”

Blackboard’s LMS technology enables a powerful transformation of pedagogy in the classroom. Edwards notes, “When students are using digital resources, building multimedia projects, collaborating and connecting online, and conducting online research, they are more interested in school work today, and they feel more connected to what their future holds tomorrow!”
FOUNDATIONS FOR MEASURABLE ACADEMIC SUCCESS THROUGH AGE-APPROPRIATE TECHNOLOGIES

In less than three years, MGSD implemented a district-wide, robust, efficient, and functional IT infrastructure capable of graduating students who are fully conversant with 21st-century technology; provided interactive whiteboards for all K–3 classes; and provided every student in grades 4–12 with a personal MacBook® computer through the district’s partnership with Apple. At the Mooresville schools, from kindergarten through 12th grade, students are fully immersed in age-appropriate technologies.

The MGSD digital conversion is carefully aligned with the district’s strategic plan, which, in turn, is aligned with North Carolina Standard Course of Study² and with the ISTE National Educational Technology Standards³. The North Carolina Standard Course of Study consists of the Common Core State Standards in English language arts and mathematics and the North Carolina Essential Standards in all other subjects. This alignment ensures that MGSD delivers academic results for its students that correspond with state and national educational goals.

In terms of technologically enhanced academic performance, ISTE’s National Education Technology Standards support numerous goals. The MGSD digital conversion aligns with two of those:

• Advance the art and science of teaching, learning, and educational leadership with and about technology, research, development, professional learning offerings, and other capacity-enhancing activities.
• Provide leadership through envisioning emerging technologies and their implications for teaching, learning, and academic leadership.

However, neither the national standards nor MGSD’s mission are about technology itself. They’re about academic performance.

PROFESSIONAL DEVELOPMENT

MGSD’s success didn’t stem from technology, alone; it required a balanced and accepted conversion of teaching and learning. As Smith says, “Digital learning and pedagogy need to be integrated for a conversion of this nature to succeed. Instructional and technological leaders need to work side by side and across the entire district. [Without] a professional development strategy, no amount of technological innovation will deliver results. Fundamentally, a digital conversion is about cultural change within our schools. That needs to be strategic, measurable, and enforced. Teachers and staff need to be prepared for and open to new ways of teaching and learning.”

Blackboard solutions and a laptop for every child are only two components of MGSD’s digital conversion; the following factors¹ are critical to Mooresville’s success:

• A commitment to every child
• A shared vision
• A culture of caring and collaboration
• Embrace of the moral imperative
• Relentless focus on achievement
• Personalized, relevant, connected learning
• Deep transformation of instruction
• High expectations
• Digital resources and infrastructure
• Ongoing professional growth
• Ubiquitous leadership
• In-depth planning
• Data-driven decision making
• Creative resource alignment
• All hands on deck
• Joy, laughter, recognition, and celebration
• Understanding of second-order change
To ensure staff were ready to truly integrate technology into teaching and learning, administrators and teachers attended a four-day on-site summer institute featuring Blackboard’s LMS technology prior to the deployment of one-to-one MacBooks® and Blackboard’s LMS solutions. There, they received training on the teaching and learning platform. They also explored pedagogical changes necessary for technology-enriched curriculum development and delivery. Blackboard trainers taught administrators and teachers how to effectively integrate technology in the classroom with the LMS. Teachers learned how to leverage Web 2.0 tools (blogs, wikis, discussion boards, etc.) in the classroom not just to build students’ digital skills, but to foster the collaboration, creativity, and independent research skills needed today for college and career success. With training, MGSD teachers are empowered to employ various leading-edge approaches to instruction and blended learning, such as project-based learning, inquiry-based learning, collaborative learning, and student-centered teaching methodologies.

“One-to-one computer education is the tip of the iceberg regarding 21st-century academic performance,” says Bethany Smith, an 8th grade teacher at Mooresville Intermediate School. “The laptops enable teachers to reach today’s students through a format that suits their lifestyles. But unless teachers understand how to use technology in the classroom, learning doesn’t change. Fortunately, through our digital conversion, Mooresville teachers have had the professional and pedagogical development to build our curriculum around digitally enhanced learning. With few exceptions, we’re very engaged in the conversion. We see meaningful results every day.”

