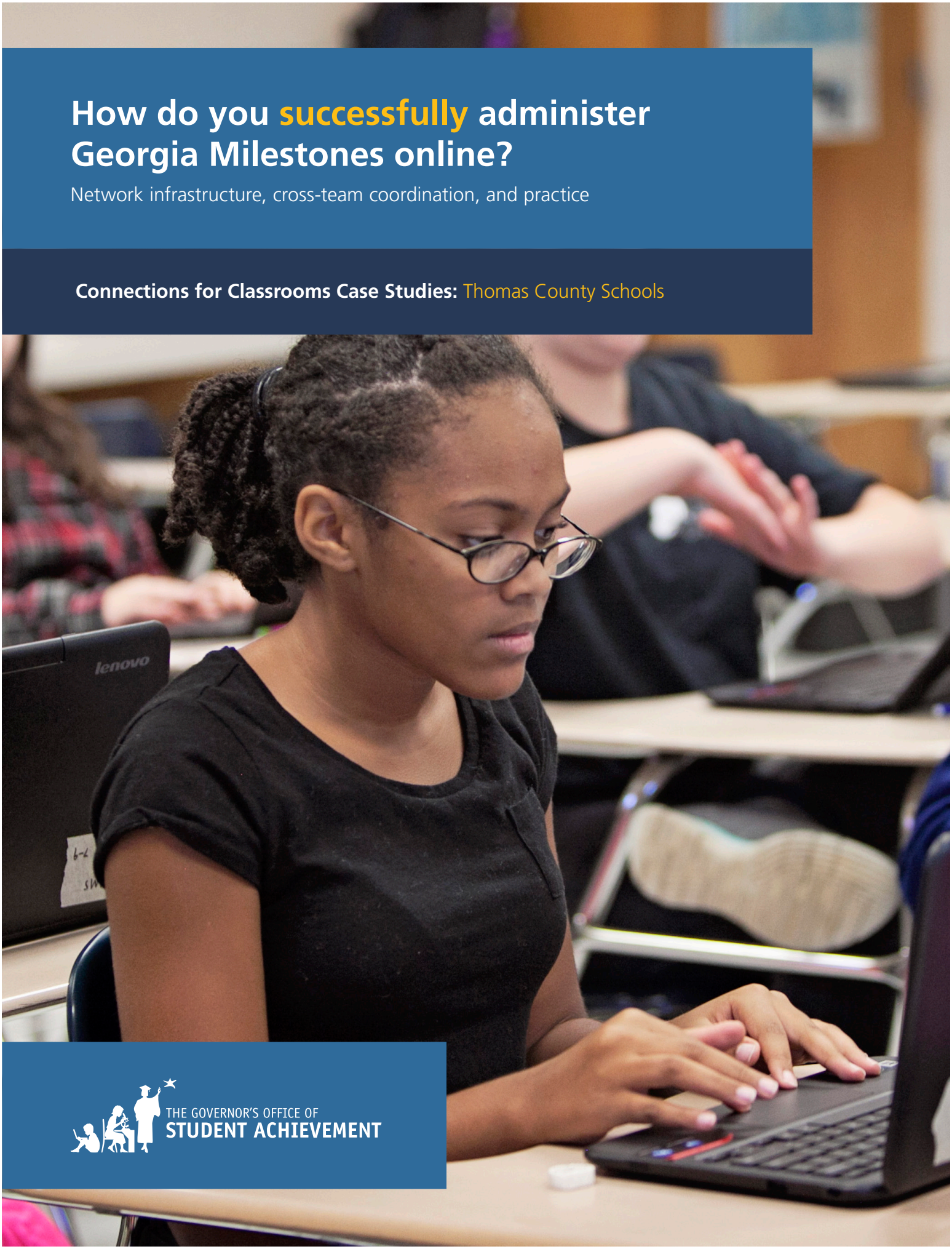
How do you successfully administer Georgia Milestones online?

Network infrastructure, cross-team coordination, and practice

Connections for Classrooms Case Studies: Thomas County Schools



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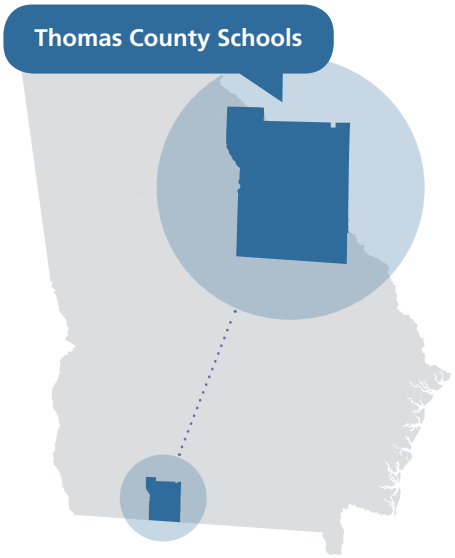
Background

Thomas County Schools (TCS) is a rural school system in southeast Georgia serving 5,700 PK-12 students across its eight schools. To increase equity for these rural students, Superintendent George H. Kornegay, Jr. has prioritized the integration of instructional technology and digital learning since he began his tenure five years ago.

In 2014, TCS applied for, and received, a Connections for Classrooms (CFC) grant to upgrade broadband and wireless network capacities at its two elementary schools, Garrison-Pilcher and Cross Creek. These upgrades enabled the rollout of its system-wide, one-to-one instructional device initiative, which created new opportunities for students to engage in digital learning and develop computer skills like coding. Further, the upgrades also allowed the school system to administer more than 81 percent of their Georgia Milestones tests online last year, well ahead of state expectations.

Teachers in Thomas County increasingly use a range of online tools and applications in their daily instruction. In addition to the integration of digital learning into academic classes, TCS added computer science and robotics courses, as well as a coding sequence to its K-12 curriculum to further students' computer skills—something not often seen in rural schools. Superintendent Kornegay explained, "It has been one of my goals as superintendent to have our students leave our system prepared to compete on equal footing with students who have graduated from a metro area school."



CFC Award Amount:

$382,960.41

Federal E-rate Amount:

$292,308.28

Total

$675,268.69

Successful Transition to Online Georgia Milestones

One benefit of the upgraded network infrastructure and expanded bandwidth has been TCS' successful implementation of online Georgia Milestones assessments. In a year when some districts faced network obstacles to Milestones testing, TCS had almost no issues while completing a greater percentage of tests online than most districts. This success was accomplished through careful planning and testing the capability of the infrastructure that was available in 2014, which built confidence among staff, students, and parents.

Staff report that the upgraded network is now reliable and able to handle daily classroom use where technology is available, as well as the rigors of the testing period when thousands of students complete online assessments simultaneously.

Thomas County's systematic implementation made successful online testing the district norm through three key actions, including:

Network Infrastructure

Prior to the grant, Garrison-Pilcher and Cross Creek elementary schools had significant gaps in wireless coverage that inhibited online access for educational and administrative systems and tools. With the CFC grant, TCS updated switches, wireless access points, and other network hardware to provide consistent wireless access throughout each school building. The expanded capacity paved the way for the use of mobile devices for instruction and online assessment, both of which could only be conducted in each school's computer labs, prior to the upgrade.

The district moved quickly to provide devices (primarily laptops and tablets) for all students using grant funds from other sources. According to Associate Superintendent Melanie Chavaux, acquiring more mobile devices without the network upgrades would have had limited impact, since the network was routinely pushed to its limit before the upgrades. Since then, the use of instructional technology has grown exponentially.

Cross-Team Coordination

When asked about Thomas County's success in the rapid implementation of online testing, Superintendent Kornegay noted, "the greatest asset is the team I have." Wes Davis, Director of Technology, worked tirelessly across district- and school-based teams to lay the groundwork for success. All district stakeholders were involved with the planning and execution of online testing, including the technology team, instructional technology team, assessment team, district instructional team, and each school's staff. This collaboration included scheduling assessments to reduce disruption, assuring adequate infrastructure, and preparing students and teachers to minimize anxiety.

