IT SEEMS THE TYPICAL SCHOOL IN THIS country has become anything but typical. Sure, there are plenty of traditional schools left, but more and more districts are carving out niches to offer students some new or different type of experience. In deciding to highlight a few of these examples, we were able to quickly come up with a short list. Inside, you'll learn about a high school where students study veterinary medicine through hands-on work, a middle school in Massachusetts that extended its school day so it could offer phys ed classes three times a day, and a high school outside of Detroit that flipped all of its classes. And we took a long look at Kent School District in Washington State to see how this tech leader for more than a decade keeps on the cutting edge. We hope these examples inspire you to consider your own experiments. YOUR STUDENTS ARE READY.
FOR ONE DAY EVERY JANUARY, THE ShoWare Center in Kent, Washington, is packed with kids, teachers, families, and businesspeople checking out the technological learning going on in the classrooms of Kent School District.

One booth might feature middle school students performing DNA fingerprinting. In another, student-created video games are on display. Elsewhere, robots trundle along the floor or totter across a table. A few aisles over, students demonstrate their knowledge of Excel spreadsheets, C++ software programming, or digital filmmaking. Peppered among the student displays are business booths touting the educational value of everything from mobile printing apps to interactive whiteboards.

"It is the most fun thing I do all year," says Debra Hanninen, who teaches a combined fifth- and sixth-grade class.

This year, the Technology Expo drew more than 5,000 attendees. Beyond showcasing student projects, the expo crystallizes everything the district has set in motion since voters first approved a "tech levy" in 1999. That was when the board decided that technology would, henceforth, be a central component of instruction. Adopting the motto "Successfully preparing all students for their futures," the district understood that those futures, wherever they might lead, would necessarily be digital, connected, and global.

"It doesn't say some students or most students; it says all students, their futures," emphasizes Superintendent Edward Lee Vargas.

The expo gathers in one place all the players the district sees as necessary to accomplish that goal: students themselves, their families, teachers, businesses looking ahead to their future workforces, and other civic leaders. (Vargas maintains separate advisory groups for business, civic, and faith-based leaders.)

The expo also allows the residents, who have renewed the tech levy three times since 1999, to see "how well the community's resources and investments in technology are paying off for our students," says Vargas.

As one significant measure of improvement in instruction, between 2010 and 2012, the number of Kent schools identified in the top two performance categories—"very good" and "good"—on the Washington State Achievement Index
has nearly tripled. There has also been an increase in the number of students taking advanced courses, and disciplinary actions have declined. “I would not say that all of these changes are attributable only to technology, but it was a major component,” says Thuan Nguyen, the district’s chief information and digital strategy officer.

In February, the Consortium for School Networking (CoSN) honored Kent with its annual team award. It’s the most recent of some dozen awards that Kent has collected in the past few years, as news of its innovative technological initiatives have spread.

“This one recognizes that it truly took a team effort to make these things occur,” says Nguyen. “That’s what’s very, very unique about this award, and as a team, we can truly celebrate it.”

Integrating Tech

CoSN CEO KEITH R. KRUEGER SAYS THAT Kent’s well-thought-out approach to technology, and its inclusion of the whole community, distinguishes it.

“Kent is a longtime leader with leveraging technology powerfully in education,” says Krueger. “This is not a flash-in-the-pan effort.”

Every classroom in the district is equipped with a common suite of technology: interactive whiteboard, projector, audio amplification, document camera, and laptop. Beyond that, every student in grades 7–11 receives a laptop through the district’s 1:1 program; this fall, 12th graders will be added.

To keep pace with rapid changes in technology, much of Kent’s professional development has gone digital. Earlier this year, Kent held a district-wide PD video conference via Microsoft Lync. Teachers and principals could just flip open their laptops and attend without having to travel. “And it’s 24–7,” Vargas says. “If someone can’t participate, it’s digitally recorded so that it can be viewed at a later time.” Some schools, such as Millennium Elementary, where Hanninen teaches, have in-house technologists, so face-to-face support still happens as well, along with informal idea swapping that takes place in conversations among teachers. Still, Hanninen says, there is some fear of technology among teachers. “I find they don’t use it as much because they don’t know how and they don’t have time to figure it out. Or they’re older like me and so they don’t bother with it.”

Hanninen herself employs it all the time. “Technology is big in my classroom.” Students love to touch the screens on interactive whiteboards, she says, and are far more engaged with material presented that way. Hanninen still has a cart with a DVD/VCR but rarely uses it. Most everything is online, she says, so she can load a video on her laptop and show it on the whiteboard. Sometimes she uses clickers to give true-false or multiple-choice quizzes. The clickers record students’ answers on a spreadsheet, giving Hanninen instant feedback on the areas they need to work on.

Every year at parent-teacher conferences, Hanninen says, her students present slide shows that they have made, outlining their progress and goals. “It blows me away how polished the kids are,” she says. “It’s hard to take time away from Common Core subjects these days, but it is such a powerful learning experience for them to make decisions on what their own goals can be and present them to their parents.”

Hanninen never misses taking her students to the Tech Expo. This year she assigned students to create book trailers, akin to movie trailers, using Windows Movie Maker. “Everything I had taught about reading since September, they were synthesizing into the output of these trailers,” Hanninen says. “They’re getting tone and mood, theme, inference. They’re learning how to summarize but not give anything away—to persuade the viewer to read the book.”

The 2014 Technology Expo was the district’s eighth; Boeing and Comcast were the corporate presenting sponsors, along with the Northwest Council for Computer Education. Other sponsors included Microsoft, Hewlett-Packard, and Cisco Systems, as well as the local police department and library system. In the weeks leading up to the event, the district ran TV commercials and circulated flyers and posters to advertise the expo.

