Proof Points: Blended Learning Success in School Districts

MOORESVILLE GRADED SCHOOL DISTRICT

Mooresville, North Carolina

INTRODUCTION

Since 2007, the Mooresville Graded School District (MGSD) has been implementing what it calls the Digital Conversion Initiative to employ technology in ways that improve teaching and learning through increased student engagement, including the use of blended learning. Critical components of the conversion include a 1:1 computer initiative, extensive professional development, a variety of online curriculum and EdTech products, the use of state resources for bandwidth, and creative budget flexibility to pay for online curriculum and devices with district funding. Although the district is often lauded as a leading example of successful technology integration, Executive Director of Secondary Instruction Stephen Mauney stresses that it took several years before the district saw results in terms of measurable student outcomes—even in an initiative as well-planned and carefully executed as MGSD's. Student scores on end-of-grade and end-of-course exams have steadily increased since 2007, and MGSD was rated number one in North Carolina for meeting the state's targets for proficiency and other measures in the 2013–14 school year.

KEY ASPECTS OF BLENDED LEARNING PROGRAM

- Most blended learning at MGSD uses primarily the Station Rotation or Individual
 Rotation models in which students move between online learning and individual
 or small-group instruction. The district also uses online courses and online teachers
 that the North Carolina Virtual Public School provides to offer the A La Carte
 model of blended learning to high school and middle school students.
- Although MGSD is well known for its technology implementation, the district's chief technology officer has said: "It is imperative to note that this project is a curriculum and instruction project, not a technology project."



District Profile

Mooresville Graded School District, Mooresville, North Carolina

6,000 students

Three elementary schools, two intermediate schools, one middle school, and one high school that has an advanced technology and arts center campus

The student population is 70% white, 17% African American, 8% Hispanic, 3% multi-racial, and 2% Asian; 38% of students qualify for free and reduced-price lunch

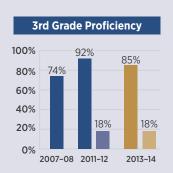
The district graduation rate is 89%

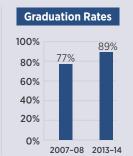
- MGSD ensures that all students have access to laptops or tablets during the school year. It charges students a \$50 annual computer usage fee but, through a foundation that works with the district, waives the fee for students who request financial assistance.
- The district has almost entirely eliminated the use of paper textbooks (except for some Advanced Placement texts) and uses the savings to pay for online curriculum.
- School administrators initiate communications with a wide range of students, particularly minority students, to advertise the school and ensure that the school population mirrors that of the rest of the district.

Blended Learning Success Proof Points

The graphs illustrate the percent of proficient 3rd-grade students based on state end-of-grade exams. Blue bars show proficiency over first four years; lighter blue bar indicates improvement over same period. A new testing methodology

began in 2012 that established a new baseline. Gold bar shows proficiency for first year following that change; lighter gold bar shows improvement from previous year's new baseline. Graduation rates improved significantly making MGSD the highest ranked school district for North Carolina's Annual Measurable Objectives (AMO).





AMO Targets Ranked #1 in NC 96.1% of Targets Met Level 4 or 5 on EOG/EOC EOG/EOC participation rate Math course rigor Graduation rate ACT performance ACT participation rate WorkKeys performance

WorkKeys participation rate

· Attendance rate

BLENDED LEARNING AT MOORESVILLE GRADED SCHOOL DISTRICT

Critical components of blended learning in the Mooresville Graded School District (MGSD) include the following:

- Devices for all students and teachers. MGSD believes in the importance of "Universal Access to Personal Teaching and Learning Devices." Each student in grades 4 through 12 receives a MacBook Air to use in and out of school, each 3rd-grade student receives a MacBook to use at school, and all K–2 classrooms have MacBooks and iPads on carts for students to share.
- Extensive teacher professional development. MGSD recognizes the critical role
 that professional development plays for teachers. The district conducts summer
 institutes to assist teachers with integrating technology in their classrooms. Between
 85% and 92% of teachers participate voluntarily in these institutes each summer.
 Additionally, the district added 10 professional development early release days to the
 school calendar for prescriptive training for teachers. Ongoing training also occurs
 in schools through district instructional technology facilitators, media specialists,
 teacher leaders, and outside vendors and partners.
- "Daily information in the form of performance data, organized by student, teacher, department, and grade level, helps everyone focus on improvement and increase the likelihood of success. We call the dynamic infusion of data into the instructional process 'infodynamo' because it drives personalized learning and tailors intervention on a daily basis."
- Dr. Mark Edwards, Superintendent, Mooresville Graded School District
- A variety of online curriculum and EdTech products. MGSD uses about 40 online curriculum and EdTech products, both
 paid and free. These include Accelerated Reader, BrainPOP, Discovery Education Science, Social Studies and Math Techbook,
 GradPoint, icurio, IXL Math, Istation, MyMathLab, Rosetta Stone, Study Island, TenMarks, Big Universe, easyCBM, Raz-Kids,
 NC WISE Owl, SAS Curriculum Pathways, and others. Some of these products are used on their own websites or proprietary
 platforms, whereas others are integrated into the district's Blackboard learning management system (LMS).
- Shared services provided by the state or other providers. MGSD uses the North Carolina Research and Education Network connection, provided by the School Connectivity Initiative, to carry digital traffic from the district to the Internet. The district provides each school 1GB of bandwidth. These two initiatives have provided more than adequate bandwidth to support district and school needs.
- Budget flexibility. MGSD receives less total funding than 100 of the state's 115 districts, so it has needed to be creative with its budget for the digital conversion. State policy that allows flexibility in the use of funds for instructional materials is instrumental in allowing the district to use funds to purchase online curriculum. The cost of online curriculum is about \$75 per student per year, and the cost of devices is slightly under \$300 per student per year.

With the Digital Conversion Initiative now in its seventh year, student results are readily available—and it is apparent that the improved outcomes are real and not simply temporary fluctuations. The steady improvement in state assessment scores is masked because of a change in state assessments in 2013, which resulted in a drop in scores across North Carolina schools that averaged about 30% and made direct comparisons with prior years impossible. Still, the overall improvement is clear. For example:

- Except for the year in which the state assessments changed (2013), both middle school and high school students' performance has improved every year since 2007.
- The number of 3rd-grade students testing as proficient on North Carolina end-of-grade exams increased from 74% in the 2007–08 school year to 85% in the 2013–14 school year, even when accounting for the drop in scores in 2013.
- The district's graduation rate has improved from 77% in 2007 to 89% in 2014.
- In recent years, MGSD has consistently scored at or near the top of the state's Annual Measurable Objectives (AMO), which
 look at a variety of proficiency and other measures. In the 2013–14 school year, MGSD was rated first in North Carolina for
 meeting its AMO targets.



