

National Association of State Boards of Education

⊕ Utah Banks on Statewide Approach to Adopting Education Technology

By Valerie Norville

In a bid to personalize instruction and counter inequitable access to technology for learning, many state and district leaders have invested in one-to-one laptops or tablets for students and in educational software, only to be disappointed when these purchases do not boost student achievement. Seeking to learn from missteps elsewhere, the Utah State Board of Education has shepherded a grant program to help local education agencies (LEAs) build the capacity of teachers and leaders to deliver digital learning effectively.

Federal policies such as the E-rate program have contributed to the widespread prevalence of computers, applications, and internet access in classrooms across the country. Yet research on the impact of technology in education paints a mixed picture.¹ Some studies find technology adoption yielding little or no effect on student performance; others have found positive effects, especially in relation to education software that enables personalized learning.

There are many possible explanations for why technology adds values in some instances but not others. It is increasingly clear, however, that putting technology in classrooms is by itself insufficient to accelerate learning. A common problem, according to Richard Culatta, CEO of the International Society for Technology in Education (ISTE), is that school districts “take the allotted budget based on the amount of money it costs to buy the technology and roll it out [with] no thought or plan on how to prepare teachers and leaders to use it effectively.”

Frequently, administrators do not begin by asking what instructional problems the

technology is supposed to address, Culatta said. Many states lack teachers who are willing and prepared to leverage digital tools to deepen and hasten learning and principals who know how to lead the process.

Utah started with a pilot program to put devices in students’ hands, said Rick Gaisford, education technology specialist for the Utah state board. “It helped us learn what to do and what not to do,” he said. Utah state board members were instrumental in pushing for a new approach.

BUILDING SUPPORT

Formerly a state legislator and chair of the education committee, Dave Thomas was elected to the state board in 2008. “I came on with a bunch of education reformers, and one of the things I wanted to do was to change digital teaching and learning—making it more hands on and more available in the classroom,” Thomas said. “I saw it as the future of education and the delivery of teaching. It allows you to do a lot of different things with less resources.” In addition, it made economic development sense in a state with a fast-growing technology sector. Convinced of the potential for digital learning because of impressive results he observed from a pilot for computer adaptive testing, Thomas began to build support for a statewide digital teaching and learning program. “There was a lot of opposition to it,” he said. “The first thing I had to do was to convince the state board and the education establishment that this should even be a goal.”

Thomas then met with legislators who were interested in digital learning and with the chair of the Senate education appropriations

subcommittee to develop legislation. While one bill passed in the Senate only to die in the House, a bill in a subsequent session passed in the House and died in the Senate, Thomas said. “All of these people were playing together, trying to craft a bill,” Gaisford said. “When it came down to appropriations, we received zero dollars. Everybody was disheartened. It was months of work to get nothing.”

The funding was a particularly hard ask in a state at the bottom of per-pupil spending in the nation, Thomas said. He got the principal legislators together and asked, “What’s it going to take?” By the end of the session, both chambers had agreed to a modest proposal: \$5 million to set up a task force to develop a program proposal and to provide technical support.

The Utah state board in 2016 approved members to join the task force, which had a few months to develop a master plan in hopes that the legislature would fund their proposal in the next session.² Thomas, who chaired the task force, said that he wanted a diverse panel that could build support for an eventual program, with superintendents from small and large districts, charter school directors, district IT directors, state board members, legislators, and representatives from the governor’s office. Consultants from three groups were also included to help the task force absorb lessons from education technology efforts outside Utah.

“I didn’t necessarily know what would be a deal breaker,” Thomas said. “I knew that we wouldn’t be able to get an appropriation from [legislators] unless we could show them in some way that they were getting a bang for their buck.”

The plan specified a vision for technology implementation and principles to guide the program. Legislators wanted a competitive grant program with metrics to ensure their investment was well spent; the governor did not want a grant program at all but rather funding for all districts. “One of the compromises was that it became not a competitive grant program but a qualified grant program,” Thomas said.

To qualify, each district had to submit an application detailing how they would use the grant for digital learning that targeted self-selected long-term and intermediate goals for student achievement or college and career readiness. In the first year, the Utah legislature passed a bill to appropriate \$10 million in ongoing funds.

In the first cohort, 65 districts and charter schools qualified for grants and sent teams to a technology “boot camp.” Their plans addressed a variety of needs. “Almost universally, districts felt what they were lacking was teacher professional development,” Gaisford said—specifically, whether teachers were prepared to transition to teaching with digital resources. Many districts wanted to use their grants to address teacher capacity, he added.

EQUIPPING TEACHERS AND LEADERS

The state board has offered an endorsement for technology on teacher licenses for 30 years, Gaisford said. The endorsement was intended to certify that teachers know how to use technology to accelerate teaching and learning. The old endorsement required teachers to take three courses onsite at the University of Utah and the Utah Education Network (UEN) in Salt Lake City. This arrangement did not meet many teachers’ needs, Gaisford said, so the state added multiple pathways to endorsement, many offered online and at the local level.

Last fall, Utah’s state board added the educator certification program from ISTE, an education nonprofit focused on using technology to improve learning, as a new pathway to endorsement. It requires candidates to attend a two-day workshop, take online courses, and complete a portfolio that demonstrates their

ability to use technology to improve teaching practice. UEN will deliver the program to Utah teachers and leaders, and ISTE staff will review their portfolios. “It exceeds the traditional endorsement program,” Gaisford said. “That’s going to make them better teachers.” In addition, the grant program has given some districts the flexibility to offer stipends to educators who earn ISTE certification.

Utah is the first state to recognize ISTE certification for those seeking an education technology endorsement, Culatta said, though he expects other states will follow. The program is in a train-the-trainers phase, according to Gaisford. The first cohort begins the six-month process this month.

OUTCOMES AND NEXT STEPS

In 2018, the Utah legislature doubled ongoing funding to \$20 million. Most of Utah’s LEAs (representing 95 percent of Utah’s K-12 students) are now participating in the grant program. There are three components to the evaluation of outcomes in each LEA: select teachers complete logs on their use of technology for five consecutive days, all teachers complete a survey on their perceptions of students’ use of technology, and grantees update a publicly available dashboard on their progress toward their chosen student achievement goals.³

Gaisford visits participating LEAs annually. During the first year, his conversations with educators centered on networks, device purchases, and training. The conversations were different in fall 2018, he said. “When I asked how the program was going, we didn’t talk about networks or professional development. We talked about how teachers were using data they’d never had before to inform them on what students need, on new ways teachers were teaching kids, and new and exciting ways students were collaborating and sharing. It was all about teaching and learning and not so much about technology, which is really the end goal.”

LESSONS FOR STATE BOARDS

Changing the way districts incorporate education technology in schools may seem daunting to some state boards. Certainly, “state boards have to understand that there are complexities that most of them have never dealt with

before,” Culatta said. “Most of them probably don’t have experience rolling out technology effectively in schools.” Yet, he added, this work “is something that all state boards can do. Utah’s approach to ensure that teachers are successful with technology is not some magic thing in Utah that can’t be replicated in other states. They just asked the right questions.”

“The Utah board asked, ‘How do we make sure teachers are successful? What do we need to know before buying devices?’” he said. “My advice for other state boards is, don’t get so enamored with the technology that you forget to make sure teachers are prepared to thrive in digital classrooms, and use your oversight role to make sure technology is used in a way that makes the greatest impact for students.”

Nowhere is this more important than in addressing achievement gaps. State boards, for example, can ask districts how their technology plans address equity gaps. “It’s a great question, but I don’t think many state boards know to ask,” Culatta said.

Changing policy and practices around education technology takes broad-based coalitions, Gaisford said. Utah required superintendents and curriculum directors to attend boot camps. Principals and local school board members were also on the teams, which built support for added local funding.

“The teachers have to buy into it,” Thomas said. “If they don’t, you may have a lot of devices, but they’ll stay in the closet.” Parents’ concerns about data privacy must also be addressed, Gaisford said, and they need to understand why technology is being used. “It is a changing of culture, which takes time,” Thomas said. “It’s like turning a big ship.”

Valerie Norville is NASBE’s editorial director.

NOTES

1 Aaron Chatterji, “Innovation and American K-12 Education,” *NBER Working Paper 23531* (Cambridge, MA: National Bureau of Economic Research).

2 Utah Digital Teaching and Learning Task Force, “Utah’s Master Plan: Essential Elements for Technology Powered Learning” (Salt Lake City, UT: Utah Education Network, 2016).

3 The dashboards are available on <https://dtl.utah.org/>.