CLOSING THE DIGITAL AND OPPORTUNITY DIVIDE

Part of the boon for parents and students—particularly those who could not afford home computers—is that each student, beginning in 4th grade, has a computer to bring home. MGSD engaged the entire community from day one, collaborating with local businesses, the chamber of commerce, and economic development to rally support and ensure the community understood the benefits of the digital conversion. As a result, most local businesses and all city facilities, such as the library, police and fire departments, the citizen’s center, and even public parks, offer free Wi-Fi. MGSD has also partnered with a local Internet service provider to reach into neighborhoods previously without Internet access and provide free home Internet access for any Mooresville student on free and reduced lunch.

With nearly 2,000 MacBooks® circulating around Mooresville High School, someone needed to be responsible for troubleshooting technological problems with laptops and answering basic computer-related questions. Under the guidance of CTO Scott Smith, the former computer lab was converted into a drop-in/call-in help desk—staffed by students. Mooresville High School students receive academic credit for staffing the help desk. They learn the MacBook® system and the various applications used in MGSD and are able to help fellow students resolve basic computer questions regarding their laptops and applications.

The onsite help desk promotes:
- Peer-to-peer learning
- Technology skills development
- Technology cost containment
The presence of a computer in the home of every 4th to 12th grade student has made it possible for all parents to use Blackboard’s LMS technology to stay engaged with their child’s work and performance. With home access to instructional materials, assignments, and communication tools, the platform has effectively extended the school day and has made it possible for students to stay engaged when they’re not well enough to attend school or if they miss a day for other personal reasons.

MGSD has also been strategic about using Blackboard Connect to drive parental engagement. Connect enables mass phone, email, and text messages to be sent to parents, and it is used for emergency alerts, weather-related closures, school events, and many other announcements. MGSD alerts parents when interim and quarterly performance reports are posted online, and administrators use Connect to promote parent use of the LMS at home.

The Blackboard solutions, along with personalized computers for every student, bring Edwards’s vision for equalized learning to life. Edwards believes that schools must address the challenges of today and meet the needs of every student regardless of socio-economic status or special needs. “Digital conversion allows educators to level the playing field and provide every student, including at-risk learners, with anytime/anywhere access to resources and the opportunity to develop the skills they need for today’s workplace,” Edwards says. “The personalization offered by digital conversion has helped our special needs students work at their own pace and level, and the organization of student work on the learning management system has helped them improve their organization and time management skills. Digital conversion is today’s great equalizer because it includes every student, enables individualized learning, and makes extended learning outside school hours possible for all students, not just those fortunate enough to have a computer at home.”

RESULTS:
Improved Academic Performance and Elimination of the Digital and Opportunity Divide

In six years, MGSD has demonstrated remarkable results in academic performance, attendance, college attendance and scholarships, suspension rates, parental engagement, and proficiency with the technology. Most notably, while spending less money than 113 of the 115 districts in North Carolina (just $7,562 per student per year), the district now ranks third in academic composite and second in graduation rate across the state. MGSD’s academic composite score improved 16 percentage points, moving from 73% in 2007-2008 to 89% in 2011-2012, while the graduation rate improved an astounding 29 percentage points, jumping from 64% in 2006 to 93% in 2013. Since the digital conversion began, MGSD’s attendance rate has increased from 94% to 97%, high school dropouts have declined, and the district’s suspensions have reduced by 64%.

Mooresville High School has demonstrated a staggering 23 percentage point improvement in the overall composite for students testing proficient on state end-of-course exams. It improved
from 68% in the 2006–2007 school year to 91% in the 2011–2012 school year. Students in grades 3–8 have demonstrated steady improvement year over year on the overall composite for students testing proficient on state end-of-grade exams, as well. Advanced Placement class enrollments and exams taken have increased by more than 200% during this time, and scholarship dollars awarded have increased by more than 300%. The college attendance rate of MGSD graduates has jumped from 74% to 88%.

On the astounding improvements, Edwards says, “By living our motto of ‘every child, every day,’ incorporating data into instructional planning, increasing student engagement, and building a strong sense of family, we believe we have turbocharged student achievement. A power surge of relevance is connecting students’ work today to their dreams for tomorrow1.”

In addition to demonstrating district-wide success, Mooresville has demonstrated success in closing the digital and opportunity divide. Just some examples of this success include climbing to a number one rank in the state in African American graduation rate at 98%; African American male third graders scored higher than any other sub-group in math at 94%; and the graduations rates for students with special needs and children of poverty have improved to 88% and 91% respectively. Mooresville’s South Elementary, the elementary with the highest percentage of students who qualify for free and reduced lunch, posts the highest elementary academic achievement scores in the district in all subjects. Edwards points out, “We have reduced—and in some cases erased—the achievement gap for our disadvantaged students, including students with special needs, English language learners, and minorities1.”

