Everybody Learns:
Educational Equity for All Connecticut Students

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"Access to digital learning is the Brown v. Board of Education of our generation."
— Connecticut Governor Ned Lamont, July 28, 2020

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Executive Summary

Ensuring a safe, fostering educational environment where all students may flourish and learn may be the most important and long-lasting of the functions government serves, especially through the lens of the COVID-19 pandemic. The pandemic required state and local government to choose between running schools in person and risking the physical health of students, teachers, and families or shifting to remote learning, but remote learning models required us to address a variety of inequities, including access to technology.

The significant need became imperative beginning in March 2020, when instruction, lesson delivery, tutoring, independent research and project-based learning, and family outreach went online. When school went remote, students without a device and connection were essentially disenfranchised from learning. Delivering education became fundamental digital service overnight.

The State of Connecticut's Everybody Learns initiative came as a direct response to this challenge. The project enabled the safe planning and operation of remote learning, equipping students with the technology resources to continue their education from home during the pandemic. The work represents a significant achievement in terms of scope, impact, collaboration, and insight. While many projects meet a handful of initial objectives and some meet all, few also shed light on opportunities to effect long-term, systemic change. Everybody Learns is one of those few initiatives.

The initiative began with a vision and commitment from the highest levels of leadership. Governor Ned Lamont, a former telecommunications executive, dedicated the personnel and funding needed to provide the technology resources necessary to keep students learning remotely. Connecticut has since provided a computer and access to broadband connection to every learner who needed one.

The State has delivered more than 80,000 computers to students in every school district, with a priority to the communities hardest hit by the pandemic. Nearly 13,000 mobile hotspots went to students to keep them connected to their teachers, classmates, and assignments. Multi-million dollar agreements with five cable Internet providers made it possible to equip thousands of additional students with fixed broadband connections. The initiative also included the buildout of community wireless networks through anchor institutions such as libraries, universities, and schools. Finally, bundled teacher support and professional development supported teachers in making effective use of technology to enable accelerated learning opportunities and strengthened family connections.

The project came with its share of challenges that were addressed effectively because of the strategic collaboration of the inter-agency leadership team. This reinforced the State's fundamental belief that digital services must be driven across governmental lines to meet resident needs. Additional takeaways have provided greater insights into scaling equity initiatives beyond strict technical considerations to address the

underlying cultural and social factors that influence digital adoption campaigns. The impact of this work will benefit students, families, and communities in Connecticut moving forward, and lessons learned will help other states take on similar challenges more efficiently and effectively.

Project Narrative

Idea

The Challenge

The past year marked a significant turning point for most of society, including those in education. The need for social distancing to protect against COVID-19 forced schools, colleges, and libraries to adopt remote models of instruction and operation, all dependent on technology. However, serious inequities in access to devices and connections vied against ensuring equal opportunities for continued learning.

Prior to the pandemic, an estimated 321,000 households, 57,000 of which have children, — lacked reliable Internet access. That's out of 3.5 million Connecticut residents. Surveys of school leaders indicated that 29 percent of high school students and nearly half of middle school students did not have a school-issued device for completing homework and engaging with teachers and fellow students after school and on weekends. In the absence of broadband mapping and device inventories in the State, these totals remain estimates, pointing to another significant need to counter the digital divide: accurate measures.

The Solution

In the early spring of 2020, Connecticut Governor Ned Lamont enlisted a team of agency leaders to close the digital divide among all public school students through the Everybody Learns initiative. The Governor committed $45M, the largest statewide per-pupil investment of its kind, to provide a computer and home Internet connection for every learner who needed one.

To reach a 1:1 device ratio and connect students to the Internet, the leadership team gathered input from every local education agency in the state. Data received from school districts indicated a need for fixed (cable Internet) as well as mobile broadband, especially for students experiencing housing insecurity or living in dual custody situations. The State committed to purchasing 42,000 cable connections, made possible through agreements brokered with Connecticut's five major cable Internet providers, as well as nearly 13,000 mobile hotspots.

Implementation

The Everybody Learns initiative began with a convening of leaders and subject-matter experts in addressing broadband and the digital divide. Governor Lamont assigned Nick Simmons, then the Office of the Governor (OTG) Director of Strategic Initiatives who has since assumed the role of Senior Advisor for School Reopening and Recovery

under Secretary of Education Cardona, to lead the project team. Members included commissioners and senior leadership from the following agencies and groups:

- Advance CT (Connecticut Economic Resource Center)
- Commission for Educational Technology
- Connecticut Education Network
- Department of Administrative Services
- Department of Economic and Community Development
- Department of Education
- Internet 2
- State Broadband Office

Following the initiation phase, the team established working groups to identify milestones, data collection needs and tools, external partners, risks and barriers to implementation, and public-facing communications. With the goal of providing broadband to every disconnected student, the team acknowledged that tens of thousands of households in the state have no fixed broadband options. This realization informed the design of the connectivity portion of the initiative and provided context for forthcoming legislation from the OTG around broadband measurement and availability in Connecticut (see House Bill 6442).

Needs Assessment and Solution Design

Providing a computer and home broadband access to every disconnected public school student in Connecticut required specific and accurate measures of need. No availability or connection maps exist in the state, as is the case in most other regions of the United States, so the team turned to those who best understood the needs of learners: their schools.

The team had general connectivity data through United States Census reports and other sources but needed specific counts of disconnected students and those in need of a computer for remote learning. Soon after schools closed, the Commission for Educational Technology conducted a survey of district leaders to identify the number of students in need of home Internet and a device (see "School Technology: Current and Planned Investments to Support Remote Learning"). Responses to that survey helped quantify aggregate as well as local technology needs.

A second survey through the Department of Education (see "Student Participation in Distance Learning: Device/Connectivity Needs, Effective Strategies, Challenges, and State Supports Needed") pointed to the nearly universal dependence of schools on technology for remote learning. Responses from every local education agency provided the total fixed broadband, mobile broadband, and device needs, per district. The two reports provided the basis for engaging with fulfillment partners to ensure that all students had access to devices and broadband for remote learning.

Procurement

With these aggregated needs in hand, the team engaged with hardware and connectivity providers to negotiate agreements and ensure timely fulfillment. On the hardware side, school districts requested 20,000 laptops running the Windows operating system and 60,000 computers with the Chrome operating system. The Department of Education engaged with Dell and CDW-G to place the orders, streamlined through Connecticut's Executive Order 7Z, which greatly simplified procurement terms and processes for both State agencies and providers. In the context of global technology supply chain delays during the spring and summer of 2020, delivery of the first devices within two months of the order remains an exceptional accomplishment.

The Department of Education leveraged its buying power and strength of partnerships with providers to include complementary professional development resources, helping to ensure the effective use of devices by teachers. Through an agreement with Google, the State received 500 full-access vouchers to the course catalog of Kiker Learning as well as 20 hours of custom training for all Connecticut teachers. With a focus on applying digital tools to solve real learning challenges, teachers will have access to courses on topics such as design thinking, effective blended lesson design, and elementary mathematics.

For the broadband connections, the State provided two options for districts to request: fixed and mobile Internet. The team negotiated agreements with all five cable Internet providers operating in the state to meet school leaders' demands, encouraging them to choose fixed broadband as the preferable means of connecting students, given the superior speeds and dependability of cable Internet. Schools indicated the number of connections by provider based on the territory of each company in the state.

Districts could also request cellular hotspots to provide Internet access to students with higher mobility needs, such as those experiencing housing insecurity, in dual-custody living situations, etc. The team partnered with Kajeet, an education-specific provider of mobile connectivity solutions, to offer hotspots with connectivity options through AT&T, T-Mobile, and Verizon. Each of the nearly 13,000 hotspots included a "hot swap" feature to allow program administrators to exchange the SIM card of one provider for that of another, depending on which had the fastest signal to a given student's home. The State also chose Kajeet because the solution provides extensive device management and usage tools as well as content filtering mandated through the federal Children's Internet Privacy Act (CIPA).

In addition to providing critical input on device and connectivity needs, school leaders served as key partners in the Everybody Learns initiative. The State had all computers shipped directly to district technology leaders, who knew exactly which students needed these devices. The team also worked closely with schools on broadband fulfillment, sending the Kajeet hotspots to districts, which gave them directly to students.

