



DELL SCHOOL ARCHITECTURE™ FRAMEWORK ■
 DELL INTELLIGENT CLASSROOM™ SOLUTION ■
 LIBRARY ■
 MOBILITY ■
 ASSESSMENT/STANDARDS ■
 ONE-TO-ONE ■
 E-RATE ■

CUSTOMER OVERVIEW

The Round Rock Independent School District in Round Rock, Texas, recognizes the benefit that technology brings to education and is expanding this understanding to its community supporters. After a \$38 million technology bond was defeated, Round Rock ISD forged ahead with a revised plan to implement a pilot program that places multimedia and interactive technology in a small number of district classrooms.

CHALLENGE

The school district was seeking a vendor partnership that would not only provide the right technology for each subject area, but would also ensure an integrated learning environment.

SOLUTION

Round Rock ISD turned to its existing strong relationship with Dell™ to outfit 16 classrooms to serve different academic subjects.

BENEFIT

As a result of the pilot project, Round Rock ISD had solid proof to share with voters during the November 7, 2006, bond election of how technology can be used to enhance student performance and comprehension. And the proof paid off; the voters of RRISD overwhelmingly approved the bond.

Model Technology

Round Rock Independent School District is discovering how a broad mix of technology can transform learning

Gayle Hughes gives five to 10 mini-quizzes every day. A math teacher at McNeil High School in Austin, Texas, Hughes will stop her lesson and ask every student to answer a multiple choice question related to the topic of discussion. The kids dutifully take out their student response devices and click in their answers. And that's when things get interesting.

The handheld student response devices — Hughes calls them “clickers” — interact with software on her notebook to instantly create a bar graph of how many students picked each answer, which is shown to the class via the ceiling-mounted data projector.

“If they all got it right, we move on,” says Hughes. “But if a lot of students made the wrong choice, we can review the topic right then and there. There's almost always a dialogue — the ones who understood it explain how the problem works. We've developed an atmosphere where students can help each other.” Her computer also keeps track of how many answers each student answered correctly, yet the information can be kept private and not shared with the class. And she checks at the end of each period to see if anyone needs a bit of extra tutoring on the day's topics.

The combination of teacher notebook, clickers, and projector is one of Hughes' favorite parts of her Dell Intelligent Classroom™ solution, but far from the only one. There are the wireless carts for the Dell™ Latitude™ notebooks — one for every student to keep notes or work through tasks such as graphing with a spreadsheet. The geometric sketchpad software allows Hughes to bring higher-level, abstract math concepts back to the concrete with visual polar graphics and unit circles. The document camera

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and projector are useful for sharing with the entire class the geometry study solids, which in the past had to be passed around from student to student. “The camera is also the easiest way to share a student’s work with the whole class,” she notes.

Fully equipped classrooms

Hughes is one of 16 teachers in the Round Rock Independent School District who began the school year holding the keys to a serious amount of technology. Partnering with Dell™, Round Rock ISD created a Dell Intelligent Classroom™ solution for a science, social studies, mathematics and language arts teacher in each of its four high schools.

In addition to the notebooks, data projector, student response devices and document camera, each room is equipped with a laser printer, digital camera, sound system, and wireless connection that enables the teacher to move freely around the room and still manage his or her notebook. A few bonuses here and there, such as a video camera and extra digital cameras for the language arts and social studies rooms, round out the program. And subject-specific software supplements the curriculum, says Mary Jo Humphreys, one of the district’s technology integration specialists.

Despite an early setback when a more ambitious \$38 million technology bond was defeated in 2005, the district’s leadership forged ahead with one exciting idea: to create a small group of pilot classrooms with the perfect mix of technology for the subject. “Our main question was: ‘What does each high school classroom really need?’” Humphreys says. That’s when they turned to Dell for assistance.

Models for success

“We have a long and strong relationship with Dell,” says Ed Zaiontz, the district’s executive director of information services. “We met with our rep from Dell, and she said they were interested in working with us.” Dell and the district developed a plan in which the computer company provided every piece of technology in eight of the 16 classrooms. Members of the Dell K12 Education team facilitated a discussion with teachers, principals, and technology coordinators in the district to assess what technology would help them meet

their educational goals. After much discussion, they aligned the software and technology by subject for exciting results.

Now, Dell showcases the sites as models for how its Dell Intelligent Classroom solution can have an incredible impact — administrators from across the country routinely visit Round Rock ISD, and an independent team of researchers is preparing a report on how the classrooms are changing student performance and comprehension.

Zaiontz and his colleagues will be the first to say that using the Dell Intelligent Classroom solution to its fullest extent is no overnight task. “Even though there have been pretty dramatic results, I think that everyone is still learning how to use the technology, to some degree. I think we’ll see even more changes next year — that’s why we conceived of this as a two-year project,” he says.

Hughes, for example, deems herself fairly tech-proficient, but found the learning curve a bit daunting at first. By February, she said, everything had clicked into place. Still, she spends about two hours a night converting existing lesson plans into a high-tech version. Excited by how well it’s all working out, she has already asked to teach the same courses next year to take advantage of her investment.

Ongoing professional development

Professional development is key to helping teachers get the most from their Dell Intelligent Classroom solution. Here too, Dell has played a significant role,





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providing a basic, full-day orientation for all the various technologies before the school year started, and another day once the teachers had a chance to experience the tools firsthand. Ongoing professional development has included a series of hour-long sessions focused on a single task, such as how to create a PowerPoint presentation that incorporates photos from the digital cameras, as well as utilizing the Dell™ Online Exchange, which provides lesson plans and how-to guides on demand.

When it's all said and done, everyone associated with the Dell Intelligent Classroom solution in Round Rock ISD is confident that all the hard work—from rewiring some classrooms to putting in extra hours of lesson prep—is going to pay big dividends. The results are already being seen in the classrooms. Zaiontz points out that everything they learned about how to best configure the equipment and get teachers up to speed will be instrumental now that the district is expanding the concept beyond the 16 pilot rooms. How is this going to be done? In November 2006, RRISD, armed with solid proof on how transformative technology can be in the classroom, was successful in passing an impressive \$267 million school bond package for capital improvements and technology.

HOW IT WORKS

HARDWARE

- Dell™ Latitude™ notebooks
- Data projectors
- Student response devices
- Document cameras
- Laser printers
- Digital cameras
- Sound systems
- Wireless connections

SOLUTIONS

- Dell Intelligent Classroom™ solution