

CoSN-SETDA Roundtable on the Sustainability of District-Issued Student Devices

AUGUST 2023

SUMMARY AND TAKEAWAYS

In May 2023, CoSN and SETDA convened a roundtable discussion that brought together industry stakeholders, state education agencies, and school districts. The collaborative dialogue sought to cultivate innovative solutions and best practices that can be implemented across the K-12 education ecosystem.

During the discussion, several themes emerged, paving the way for a more eco-conscious future. Here are the key takeaways:

THE DISTRICT DEVICE REPLACEMENT CYCLE IS WELL-ESTABLISHED.

Most districts replace a percentage of devices (typically $\frac{1}{3}$ or $\frac{1}{4}$) every year, with typical refresh rates of 3-5 years. Lifespan is an ongoing concern.

DEVICE BREAKAGE IS A GROWING PROBLEM.

Pre-pandemic, 55% of students had devices and breakage was lower. Today, 98% of students have devices and breakage in some districts is reported to be significantly higher.

A May 2022 *EdWeek* article, "[What the Massive Shift to 1-to-1 Computing Means for Schools, in Charts](#)," found that 43% of district leaders reported a challenge of students damaging/destroying devices.

PROCUREMENT NEEDS TO CHANGE.

Some Nordic countries require sustainability in procurement. This trend has started here in U.S. higher ed but not typically in K-12. Industry should take the lessons of COVID and make procurement transparent by bundling packages (perhaps in tiers) that include finance, refresh, and programmatic elements (possibly subscription based) to meet districts where they are. Districts can break it down as an annual cost per student and pay up front or finance. Regional service agencies could package an array of services (break/fix, packaging, LMSs, etc.).



The New Mexico Public Education Department and New Mexico Regional Education Cooperatives Association (NMRECA) launched a statewide Student-Run Helpdesk. Students resolve tech tickets within their districts and through the statewide call center while gaining skills and technical certifications. [Tularosa High School's program](#) is one of the most active.



1:1 IS NO LONGER THE CEILING.

Most classrooms are largely 1:1 and 15% of districts have two or more devices per student.

SUSTAINABILITY IS ABOUT MORE THAN DEVICE LIFE.

It also includes device components, energy usage, the whole supply chain, residual value, recycling, and manufacturing facilities being carbon neutral. Manufacturers are working on sustainability in varying degrees, such as:

- using sustainable materials, e.g., a mouse built from recycled ocean plastic
- running software updates at times of day/night when electricity is cheaper
- making processors require fewer system resources
- reevaluating and/or reducing packaging
- running all data centers on carbon-free energy 24/7 by 2030
- integrating sustainability criteria with partners and suppliers

DISTRICTS NEED HELP IN LEARNING HOW TO REDUCE BREAKAGE.

This includes students learning how to manage their laptops and creating student tech teams to fix devices (and develop career skills).

DISTRICTS NEED BETTER ROI:

- One reseller says it sells more Chromebooks because it supports the parts after the warranty expires. If parts are easier to purchase, the device is more appealing.
- One company is exploring a Chromebook rental model with connectivity.
- One reseller “owns” the full lifecycle of devices; it packages services to deliver, manage warranty, and replace inexpensively.

Houston ISD does weekly tech checks so the IT department stays on top of issues.



Clark County School District (NV) purchases 100,000 devices each year. They do a great job with RFPs, putting responsibility on various vendors so there are no surprises. Full lifecycle of devices is on the vendor and is built into the initial RFP.



Auburn School Department in Maine resells student and staff devices before they become obsolete. Their tips: Resell devices while they still have value and work with the right company.



NEXT STEPS

CoSN and SETDA will work together to develop a comprehensive roadmap for K-12 device sustainability. This roadmap will encompass strategies that emphasize device longevity, energy efficiency, and the integration of eco-friendly practices into edtech adoption and management.

Participants recommended that our organizations should:

DEVELOP BEST PRACTICE GUIDANCE AROUND ENVIRONMENTAL SUSTAINABILITY.

Use Nordic countries as an example. Collect data from vendors about sustainability efforts, publish position papers, give guidance to schools/districts, and try to influence the Dept of Ed or Dept of Agriculture who are putting out policy statements. One major manufacturer says it has guardrails in place to prevent manufacturing of devices with low Automatic Update Expirations (AUEs) years left and recommends encouraging other Original Equipment Manufacturers (OEMs) and manufacturers to put the same guardrails in place for their own Operating System (OS) updates.

DEVELOP BEST PRACTICES ABOUT TECH PROCUREMENT.

Collect data from vendors and districts. If we don't require some environmental guidelines as a condition of purchase, companies will choose cost-effectiveness. Discuss group purchasing models. Schools should look at the dates that platforms stop receiving updates so that they are aware of the expected lifespan and serviceability of the device. When Illinois asked districts if they wanted help with tech procurement, 80% said yes and 25% said yes, very much. Create case studies showing energy savings.

CREATE PROCUREMENT TEMPLATES.

Build RFPs in which vendors bundle all services but leave control with the district. No more surprises like today when vendors build in ancillary services that increase costs.

MAKE SURE THERE IS ENOUGH FUNDING TO COVER ALL THE NECESSARY TECH.

Technology delivers curriculum; it's a must have. (Technology is 2 to 3% of the overall spend in education budgets.)

**Interesting fact: Electricity costs are generally not in the district's technology budget. The district department (operations) that pays for electricity is not typically leading tech RFP (technology), making energy consumption an area for potential financial savings when conservation is prioritized.



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