Fulfillment of fixed broadband solutions proved more challenging than procuring devices. Through a series of outreach sessions with district leaders and cable providers

(see materials and recordings at www.bit.ly/CT_Home_BB), the State asked schools to provide deidentified student addresses so that providers could conduct serviceability checks. Once carriers identified the subset of addresses that (A) were not current customers and (B) were able to connect to service, school leaders then reached out to families with instructions on how to request free installation and service through the program. In the case of Comcast, the State worked with this provider to design a process whereby families could skip the serviceability step and simply redeem one of more than 28,000 vouchers to initiate service in their households.

The Everybody Learns initiative also provided for open access to wireless Internet access through community anchor institutions such as libraries, schools, and universities. The State leveraged its existing high-speed Internet backbone run by the Connecticut Education Network (CEN, www.ctedunet.net/everyonelearnswifiinitiative) to provide this service. The CEN team has brought online more than 100 locations, prioritizing work in the most under-connected communities in the state.

Support and Outreach

Since the delivery of devices and provision of home, mobile, and community-based connectivity solutions, the State team has engaged in coordinated, cross-agency support efforts. Close partnerships with providers and school leaders have allowed for the rapid identification of account and connectivity issues, ensuring that students get online and stay connected for remote learning.

The Everybody Learns team equipped school leaders with communications tools in multiple languages to reach all eligible families. They also designed a cross-media outreach campaign ("Get ConneCTed") to raise awareness of the program. The State engaged with specialists in reaching underserved communities across multiple languages to boost adoption of free Internet. The campaign included a Web site (CT.gov/GetConnected), social media posts, radio and television advertising, and interviews with local and state leaders, including current Secretary of Education Dr. Miguel Cardona, who served during this time as CT's Commissioner of Education.

Impact

By addressing the digital divide in Connecticut's schools, the Everybody Learns initiative made remote learning possible, thereby enabling the continuation of learning while protecting the health of students, teachers, and family members as our state and country worked to contain the COVID-19 pandemic. The project has brought enormous and specific benefits to the education community:

- **Students:** Allowing them to remain connected to learning during the mandated period of school closures. The provision of computers and Internet connections for all learners meant that students could attend class, review and complete assignments, and — perhaps most importantly — maintain essential relationships with their teachers and fellow students.

- **Teachers:** Providing an equitable platform on which to reach, educate, and nurture students, regardless of their families' ability to pay for technology. Educators have shared the enormous challenge early into the pandemic of supporting disconnected students, an extra stress added to the already difficult task of rapidly adapting to online and blended learning approaches. By ensuring all students have access to school during the pandemic, the State provided the essential conditions for teachers to continue this important work.
- **Families:** Benefitting families and communities as well as students. As households and local anchor institutions came online, parents who experienced job loss could seek new work opportunities and file for unemployment benefits while watching their children at home, take advantage of telehealth resources, pursue adult education opportunities, and leverage other online services through new home and community-based Internet connections.
- **Education Leaders:** Enabling effective remote learning. District and state leaders, with the provision of computers and connections for all students, could design and execute distance learning plans. Doing so significantly reduced the cost and complexities of planning and operating multiple educational approaches (e.g., some students with paper handouts, others with streaming classes, etc.) and unified culture and process among the entire educational community.

By the numbers, Everybody Learns remains significant in its investment and outcomes:

- **Devices:** The State procured and delivered 82,102 computers to close the device gap among public school students in Connecticut.
- **Connections:** Deploying 12,774 mobile hotspots and providing nearly 45,000 cable Internet connections has gotten tens of thousands of students online.
- **Community Access:** The State has provisioned for 154 access points in the 40 neediest communities in Connecticut, from rural to urban. More than 100 have come online, and the success of this work has led to its expansion through the Governor's American Rescue Plan framework.

In addition to these totals, Everybody Learns supports the longer-term goal of supporting digital inclusion at all levels. The initial investment into devices and connections spurred additional research into broadband adoption barriers. The State delved into these issues, gathering input on the logistical and mindset challenges of getting online that has informed additional phases of the work. The report, "Home Internet Connectivity: Barriers and Opportunities for K – 12 Students," includes key learnings about why families remain averse to getting online and has garnered national press coverage (e.g., see April 29 Politico article).

Takeaways from the initiative and associated research reinforce that short-term broadband adoption and its long-term benefits depend on effective digital inclusion programs and strong community supports. These insights have since led to the creation and launch of the State's Learner Engagement and Attendance Program, which provides millions of dollars for family outreach and support through digital inclusion teams.