

# HP TABLET UNLOCKS PC POWER AT JCPS

Versatile functionality of HP Tablet PC overcomes barriers to adoption of classroom technology



“The HP Tablet PC has the full functionality of a PC, it’s mobile, and its handwriting capabilities are a perfect fit with the way teachers work in the classroom. As a result, teachers have integrated technology into their instructional processes, and students are benefiting.”

—Cary Petersen, Executive Director of Information Technology, Jefferson County Public Schools, Louisville, Ky.

**HP customer case study:** Jefferson County Public Schools leverages infrastructure investments when HP Tablet PC overcomes classroom technology barriers

**Industry:** K-12 public school education

## Objective:

Induce teachers to use technology in the instructional process

## Approach:

Equip teachers with HP Tablet PCs and a digital projector to complement student HP Compaq Desktop PCs in the classroom

## IT improvements:

- Teacher technology usage jumps from 15 to 84 percent
- Mobility frees teachers to learn at own convenience
- Handwriting functionality matches in-class teaching styles
- Full PC functionality brings multiple resources into the classroom

## Business benefits:

- Overcomes barriers to teacher use of technology
- Unlocks value of \$30 million technology investment
- Improves educational outcomes: high performers up 22 percent
- Inspires teachers, engages students and shows principals value of technology

Over the past decade, Jefferson County Public Schools of Louisville, Ky., had spent some \$30 million on technology—yet teachers were still lecturing in front of classrooms as in the days of hoop skirts and frock coats. Something had to change. Research showed that technology could be a powerful educational tool—but not if it’s sitting around gathering dust. District administrators searched for a way to unlock the potential of their huge existing IT investments—something that would finally get teachers using technology in the classroom. They found the answer in an ultra-mobile, highly versatile device weighing approximately three pounds: the HP Tablet PC.

“Before we got the HP Tablet PCs, teachers were standing up and presenting subject matter the same



“We spent \$30 million over the last decade to put non-HP technology in the classrooms, and most of it was not being used effectively. Combining the HP Tablet PC with a digital projector changed everything. The HP Tablet PC’s functionality strongly matches the way teachers work.”

Cary Petersen, Executive Director of Information Technology, Jefferson County Public Schools, Louisville, Ky.



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way it had been done since the early 1900s,” says Cary Petersen, the district’s Executive Director of Information Technology. “When you look at it now, you can’t believe the change in the classroom. The students are engaged, they’re excited, and the teachers say they don’t know how they lived without their HP Tablet PCs.”

The HP Tablet PC, in fact, turned out to be the linchpin that made all of the district’s IT investments pay off, because it was the tool that overcame the barriers to teachers’ use of technology in the classroom.

### **The mission: entice teachers to use technology**

JCPS is a K-12 system with more than 98,000 students and 5,700 teachers. District classrooms had been equipped with desktop PCs, but hardly anyone used them outside of computer labs. School principals when surveyed on the effectiveness of various expenditures ranked technology dead last. “Our biggest problem was that the teachers were not using technology as part of their instructional process,” recalls Sharon Shrout, Director of Instructional Technology. “Having a standard desktop PC in the classroom was not working, because the teachers had to share them with students and couldn’t learn a new technology on the job when their day was already filled up. We thought

a mobile solution would give them greater convenience to take the equipment home and get comfortable with it.”

Petersen and Shrout considered notebooks with a digital projector at first and even bought some for elementary schools. Researching various vendors’ offerings, they chose the HP Tablet PC—in a version whose parts would not be detached and therefore lost. Selecting HP also brought the advantages of standardization, as the district’s classroom desktop PCs also are HP. “The HP desktops were competitively priced and the HP Tablet PCs were just the right fit,” Petersen says. “Being able to buy from one vendor was good, because of HP reliability and because we had to roll out such a large number of devices.”

The district phased in the HP Tablet PCs over several years as funding became available. It ultimately will deploy some 6,000 units, including HP Compaq 2710p Notebook PCs and HP Compaq tc4400 Tablet PCs, some accessorized with HP 17-inch diagonal LCD monitors and HP Docking Stations. In addition, JCPS has more than 20,000 HP Compaq Business Desktop PCs for student classroom and computer-lab use. On the printing side, it uses HP LaserJet Printers. To ensure success of the HP Tablet PC rollout, each teacher

received three hours of training on computer basics and three hours on Tablet functions. After that, they get a year of follow-up coaching from a Technology Integration Specialist. Thus prepared, teachers take full advantage of the HP Tablet PC's advanced functionality.

