Solution Brief

Education Technology as a Service
K–12 Education

Education Technology as a Service Streamlines and Accelerates 1:1 Technology Initiatives for K–12 Schools

Education Technology as a Service (ETaaS) is an innovative, customizable service package that helps K–12 districts move to an integrated model for deploying and supporting 1:1 EdTech initiatives.

"EdTech as a Service is looking at all the parts of implementing technology into the learning environment—the distribution, the asset tagging, imaging, getting the device or the technology ready, and all the processes around purchasing and distributing technology in schools."

—Colleen Flannery, CTO for Chandler Unified School District, Chandler, Arizona

"The PC has become an essential learning tool, and the Education Technology as a Service model has the potential to be a cost-effective way for schools to leverage high-performing and secure devices, such as Intel® Core™ and Intel vPro®, to accelerate learning outcomes."

—Stephanie Hallford, vice president and general manager of Commercial Client Division, Intel Corporation

ETaaS aims to change the way schools embrace education technology to help ensure digital equity, streamline device configuration and deployment, and implement effective end-to-end managed services to efficiently uplift support for anytime, anywhere learning and teaching.

When implemented thoughtfully, education technology (EdTech) engages and motivates students to learn, empowers educators to teach creatively, and improves educational equity and student outcomes. To close the digital divide, curb student learning loss, and shift to personalized learning, many districts are exploring 1:1 EdTech programs where each student, teacher, and staff member receives a personalized computing device.

Challenge: Implementing a 1:1 technology initiative creates costly challenges for IT departments

Implementing a 1:1 initiative across the district is costly, complex, and time-consuming for IT departments. Configuring, deploying, and supporting these initiatives take IT staff away from providing everyday technical support, which can interrupt teaching and learning, cause frustration, and fuel student/user disengagement. Additionally, if 1:1 projects are deployed on an existing fragmented IT environment, it can result in weeks, if not months, of delays; poor device management; increased security risk; and delayed learning outcomes.

Solution: ETaaS, an integrated service model for 1:1 technology initiatives

ETaaS pairs Intel® hardware and platform leadership with highly capable devices and services from Intel partners to give K–12 districts a better way to implement a 1:1 technology initiative.

The simplified and integrated technology approach provided by ETaaS benefits all education stakeholders.

- **IT:** Departments can save hundreds of staff hours on device configuration, deployment, and management, freeing team members to provide essential daily support to keep students learning and educators teaching. The Intel vPro® platform provided additional below-the-OS security solutions as well as increased manageability and performance.
- **Administration:** Administrators can establish more-predictable, sustainable technology budget cycles and maintain cash flow with fixed payments and leveraged group buying rather than lump-sum procurement decisions and individual purchases.

- **Students:** Students have 24/7 access to devices, so homework and daily assignments can be turned in on time. Fast and powerful Intel® Core™ laptops allow students to use applications and programs that need higher computing power to learn advanced skills like modeling and simulation, AI and machine learning, and programming and coding.
- **Teachers:** Educators benefit from professional development led by experts, focused on leveraging device features and blended learning pedagogy to accelerate student outcomes.
- **Families:** Students with limited or no internet connectivity at home can use their LTE-enabled devices to complete homework, and parents can use the devices to communicate with teachers instantly.

Additionally, because ETaaS helps get performant, resilient devices into the hands of every student, it can help schools enable anytime, anywhere learning; ensure digital equity; create engaging, accessible, and consistent educational experiences; support better relationships through connection; and more effectively prepare students for the jobs of the future.

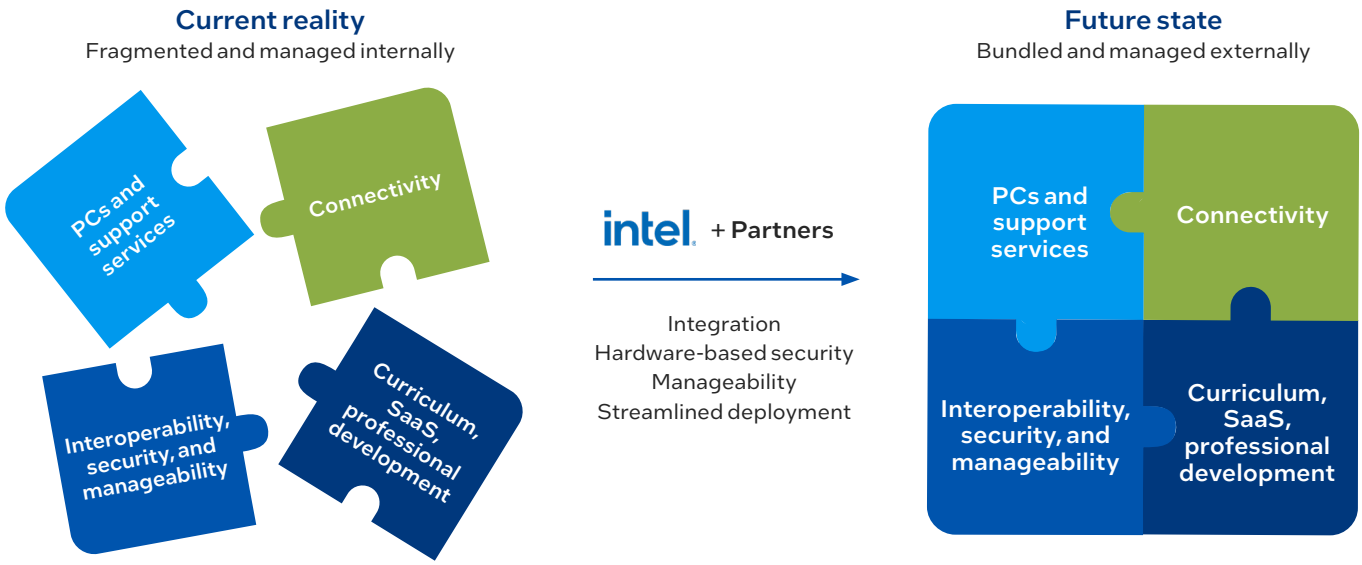

Figure 1: ETaaS integrates all aspects of school districts' 1:1 technology strategies.