Mooresville’s results have garnered national attention. Edwards and Mooresville have been featured by numerous journals, news organizations, research groups, and newspapers over the years, including Project Red, Educational Leadership, Scholastic Administrator, PBS News Hour, The New York Times, CNN Money, Fox News, The Wall Street Journal, and THE Journal. In a 2012 New York Times article, Karen Cator, the former director of the office of educational technology in the U.S. Department of Education and current chief executive officer of Digital Promise, was quoted, “Other districts are doing things, but what we see in Mooresville is the whole package: using the budget, innovating, using data, involvement with the community, and leadership. There are lessons to be learned4.”

In 2013, Edwards was named the AASA National Superintendent of the Year by the School Superintendents Association. In June 2013, President Barack Obama visited MGSD and endorsed the district’s commitment, “So that’s the spirit that’s reflected in the motto of your school district—‘every child, every day.’ It’s that fundamental belief that no matter who you are, no matter what you look like, no matter where you come from, every child can learn. Every child can succeed. Every child, every day, deserves that chance. We’ve got an obligation to give every young person that chance5.”
“The entire program is about integrating 21st-century pedagogy with 21st-century technology to produce 21st-century graduates,” says Edwards. “We’re excited about our results. We’re optimistic about the future. We’re grateful for the business engagement we’ve seen. More importantly, we’re delighted to be helping our students build their futures. In the end, it’s the only thing education providers—whether that’s teachers or technology developers like Blackboard—are here to do.”

MGSD District Achievement

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

Students in grades 3-12 have demonstrated steady improvement year over year on the overall composite for students testing proficient on state end-of-grade exams.
Four-Year Graduation Rate
College Attendance Rates
Scholarship Amounts Received

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<th>College Attendance Rate</th>
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*smaller graduating class

2 The North Carolina Standard Course of Study sets curriculum standards and graduation requirements for students in North Carolina schools. Among these are state requirements and standards for end-of-grad and end-of-course tests. Currently, North Carolina’s Standard Course of Study consists of the Common Core State Standards in English language arts and mathematics, and the North Carolina Essential Standards in all other subjects. For details, see www.ncpublicschools.org/curriculum/.
3 The National Education Technology Standards are a set of guidelines that direct the work of the International Society for Technology in Education (ISTE). Its mission is to advance excellence in learning and teaching through innovative and effective uses of technology. Key ISTE values are strategic partnerships across the educational spectrum and belief in the “the power of a diverse and inclusive global community of members who learn, teach, and lead to advances in the field.” For more information, see www.iste.org.
5 Obama, Barack. “Remarks by the President at Mooresville Middle School—Mooresville, NC.” The White House, The Office of the Press Secretary. 6 Jun. 2013.
WANT TO LEARN MORE?

Read Dr. Edwards’s book:
http://www.amazon.com/Every-Child-Day-Conversion-Achievement/dp/0132927098

Read about Dr. Edwards’s 2013 AASA National Superintendent of the Year Award:
https://www.aasa.org/content.aspx?id=27088

Learn more about MGSD’s Digital Conversion:
http://digitalconversion.mgsd.k12.nc.us

Learn more about digital conversion in the Education Week article:
http://www.edweek.org/dd/articles/2011/10/19/01conversion.h05.html

Watch the PBS News Hour report:
http://www.pbs.org/newshour/bb/education-jan-june11/technology_04-08/

Read how MGSD’s success is more than laptops in the CNN Money article:

Read more about MGSD’s success in The New York Times:

Watch Dr. Edwards in a panel discussion with The New York Times:
http://www.livestream.com/nytschoolsfortomorrow/video?clipId=pwa_7f91f33-6d2f-4d5a-bdbb-739c3c1c422fd&utm_source=lslibrary&utm_medium=ui-thumb

Watch President Obama’s speech from his visit to Mooresville June 6, 2013:
http://www.whitehouse.gov/photos-and-video/video/2013/06/06/president-obama-speaks-technology-schools

Read President Obama’s speech from his visit to Mooresville June 6, 2013:
http://www.whitehouse.gov/the-press-office/2013/06/06/remarks-president-mooresville-middle-school-mooresville-nc

Check out Blackboard videos on MGSD: