Edgecombe Schools reduce dropout rate by 35% and lift test scores by up to 30% with help from Dell technology, Dell Professional Learning Services and Intel



- Connected Classroom
- Desktop/Laptop Refresh
- Services



"What really made
the difference was the
program of professional
development with Dell
Professional Learning
Services to ensure
that the teachers were
ready to incorporate
the technology into
their lesson plans and
achieve the vision of
the school district."

Barbara White Hardison, Federal Programs Director, Edgecombe County Public Schools

Customer Profile

Company:	Edgecombe County Public Schools
Industry:	Education
Country:	United States
Students:	7,500
Web:	www.ecps.us

Institutional Need

Edgecombe County Public Schools had one of the highest dropout rates in North Carolina. It needed to engage students so they would remain in school, lower the suspension rate and improve test results.

Solution

The school district improved the dropout rate and raised test scores by engaging students with technology-rich lessons, using public and private grant money to provide each high school student with a Dell™ Latitude™ E5400 laptop computer with Intel® processors and all high school teachers with a professional learning program from Dell Professional Learning Services.



Benefits

- 35% decrease in the dropout rate over 3-year period, from 6.23% to 4.05%
- 50% decrease in the suspension rate at the high school level
- 5-30% increase in test scores
- Teacher training completed within 1 semester

Preparing students to work in a more connected, digital world takes more than handing each student a laptop, although that is undoubtedly a good first step. Teachers have to be prepared to plan and teach technology-rich lessons, and that takes professional training.

"With Dell's help, the dropout rate decreased 35 %, from 6.23% to 4.05%, over a three-year period, and the suspension rate declined by 50% at the high school level. The turnover rate for teachers also declined."

Barbara White Hardison, Federal Programs Director, Edgecombe County Public Schools Such is the approach that Edgecombe County Public Schools (Edgecombe) in rural eastern North Carolina took when it implemented its "1:1" program. Using money provided by public and private funding, and a grant from Golden LEAF Foundation, the North Carolina 1:1 Learning Technology Initiative made it possible for each high school student in the Edgecombe school district to receive a laptop computer.

What differentiates Edgecombe and helped to make its program successful is that the school district had specific goals in undertaking the initiative, and teachers were prepared to use the technology to achieve those goals.

Before the 1:1 program happened, Edgecombe had one of the highest dropout rates in North Carolina. Edgecombe County has 56,000 forward-looking citizens who want their children to receive the best education possible to prepare them for higher education and well paying jobs, despite a 73 percent free/reduced lunch program which indicates that many of Edgecombe's families are socio-economically challenged.

The school district wanted to foster student engagement in order to encourage students to stay in school, lower the suspension rate and push test scores up substantially. In all three categories, the Edgecombe program must be counted a resounding success.

Molding a program around a vision

The school district chose Dell to provide the 2,200 laptops along with the professional development and training to acclimate all of Edgecombe's 143 high school teachers to technology and enable them to incorporate technology-rich lessons into their curriculum.

"We chose Dell Latitude E5400 laptops and Dell Professional Learning Services because of Dell's willingness to be flexible," says Barbara White Hardison, federal programs director for Edgecombe County Public Schools. "Dell told us that it was important for us to come up with our own vision. Dell then mapped that vision to the best training program."

Technology at Work

Services

Dell™ Professional Learning

Hardware

Dell Latitude™ E5400 laptops with Intel® Core™ 2 Duo processors

Software

SAS Curriculum Pathways

Moodle

The program that Dell worked out with Edgecombe took place within the relatively short timeframe of one semester. Dell Partner Pearson Education performed the on-site training.

Raising interest levels through professional learning

When the teachers received their laptops in September, the district conducted a "train the trainer" day to ensure that teachers knew how to use the laptops. Dell partner Pearson did the initial framework for the training. A separate vision day gave leaders and a few selected teachers an opportunity to develop a vision for the district. The Pearson trainers referred to the vision throughout the staff development and the coaching and modeling that occurred during first and second semesters.