How ETaaS works

ETaaS customizes preconfigured bundles of economical, end-to-end device management services, network security solutions, and devices powered by Intel. K–12 districts select the right Intel-based computers for their students and teachers to help optimize, simplify, and accelerate their 1:1 technology initiative. Then, depending on their individual needs and goals, districts will choose a technology service provider to work with for device purchasing and services selection.

ETaaS services and solutions pillars

Device as a Service (DaaS)
PCs powered by Intel® platforms with endpoint management and security capabilities

Software as a Service (SaaS)
Software applications for education, including digital content and video collaboration tools, Learning Management Systems, and Student Information Systems

Analytics
Data to insights that can help teachers assess student performance and help with device-monitoring facilitation

Connectivity
Integrated cellular data plan that ensures access for all and anywhere learning

Professional development
Tools to support blended learning models for teachers and students in a transition to online learning

Chandler Unified School District partners with Intel and Dell in ETaaS proof-of-capability (POC) pilot

Intel and Dell Technologies collaborated with the Chandler Unified School District (Chandler USD) in Chandler, Arizona, on a POC project that provided Chandler High School with ETaaS solutions to usher in 1:1 learning, using highly capable devices.

Project goals and selected technologies

Overall, this project aims to create a new blueprint for how devices are deployed in schools and, ultimately, transform how K–12 embraces EdTech. Intel will use it to analyze the feasibility of ETaaS as a new service model that provides schools with the best devices and services for efficient, effective teaching and learning. Chandler USD wants to improve the 1:1 initiative deployment, support teachers with professional development, enhance in-class and remote learning, and bridge the digital divide.

Initial takeaways and results

Chandler High School has seen immediate, positive improvements since implementing the laptops. Educators quickly got up to speed on their new devices and learned new ways to use technology to enrich their lessons with targeted professional development courses. Students discovered they could use technology anywhere and in the way they prefer, as a laptop or tablet, for everyday activities like reading books, writing papers, and talking to their teachers. Both educators and students used technology to explore, be creative, and express themselves. The IT department not only saved 640 work hours by using Intel and Dell to deploy all 4,000 devices on-site in 72 hours but, more importantly, helped the district deliver digital equity for all students.

4,000
Devices deployed on-site in 72 hours

640
Work hours saved by IT department

Target device (800)
Dell Latitude 5320

- 11th Gen Intel® Core™ vPro® processor-based device
- 13-inch 2 in 1
- Enterprise-class
- LTE option, e-SIM

Target device (3200)
Dell Latitude 3310[1]

- Intel® Core™ i5 processor
- 13 inch 2 in 1
- Education purpose built

Services provided
Delivered by Dell

- Etching
- Asset tagging
- Multi-pack deployment
- Connection and configuration
- Annual tune-up
- Recycle and data wipe
- 4 years' ProSupport
- 200 hardware support tickets
- Teacher professional development

Figure 2: As part of the ETaaS pilot project, Chandler USD purchased two different devices to support student and staff needs, backed by configuration and professional development services from Dell.

"Receiving these 1:1 laptops with dedicated professional development courses has taught me how to purposefully incorporate technology and new applications into my classroom. It's really transformed the way I teach, which means my students get to learn things that they normally wouldn't be able to while developing real-world skills and discovering new ways to communicate and collaborate. With every student having a laptop, students who are struggling can learn at their own pace, while students who might be at a higher level can enrich their learning."

—Samantha "Sam" Seery, teacher at Chandler High School, Chandler, Arizona

Conclusion: ETaaS provides schools with the highly capable devices and cost-effective EdTech solutions and services they need to offer a future-focused education

The success of the POC and deep collaboration between Intel, Chandler USD, and Dell have validated ETaaS. So far, the project proves that ETaaS is a tangible, more economical way to provide schools with Intel Core processor-powered laptops that help ensure digital access to all students, regardless of socioeconomic circumstances, and create a more engaging and inclusive experience for all students, teachers, and staff. "This has been a true partnership and collaboration with the Chandler Unified School District, Chandler High School, Intel, and Dell to really look at how to change and transform education through highly capable devices and ETaaS," says Colleen Flannery, CTO for Chandler USD.

To learn more about this POC project, visit intel.com/content/www/us/en/education/resources/etaas-school-district-pilot.html.

To learn more about Dell Student Technology Services, visit dell.com/en-us/dt/industry/education/student-and-educator-computing/student-technology-services.htm.

"ETaaS enabled us to help all our students remain competitive amongst their other classmates who are vying for scholarship opportunities, career opportunities, or whatever comes after high school for them. With access to high-powered devices that they can use anytime, anywhere, students can create more opportunities for themselves that, frankly, put them in a position where they could potentially change their entire generational lineage."

—Michael Louis Franklin Jr., principal, Chandler High School, Chandler, Arizona

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Notices and disclaimers

1. The previous-generation device, the Dell Latitude 3310, was used during Chandler USD ETaaS POC project but has since reached end of life. The Dell Latitude 3120 maybe be a target device used for future ETaaS projects.

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