Trinity School transforms sixth grade learning with HP Tablet PCs

1:1 program increases excitement, enables independent research, learning



Trinity School

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-Danielle Klaus, Tablet Program Coordinator, Trinity School

HP customer case study: Atlanta's Trinity School transforms sixth grade with 1:1 learning enabled with HP Compaq Tablet PCs

Industry: Education

Objective:

Provide individual PCs to support 1:1 learning at the sixth-grade level

Approach:

Trinity School equipped all its sixth grade students and teachers with HP Compaq Tablet PCs

Educational benefits:

- Students can explore topics at home or at school
- Downloadable course materials can be annotated right on the screen
- New learning experiences
- Improved preparation for technology use in middle and high school, and beyond
- · Increased intellectual curiosity
- Learning is put in students' hands



"An HP Tablet PC puts learning literally and metaphorically in the student's hands, which is why Trinity has established a 1:1 learning program that puts HP Tablet PCs in the hands of every sixth grade student and teacher," says Stephen Kennedy, Head of Trinity School in Atlanta.

Trinity School, a private, co-educational elementary school founded in 1951, has a long record of producing high-achieving graduates. But like most schools, students at Trinity haven't traditionally had 1:1 access to technology and independent learning tools. Kennedy wanted to change that. So over the course of the past few years, Technology Director Tammie Ciccarelli and Tablet Program Coordinator Danielle Klaus have laid the groundwork for a bold change in the sixth grade curriculum.

First, sixth grade teachers began using HP Compaq Tablet PCs to develop their lessons and present them in class. Teachers were oriented and trained to integrate their use in the classroom. Then in the fall, students and parents gathered for the distribution of HP Compaq Tablet PCs to every student.

"We do our best to infuse technology into the curriculum whenever possible, and the 1:1 Tablet PC program is the most compelling example of how that helps our students excel."

Tammie Ciccarelli, Technology Director, Trinity School

Excitement and expansive collaboration

"The Tablet PC opens up more possibilities for rapid access to knowledge, for sorting through that knowledge for what matters, and for developing even more creative opportunities for problem-solving and critical thinking," Kennedy says. "We think it also feeds an electric excitement for expansive collaboration, and for an approach to student-centered learning that more traditional means of instruction don't always offer."

"The goal of our Tablet PC program was to put learning into the hands of the students. We wanted to let the PC become a tool enabling them to take on that responsibility and grow with it. What we've seen is that they not only take on their own learning in the context of their classes, but also branch out into other areas and explore on their own."

Danielle Klaus, Tablet Program Coordinator, Trinity School

Kristi Story, a sixth grade math teacher at Trinity, challenged her students to create a "math trail" throughout the city of Atlanta. It's part of a National Math Trail project that focuses on problem-solving and collaboration. Students chose specific sites, took digital photos of the area, and developed math problems about that location for other students to solve. The problems and solutions are developed on the Tablet PCs, and made available through a web site. Some involve locations at the school itself—like challenging students to determine the circumference of the bell in Trinity's central courtyard, or determining the number of rectangles visible on the side of a building.

Using their Tablet PCs, students at Trinity are having educational experiences unlike any of their predecessors—from creating a VoiceThread to



"act out" characters from the Middle Ages, to using GPS and heart rate monitors to learn about human body systems.

Students utilize a variety of programs and online resources, which they can access through the school's wireless Internet access.¹

- They use Microsoft® Windows® Journal software to take notes and annotate teacher presentations.
- They create podcasts for class.
- They manage individual calendars and events.
- They explore geography in areas related to class work.
- Teachers develop a course page where students can turn in homework assignments, obtain tutorials, participate in discussion forums and collaborate online.
- Students have access to a personal weblog space to develop writing skills and creative thinking by blogging for their Language Arts class.

"It's not just that he could find the answer using his Tablet PC, but that he wanted to, that's where we're seeing the educational experience really change." Kristi Story, Sixth Grade Teacher, Trinity School

Trinity chose Tablet PCs largely because of their ability to accept both handwriting and keyboard input. Some students take to the keyboard quickly. But others use the stylus to hand write their class notes and assignments, then use built-in handwriting recognition software to produce clean, legible documents to hand in.