Practice

Thomas County initiated multiple rounds of practice to ensure staff and student familiarity with the new testing procedures.

As a starting place, students frequently completed online formative assessments in their classes. These assessments supported classroom instruction and began to familiarize students with online testing. Erin Rehberg, the System Instructional Technology Coordinator, explained "We feel it's important to give the students practice throughout the year with testing online, instead of waiting until April when the high stakes tests come along." In addition, because of the integration of devices with instruction, students' comfort level increased. Student log-in information remained the same for every system and program students used—from their lunch accounts to online assessments—to facilitate ease of use.

Thomas County also leveraged district benchmark tests and Georgia Milestones field tests to serve as "dry runs" for testing procedures. For benchmark tests, the schedule, groups, and instructors are the same as those used for Milestones. Mr. Davis explained that this is "so that everyone knows where they will be, who they will be with, and when they will be there."

The Milestones field tests simulated testing conditions, grade by grade and school by school, building up to a full-scale testing simulation of 1,600 students at once. Though the duration of the simulations was short, they were long enough to increase student, teacher, and even parent familiarity with the processes and also highlight any technical issues that could emerge.

The district assigned technology teams to each building during the practice runs, so that staff were available to troubleshoot or intervene if problems surfaced. These teams also conducted systematic building walkthroughs to confirm wireless coverage throughout each classroom. During practice and actual testing, the teams carefully monitored network use at each building and asked other schools not participating in particular tests to limit their usage during testing days. To the surprise of the district team, online testing taxed the network much less than a typical instructional day because the assessments do not use broadband-intensive activities like streaming videos. In addition to these preparations, the testing vendor offered a means to cache testing data on a local server so that student answers could be saved and submitted at a later time if the district's connection was interrupted.

By the time TCS administered the online Milestones assessment, teachers and students had completed two to three simulations specifically for Milestones. The practice runs built student and teacher confidence in the process, which reduced distractions and test-related stress.

"The key [for us] is practice and preparation. We started practicing at the middle school in October or November—going to the practice website, getting the kids familiar with what it looks like. I really feel that is why we were so successful as far as implementing and getting the kids ready for when it was time for the [actual] test."

-Lindsay Thompson, Former MS teacher and current HS Instructional Technologist

"We feel it's important to give the students practice throughout the year with testing online, instead of waiting until April when the high stakes tests come along."

-Erin Rehberg, System Instructional Technology Coordinator

Impact

More than 81 percent of tests completed online, exceeding state targets: The Georgia Department of Education has established annual targets for districts to rollout online assessments over a five-year period. The state goal for 2016-2017 is 80 percent, with 100 percent expected by 2018-2019. Thomas County reached 81 percent in 2016, surpassing the state target a year early (see graph).

Testing anxiety decreased: Teachers and administrators observed a decrease in testing anxiety among students, teachers, and parents, indicating a successful transition to online assessments for TCS. They attribute this success to the detailed practice completed with other tests prior to Georgia Milestones.

Test administration is less cumbersome: For grades where online tests are administered, teachers no longer have to physically handle, manage, and keep secure high stakes paper materials. While test administration is less cumbersome for teachers and test coordinators, lower test results indicate the need to address daily practice and preparation for students that did not score as well as when they took a paper and pencil test.

Testing disrupted far less instruction than in prior years: Motivated first and foremost by the need to reduce the disruption to regular instruction, district staff reported that the ability to administer Milestones assessments using laptops and tablets has allowed computer labs to remain available for non-testing classes. In addition, having a reliable infrastructure has prevented additional loss of instructional time due to retesting when data are lost.

District technology goals were met two years ahead of schedule: Overall, district staff report that funds provided by the CFC grant program were a significant force in accelerating their efforts to upgrade systems and introduce new technologies to classrooms. As a result of CFC funding, Superintendent Kornegay notes that the district is two years ahead of the timeline set forth in its original technology plan. Network upgrades funded through CFC freed other district funds to invest in student and teacher mobile devices, bringing the district within reach of its goal of providing a one-to-one program to students district-wide.

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Case Study prepared by PCG Education