The Challenge

In 2011, the State of Florida became one of the first states in the country to set up a timeline for a conversion to digital-only textbooks by the 2015–16 school year, with at least 50 percent of a district’s textbook budget to be spent on digital materials by that time.

“We don’t want to set up a situation where the first time a student has access to a computer, it’s a test day or a practice test day,” says Mary Jane Tappen, Executive Vice Chancellor, K-12 Public Schools, for the Florida Department of Education. “They should be comfortable accessing content and interacting electronically.”

The law also permitted school districts to set up pilot programs to test electronic textbooks. So Orange County Public Schools had a legislative mandate to spend on digital curriculum.

“Computer-based assessments provide for timely feedback and ease of administration...they’re just the right thing to do,” says Perreault. “And it’s not like technology is going to become less involved in people’s lives! But the curriculum has to be meaningful. Sometimes publishers merely digitize content rather than provide actual digitized curriculum. To just digitize a piece of content is simply transference, not transformational. The curriculum we utilize must be engaging. It can’t just be a PDF on an e-reader. That’s just disruptive.”

As someone in charge of all classroom equipment, software evaluation, and instructional materials for OCPS, Perreault was particularly invested in doing things the right way. Due to the district’s size,

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there are a great deal of considerations in terms of technology: What’s scalable? What devices have too high of a breakage rate? Are there too many barriers to implementation?
With these questions in mind, OCPS began an ambitious 1:1 Proof of Concept that involved seven schools and launched with a Bring Your Own Device pilot in two elementary schools (grades 4 and 5) in January 2014, with another seven schools in the fall of 2014 and teacher deployment in the spring.

The Solution

Orange County Public Schools began planning its Proof of Concept in the fall of 2012. The district spent months conducting research and writing a very lengthy and comprehensive Vision and Strategy document—a “map,” of sorts, that laid out what the Proof of Concept needed to look like.

The district had three people actively devoted to writing this vision document: a STEM coordinator and two administrators of Instructional Design (former teachers converted to administration positions with the necessary field experience to detail a pilot that would make sense in the classroom). They met periodically with their superiors, refined and retooled, and ultimately came up with what the district used as their final Vision and Strategy document. And while a small team was in charge of developing this crucial, inaugural document, this Vision and Strategy document guiding the Proof of Concept was born from meetings with multiple stakeholders.

“Here’s the thing: If districts are thinking about a Proof of Concept for a 1:1 program, you need to have everyone in the room,” Perreault clarifies. “Not just tech or your curriculum people, but everyone... when you bring everybody together, then-and only then-do you get buy-in.”

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The Benefits

From the get-go, Orange County Public Schools took the approach of letting the curriculum decide
what devices they’d use and how they’d use them, rather than letting the district’s most influential faculty members decide what they should be doing with 1:1.

“In some districts, if somebody has an idea they think they should try, they get high-level permission to proceed, they find money, and then they go for it,” Perreault says. “But they often don’t think through issues such as fixed assets, risk management, operational guides…that’s why we took a very different approach than most districts take. We wanted to be very nimble, so that—if we failed—we would fail small and fail quickly.”

Metrics also played a large part in the success of OCPS’s Proof of Concept. The district created a program evaluation team to measure most every aspect of the pilot: discipline referrals, electrical usage, engagement, technology integration, and device repair. The district also held parent meetings and open houses to inform parents and the community about what was coming.

“The thing about pilot programs is that you only find out where the land mines are by stepping on them,” Perreault explains. “Everything has its series of pieces you have to fit together. The best piece of advice I can give other districts looking to start a Proof of Concept is that no matter how much Professional Development planning you provide, you always need more. It’s a huge paradigm shift for teachers, so you need a good year working with them before dropping this in their classrooms. They need more time to transition. Also, keeping inventory is a big issue. What is the process for refreshing devices? How much overage do you need to swap out devices? What are your procedures for damage and loss? One thing we definitely did right from the start was to bring all stakeholders together in the same room. When we got everybody together, it was amazing. Everyone had an entirely different idea of what the pilot would look like! You absolutely have to have buy-in from all levels across all divisions to make something like this happen.

**At A Glance**

**Budget**
- Project Management: $85,811
- Technical Coordinators: $225,108
- Professional Development: $1,372,132
- Devices: $7,761,955
- Instructional Materials: $1,342,263
- Grand Total: $10,787,269
- Related Infrastructure Cost: $578,535
- Estimated cost to expand the pilot program district-wide: $229 million

**Results**
- Benchmark assessment rates are up two points in Reading and 12 points in Mathematics
- Level 3 offenses decreased by 56 percentage points
- Level 4 offenses decreased by 50 percentage points
- Mobility rates are down by 10 percentage points
- Attendance rates are up by one percentage point
- Infrastructure:

**Devices**
- Ocoee High School: 1:1 MacBook Airs
- Liberty Middle School: 1:1 Lenovo Chromebooks
- Hunter’s Creek Middle School: 1:1 iPads with keyboards
- Corner Lake Middle School: 1:1 HP laptops
- Millennia Elementary School: Class sets of Samsung Chromebooks
- Pinewood Elementary School: Class sets of iPads with keyboards
- Wetherbee Elementary School: Class sets of Intel® Classmate PCs