"After the initial training, we brought in every high school teacher, and the Pearson group provided at least two full staff development days," says Hardison. Each teacher received one day on technology-rich lessons in October. In November, math, science, language, and social studies teachers received a day of training on SAS Curriculum Pathways software, a free online resource for students and teachers that provides standards-based content in all the core disciplines.

In early December, all high school teachers received staff development on the first week in a 1:1 to help make sure they were prepared for the rollout of laptops at the start of second semester, which was mid-January.

"We wanted every teacher to really understand what they needed to do to make the maximum difference with the laptops and be comfortable with preparing lessons," says Hardison. "The instructor suggested some Web sites that would be useful in teaching our core disciplines and demonstrated how wikis might work in the schools."

Later in the day there were breakout sessions in which teachers could work together and exchange ideas for technology-rich lessons they would want to have in their classrooms. They discussed WebQuest and other Web programs that were used by teachers elsewhere to enable students to find answers to their own questions using search engines.

The professional development sessions raised the interest level of teachers who had been resistant to using computers in the classroom. "Together with Dell Professional Learning Services personnel, we got them to see the possibilities," says Hardison. "And they really decided they did like it and became more attuned to the technology. We were afraid we might lose some teachers in the process, but we did not."

Involving the community

During the rollout at the end of first semester, Edgecombe invited parents to attend with their children for the laptop distribution. The parents and students reviewed the legal documents of the parent/student laptop agreement and learned about laptop care and use and the schools' acceptable use policy for the Internet. Students also learned how to login to the school network. The four mini-sessions lasted approximately two hours.

"Parents really understood what we were trying to do and what we were expecting of students," says Hardison. "Involving the community was an important part of what we did." The process has continued, as parents of entering freshmen and new enrollees are required to attend a session before the laptop is issued to the student.

"We worked together with Dell to transform how learning happens."

Barbara White Hardison, Federal Programs Director, Edgecombe County Public Schools "Everyone has been so pleased and proud seeing that a poverty district such as Edgecombe could undertake this educational initiative," Hardison continues. "What really made the difference was the program of professional development with Dell Professional Learning Services to ensure that the teachers were ready to incorporate the technology into their lesson plans and achieve the vision of the school district."

35% decline in dropout rate

And the program did succeed. Teachers were using the laptops from the very first week of the rollout, and the utilization has continued to increase. The teachers have continued to learn how to utilize the laptops to strengthen their teaching skills and improve student performance. The use of Moodle and Web 2.0 tools are the newest strategies that the teachers are using.

The results have been dramatic. "With Dell's help, the dropout rate decreased from 6.23 percent in 2006 to 4.05 percent in 2009, 35 percent lower," says Hardison. "North Carolina's overall rate in 2009 was 4.27 percent so the decline was impressive. And the suspension rate declined by 50 percent at the high school level. The turnover rate for teachers also declined."

The dramatic increases in test scores along with increased student engagement are what really sell the 1:1 implementation, according to

Hardison. "We've seen 20-30 percent increases in physical sciences and history scores over one year," she says. "And 5-20 percent increases all over the spectrum. The results are spectacular."

More relevant lessons

Today, teachers are making school more engaging for students by using the Internet. Teachers and students have discovered podcasts for easy review of lessons and class projects. A math teacher has converted to a paperless classroom, and both lessons and homework have become more relevant for students. For example, a typical math homework assignment requires students to go out into the community and find examples of parabolas in logos and architecture, put the pictures on their computers, and find the focus of the parabola and perform other calculations.

"It's more real," the students say. The world outside the school revolves around technology, and now their education does as well. That makes the students proud and more engaged.

"We worked together with Dell to transform how learning happens," Hardison concludes. "And Dell has worked with educators around the world to create a learning environment that connects students, teachers, parents and communities to each other and to the learning resources they need."





View all Dell case studies at: dell.com/casestudies