The HP Tablet PC is a thin, lightweight full-function PC that packs the additional punch of enabling users to switch between keyboard and pen. One huge advantage is that it lets teachers work within the familiar and effective paradigm of writing out material as they teach—solving math problems, for example, or listing the exports of Peru. Many teachers had been using overhead projectors for this, but here was a mobile device they could carry around, that could project not only handwritten notes but also slide shows, websites—virtually anything. It even let them save notes for students who'd missed class, or hand them out as review material. The district deployed the HP Tablet PCs first to middle school Math teachers, then moved on to Science, English Language Arts and Social Studies. Everyone wanted one. They didn't know how they'd lived without them.

"The teachers love their HP Tablet PCs," Petersen says. "It's much easier to transition from an overhead projector to a tablet with a digital projector than to a laptop or a desktop PC. The HP Tablet PC's ability to use inking capabilities onscreen is far and away a better way of doing demonstrations. It matches the way teachers work. On top of that the HP Tablet PC gives them access to the multiple resources you get on a PC."

The school district's newest-generation HP Tablet PC, the HP Compaq 2710p Notebook PC, is lighter and more energy-efficient than previous models, with improved battery life. "The HP Compaq 2710p Notebook PC is just the right fit," Petersen says. "It gives the benefits of a tablet with the full functions of a computer. It's thin, it's light, and it comes all in a convenient package with powerful classroom functionality, from lecture-demonstration displays to Web connectivity."

The HP Compaq 2710p is also built to last. Reliable features such as HP DuraKeys, HP DuraFinish and full magnesium alloy enclosure help keep the notebooks go the distance. Durability is something that JCPS considers important with countless students handling the notebooks year after year.

#### **Measurable success, improved educational outcomes**

Anecdotal evidence indicated the HP Tablet PC was immensely popular with teachers. What about hard data? In a pre-Tablet study, district researchers had walked into classrooms at random and found that just 10 to 15 percent of teachers were using computer technology. After the pilot HP Tablet PC rollout, that number jumped to 84 percent. What about educational outcomes? Statewide assessments categorize student performance as Novice, Apprentice, Proficient and Distinguished. In schools where HP Tablet PC introduction was the only changed variable, the number of student rated in the lowest category of Novice dropped 11 percent, while high-performing Proficient and Distinguished ratings rose 22 percent. A new survey of school principals—the group who'd ranked technology dead last as a spending priority—

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## Customer solution at a glance

### Primary applications

Classroom teaching

### Primary hardware

- HP Compaq 2710p Notebook PCs
- HP Compaq tc4400 Tablet PCs
- HP 17-inch diagonal LCD monitors
- HP Docking Stations
- HP Compaq Business Desktop PCs
- HP LaserJet Printers

showed 96 percent clamoring to continue the HP Tablet PC program. Any time you can get 96 percent of principals to agree on anything, Petersen notes, you know you've done a great job.

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*"I've been in the business of instructional technology for 20 years, and we've done a song and dance trying to convince teachers that technology could help them. It was just a hard sell. With the HP Tablet PC, it's the reverse. They can't get enough of it and they can't imagine life without it."*

Sharon Shrout, Director of Instructional Technology,  
Jefferson County Public Schools, Louisville, Ky.

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"When you look at these types of gains, you realize you're on target for doing what you wanted to do: get the technology in the hands of the teachers and have them use it for instruction," he says. "We knew that if that happened, students would benefit from it."

JCPS isn't stopping with just this success. Next up on its technology agenda is replacing outdated elementary school notebooks, which sit in classroom carts for student use. Petersen and Shrout are looking into the HP Mini-Note PC. Under three pounds and ten inches wide, this convenient, cost-efficient device comes with Wi-Fi Certified WLAN and optional Bluetooth® wireless technologies.<sup>1</sup> The pair learned about the Mini-Note from their HP representative, who keeps them apprised of appropriate new solutions as they develop. "Our HP rep has been great to work with," Petersen says. "Any time we need her support, she's right there. She gave us the HP Tablet PC to play around with for a few weeks, so we could give it to our staff and feel it out. She told us about the Mini-Note as soon as she knew about it. HP is always advancing new solutions to support our educational mission. The teachers now are eager to jump on board, and our students are learning better because of it."

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<sup>1</sup>Wireless Internet service and access point required. Availability of public wireless access points limited.

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