Not many years ago, Nguyen says, the expo drew a crowd numbering in the hundreds—attendance leaped into the thousands when he involved local businesses, as well as national and international corporations headquartered in and around nearby Seattle. “This changed the focus of the event from a science/ tech fair into an interactive family and community-based event,” he says.

Managing Diversity

KENT PREPARES STUDENTS FOR A GLOBAL economy, but the district itself is already a microcosm of the world. Since the tech initiatives began in 1999, Kent, situated roughly midway between Seattle and Tacoma, has boomed as a refugee transition center. “Every major world conflict that we’ve had, you can see the various groups passing through our district,” says Nguyen. More than 100 nations are represented among the 26,270 students; almost 40 percent go home to a language other than English. One high school, Kent-Meridian, is the most diverse high school in the state.

In response to this demographic change, the district launched its Cultural
Navigators program, which taps leaders of ethnic/cultural groups to serve as liaisons to the district. One important service the navigators perform is spreading the word in their communities about the district’s Parent Academy for Student Achievement (PASA). Launched last year, PASA is a nine-week course for parents that teaches them how to be involved with their children’s education and how to access the district’s digital resources. The courses are offered in the top four languages spoken at each school.

“I tell our kids, ‘You’re so lucky to be going to school in Kent,’” says Vargas. “It’s such an asset-rich environment, the diversity we have.”

There are challenges with such a diverse environment, of course. Fifty-two percent of students qualify for free or reduced lunch, but the biggest challenge, says Vargas, is connectivity. School-issued laptops are all well and good, but online lessons, homework, or resources mean little if students can’t get on the Internet at home. Many families in the district participate in Comcast’s national program, Internet Essentials, which offers Internet access for $9.95 a month to families with at least one child in the National School Lunch Program. In fact, all Internet service providers in the district offer low-cost Internet service, says Nguyen. The district helps distribute information, at school events and on its website, about the various programs.

Even with the available assistance, things fall through the cracks. Technicians might arrive at a home to hook it up with Internet service, says Nguyen, only to find that the family has moved on; transience is not uncommon in refugee communities. Nguyen is hopeful that technological upgrades on the administrative end, which through geolocation on an interactive map gives officials real-time information on where students live, will help keep track of families’ whereabouts.

The district also wants to install more Wi-Fi kiosks around the community “so our kids don’t have to walk a mile or two to get to a library or a location like a McDonald’s for Internet access,” Nguyen says. Officials are beginning to work with local restaurants and businesses that would allow students in with their laptops; in return, the district would install a hot spot and give the place a school-friendly business sticker to display.

“The trick is getting the businesses to agree to having kids there without buying anything,” Nguyen says. The kiosks support advertising, which would help pay for the effort.

“The goal is not to have just a digital school district,” says Vargas, “but a digital community.”

Hanninen says that in the past, aware of the digital divide among her students, she wouldn’t assign homework that required going online. “But this year, I’m not sure I have one student who doesn’t have access to the Internet. I think a lot of that is Kent’s doing.”

Another way the district tries to equalize resources—while providing a great learning experience—is through the Student Technology Access & Resources (STAR) program. After four years, laptops exit the 1:1 program and enter STAR, at which point students, mentored by IT staff, refurbish them and install the latest software. The laptops are then circulated back to the community, meant for families who fall outside the 1:1 program. Since the refurbishing effort began in 2008, more than 2,000 families, who may otherwise have no computer at home, have received laptops.

Technology also features prominently in the district’s iGrad program, which seeks to bring dropouts back to the fold to complete their high school degrees—and even go beyond that. Launched about 18 months ago in partnership with Green River Community College, the program is open to young people between the ages of 16 and 21. Through online courses, students complete credits toward a high school diploma, GED, associate’s degree, or professional certificate. Immediately popular, the program has enrolled more than 500 students and just moved from a strip-mall storefront into a 4,000-square-foot space to accommodate increased demand.

Fifteen years ago, when Kent first sought the tech levy and placed technology front and center, it was on the leading edge of school districts entering the digital age. Staying ahead of the curve, says Nguyen, is an ongoing process. “We have a five-year technology road map that we review and renew every year,” he says. “We also do long-term budget forecasting and projections,” which help IT staff stay focused on the mission. But, he says, what it really comes down to are two essentials: “a lot of planning and a great team.”

Another CoSN winner lets its teachers take the lead on tech.

To Keith Bockwoldt, it always seemed that teachers, not administrators, should be the ones who decide what technology to use in the classroom. And in his suburban Chicago district, they are.

“We just don’t feel that the top-down approach is the right thing,” says Bockwoldt, director of technology services for Township High School District 214 and winner of this year’s Withrow CTO Award from CoSN. “It’s all about letting teachers do what they need to do.”

Teachers experiment with devices and determine which ones they like. Virtually all choose iPads, because of a wide array of educational apps and interactive textbooks. Teachers then present proposals for funding. Last year, says Bockwoldt, administrators received $2.3 million in requests, more than the $1.3 million they had to spend. That’s just one sign, Bockwoldt says, that teachers like the program. One 28-year veteran was hesitant to teach with iPads because she wasn’t tech savvy. Bockwoldt encouraged her to try. “Three years later,” he says, “she’s totally reenergized” in the classroom.

About 48 percent of the district’s 12,000 students have received iPads; in two years, all students will have them. To teach with iPads, faculty first must complete an “internal university” course; 55 percent have been trained so far.

And it’s all budget neutral. How? Savings from phasing out 6,300 desktops, no longer paying Microsoft Office licensing fees (hello, Google Docs), and buying far fewer textbooks.

Bockwoldt firmly believes all districts can make the approach work.

“Some districts say, ‘We like the Chromebook because it’s $250,’” he says. “And I say, ‘Is that the best educational decision you can make for your students?’” —MJB