“Our 1:1 is leading us to personalized learning, where children learn at their own pace and teachers use data for immediate recovery. We’re trying to give as much flexibility and mobility as we can.”
— Steve Wentz, Chief Technology Officer, Pasadena Independent School District

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“The factory model is not productive. We’ve been moving toward blended learning and will eventually get to personalized learning for everyone,” says Vickie Valet-McWilliams, director of instructional technology at Texas’ Pasadena Independent School District (PISD).

Just like any large district, some teachers are further along the learning curve than others. Valet-McWilliams says the teachers who are already teaching in a blended or personalized environment tell her that their students love to learn this way and that they hope to never go back to the factory model again.

Step 1: Get Devices in Students’ Hands

Four years ago, PISD did a 1:1 pilot with 300 seventh-grade students. Administrators chose 11-inch HP netbooks because they were small, mobile, not too costly, and easy to use.

In year three, teachers and district-level curriculum specialists began to rewrite the curriculum to make more sense in a 1:1 environment. The 1:1 program expanded to include grades 7 and 8 at additional intermediate schools. In year four, all 10 intermediate schools, two ninth grades, and a new career & technical high school (CTHS) went 1:1.

This year, all the intermediate and high school grades have take-home 1:1 programs and an in-school pilot has started at three middle schools (grades 5-6).

Step 2: Update the Device as the Program Expands

Last year, the 4,000 HP netbooks were passed down to the middle schools to make room for a new device for the upper grades. Chief technology officer Steve Wentz and Karen Hickman, the deputy superintendent for curriculum, had attended a Microsoft meeting where they learned about a school using digital ink; it inspired them to bring it to PISD. The new device, a Dell Venue 11, is a Windows 8 tablet with a digital ink active stylus that makes it much easier for math and art classes to participate in the 1:1.

“We are comfortable with a Windows environment. We use it for our state testing, it runs the programs we need, and we can manage it with our current tools,” Wentz says. The Dell Venue 11 was the perfect size – portable, and light. “We wanted teachers to be able to move around, so carrying a larger laptop didn’t make sense.”
Today, more than 18,000 students in grades 7 through 12 have Dell Venue 11 tablets and there are more than 2,000 Dell Latitude 3150 notebooks in grades 5 and 6.

### Step 3: Move Towards Personalization

“Our 1:1 is leading us to personalized learning, where children learn at their own pace and teachers use data for immediate recovery,” says Wentz. “We’re trying to give as much flexibility and mobility as we can.”

There is a lot of evidence already that the new approach is paying off. Kelly Cook-Costley was an assistant principal at Shaw Middle School in September 2013 when she and Rebecca Dietz implemented a blended format in Dietz’s sixth-grade science class. Dietz placed the curriculum into a learning management system and broke the class into small groups, working one-on-one with a child who needed intervention while other students worked independently online. Many of the English language learners started out with failing grades but 90 percent passed the end-of-course exam. “They were way ahead of the district average,” says Dietz. “Through the blended/personalized model we were able to fill in the gaps.”

Over at Carter Lomax Middle School, the personalized movement is in full gear. Jordan Arbuckle, a sixth-grade math teacher at Carter Lomax, says her students start their days by watching videos or PowerPoints and taking notes. Next they work on cross-curricular projects to solve real-world problems, perfecting their collaboration and social skills. Later, it's time for reading and math calculations on Khan Academy. Students end their days interacting with videos and other digital content, during which time Arbuckle pulls aside small groups of students, based on up-to-the-minute diagnostic data, to go over anything they’ve missed. “This format lets us use the best practices that we know are effective,” she says. “Blended and personalized instruction lets teachers get back to teaching.”

For Cook-Costley, the real-time data makes all the difference. “With the online system, everything is graded automatically. When you don’t have to grade assessments or daily assignments you're a more effective teacher. You’re provided with activities that reach all modalities so students can choose the best one. They determine what type of learner they are and how they learn best.”

### At A Glance

- 63 schools: 35 elementary, 8 middle, 10 intermediate, 5 high (+Career & Technical High School), 4 alternative.
- 54,382 students: 26% Bilingual/ESL; 18% Career & Tech, 9% Special Education, 5% Gifted.

### Infrastructure

- More than 18,000 students in grades 7 through 12 have a Dell Venue 11—a Windows 8 touch tablet with a digital ink active stylus and a keyboard—which they are allowed to take home.
- More than 2,000 students in grades 5 and 6 have Dell Latitude 3150 notebooks that they leave at school.
- 350 Promethean boards in classrooms around the district.

### Learn More

Website: PISD Technology Services  
Website: Summit Public Schools  
Video: A Day in the Life Of a Connect student at Carter Lomax