Learning in—and outside—the classroom

"The goal of our Tablet PC program was to put learning into the hands of the students," says Danielle Klaus, the Tablet Program coordinator. "What we've seen is that they not only take on their own learning in the context of their classes, but also branch out into other areas and explore on their own."

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Stephen Kennedy, Head of School, Trinity School

That includes learning both in and outside of the classroom. "The 1:1 aspect—each student having his or her own computer—is an important part of the program's success," Ciccarelli notes. "They're familiar with it, comfortable with it, and it's always available." Once students are assigned an HP Tablet PC at the beginning of the academic year, it's theirs to use 24 hours a day for the rest of the year.

"If they're here for a few minutes before a carpool arrives, they have their Tablets out and they're exploring programs and things," Klaus says. "They're learning more on their own because they're really engaged and interested. They might be looking up something they were talking about with their friends, or in class; or they might be blogging."

"I've had a good, long-lasting relationship with HP. Standardization helps us cut down on time devoted to IT management and problem-solving."

Tammie Ciccarelli, Technology Director, Trinity School

Student Caroline Richardson adds, "I'm a better typist and my grades are higher. It's a more interesting way to study."

Math teacher Kristi Story recalls that during a lesson on Mayan math—a base-20 system—one student asked a question to which she didn't know the answer. "That's a great question," she responded. "Why don't you go research it for me?" By the end of the day, the student had found the answer. "It's not just that he could find the answer using his Tablet PC, but that he wanted to," she says. "That's where we're seeing the educational experience really change."

Trinity's use of HP Tablet PCs has solved another age-old school problem: the conundrum of homework



eaten by the family dog. "In the past, when we had our homework on paper, sometimes we'd forget it at home," admits sixth-grader Caroline Richardson. "Now, even if we forget it, we can always take out our computer and get the document up and just print it out in class."

School standardizes on HP technology

Most classrooms at Trinity are equipped with an HP Color LaserJet 3600n printer that supports the entire class. "We wanted students to be able to print whatever they work on without having to go to a central location and take time away from class," explains Ciccarelli.

She says the Color LaserJet printers were a natural choice. Color, because it's important to be able to print color in order to capture all of the content the students develop in various software programs, she notes. And the choice of HP LaserJet printers? "Well, as far as we're concerned, HP is the clear choice when it comes to printers," Ciccarelli says. "The LaserJet printers had the performance we needed, fit the price range, had sufficient memory to handle our needs and were fully networkable." The school's technology labs, which serve the other grade levels, have LaserJet 3800n printers.

In fact, Ciccarelli says, the school has essentially standardized on HP technology products, from the Tablet PCs to HP Compaq notebooks and desktop PCs, and HP ProLiant servers that provide the underlying infrastructure.

"I've had a good, long-lasting relationship with HP," she says. "Standardization helps us cut down on time devoted to IT management and problem-solving."

Customer solution at a glance

Primary application

1:1 Educational support for sixth grade classes

Primary hardware

- HP Compaq Tablet PCs
- HP Color LaserJet 3600n printers

Primary software

Microsoft Windows Journal

In launching the Tablet PC program, the school evaluated competitive products, and selected the HP Tablets because of their form factor, battery life² and durability. "And we're absolutely convinced that was the right choice," Ciccarelli says. "Through the first year the HP Tablet PCs have proven very reliable."

"The 1:1 aspect—each student having his or her own computer—is an important part of the program's success."

Tammie Ciccarelli, Technology Director, Trinity School

Contact the HP Reference2Win Program, 281-514-5755 for more information. HP partner United Technology Group helps the school get the most out of HP technology. It set up the school's wireless network, and is available to help with technology assessment, planning and purchasing, and technical support.

Looking ahead, Ciccarelli expects that teachers involved with the Tablet PC program—now dubbed the "Tableteers"—will collaborate and find ways to integrate the Tablet PCs into Trinity's sixth grade curriculum more and more in the coming years.

"The underlying principle here at Trinity is that technology serves a transformative purpose. It enhances early learners' understanding of critical skills, as well as older students' appreciation of what they're learning. And a familiarity with technology is certainly important to their future as students and ultimately as adult leaders," Ciccarelli concludes. "We do our best to infuse technology into the curriculum whenever possible, and the 1:1 HP Tablet PC program is the most compelling example of how that helps our students excel."

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