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# When Every Dollar Counts:

Maximizing Your School's Return on IT Investments

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# 7 Strategies to Make a Winning Case for Replacing Legacy IT

Laying out the case for getting new devices for your schools requires front-end planning, whether you're getting ready for budget season or an unexpected conversation in the hallway.

**A** **s a CIO writer** once pointed out, “There are two schools of thought about when to replace laptops: Before they break and when they break.” That same sentiment could be applied to other gear in your schools as well — tablets, desktops, Chromebooks and monitors.

There are plenty of reasons to be proactive about a planned refresh of your district’s instructional technology:

- Dated equipment typically is out of warranty, which means support is costlier when the devices break down;
- They may not be able to keep up with the latest generation of software, a problem when your legacy operating system or other critical programs are no longer being supported;
- The longer machines are in use without regular reimaging, the slower they seem to run, bogged down by a history of software updates and additions;
- In the case of Chromebooks, a planned end-of-life is built

into the operating system;

- The older your inventory of machines, the less likely it is to be standardized, making for a tech support nightmare; and
- There’s the quandary: How do you decide who gets the latest and greatest?

Being proactive requires making a business case for replacing your legacy IT gear and persuading your administration and education board to buy into your thinking. Here are seven strategies for success.

**Strategy 1: Rejigger your tech plan approach.** Before E-rate—the primary funding model for networking in schools—was “modernized,” any district that wanted to get funding was expected to develop a tech plan that looked out five years. Most read like they were written from a template (which they probably were; E-rate consultants all had their own versions). Once a plan was approved, it was hardly ever touched again. Those days are over. Now, when you see a tech plan, it’s usually

meant to be continually revisited and updated as the goals of the district shift in real time. Before budget planning season arrives, sit down with your advisors and stakeholders and map out the critical goals (such as “heightened emphasis on personalization”) and factors (such as “reduced enrollment”) for the year to figure out how they will affect the numbers. Then update the plan for the coming year and going forward.

**Strategy 2: Avoid budget hits and misses.** As one California district expressed in its plan: “Technology, computers and electronic equipment have become a pervasive and embedded tool used every day for work and to educate students.” Ignoring tech in budget planning cycles would be akin to forgetting about utilities or transportation. By mapping

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out for the duration of your refresh cycle, district financial people will know exactly how much is committed to the support and replacement of those commonly used digital devices. Or better yet, find a tech provider that includes support and service with the purchase to ease the financial burden.

**Strategy 3: Enhance your plan with success stories.** People in central offices aren't always aware of the good news going on in classrooms. Encourage your staff to collect success stories for your tech “scrapbook” and share them with administrators at every opportunity. These could include instances where the use of tech tools and resources have led to proven learning among students, where classrooms have tried something innovative and seen unexpected outcomes, where children with special needs have been helped to reach new milestones, where faculty have gained in their professional development through access to online training and community networks.

**Strategy 4: Run the numbers and prove your point.** Sure, there's a common sensibility that having a broad mix of devices from multiple manufacturers, from a variety of years and of varying capabilities costs more to support. Staffing is

always the priciest aspect of any tech implementation. Use this to your advantage. Do some tracking among your support staff to quantify how they spend their time and then compare that to what a “green field” deployment would look like. If you expect administrators to recommend the “trickle down” approach for dated equipment, be prepared with a set of calculations that show how that equipment movement and reconfiguration will add up on the labor side, equaling or surpassing the cost of buying anew. Consider how a new program offering, such as Educare from Acer, targets the needs of resource-constrained schools by building in services such as battery replacements for heavily used notebooks and tablets, extended warranties, accidental damage coverage and two-way freight for depot repairs.

**Strategy 5: Emphasize equitable access.** Spend some time pondering the concept of equity. It doesn't mean “the same”; it means meeting the same goal in ways that work optimally for everybody. If the goal is to get everybody into and out of the building, that could be adding shorter steps for younger children to use and a ramp for the student in a wheelchair. In the case of technology, the goal could be to provide every child with high-quality curriculum and learning opportunities and the route for getting there could require differentiating your resource allocation — giving some students an extra-large monitor for their design work and some students a higher-powered desktop computer for their engineering studies.

**Strategy 6: Simplify your message.** If you think the idea of a multiyear refresh plan involving hundreds or thousands of new computing devices will be overwhelming to your board, change tack. Emphasize that your goal will always be to remove the oldest and most problematic equipment and replace it with new. And make sure they understand that it's not just IT involved in that work. You'll be bringing in district administrators and school leaders to determine how the distribution will unfold.

**Strategy 7: Break up your spending.** If allocating a huge amount in one purchase order is too much for your district leaders, use the “layaway” approach. The idea suggested by one IT specialist in Washington state: Establish an eligibility list for replacement and then do a portion of that list at the beginning of the school year. Check to see where the budget stands in April or May and then “do another round of replacements.” That way, those in charge of the district checkbook will feel like the budget is meant to last the whole year.

Ultimately, a device refresh is about making student learning as frictionless as possible. But to succeed, you need to back up that message with a savvy combination of data, process and cultural understanding.

# 6 Refresh Practices of the Experts

Whether you expect your devices to last three years, four years, five years or longer, these refresh practices can help you plan the work.

**W**hen was the last time your district invested heavily in its inventory of computers? When netbooks gained traction? When Chromebooks swept through education? No matter when it happened, it's time to put as much thought into your next big purchase as that first one. That calls for a multiyear plan of action.

Here's how to approach your refresh planning, based on the proven practices of IT experts.

**Practice 1: Assign a point person to manage the work.** Consider convening a computer refresh committee. It should be headed by a school technology expert whose job is to wrangle the committee in charge of planning the refresh and making final decisions.

**Practice 2: Pick your timing:** Settle on a multi-year refresh cycle (four years is considered industry standard, but some schools choose three years while others stretch it to five) for rolling out new devices. At the end of the final year, the student machines purchased in the first year will be scheduled for replacement. If IT funding has historically been bust-and-boom, in your district, go with a refresh range to take advantage of extra budget or to be able to back off when times are tight: "No less than 20 percent and no more than 40 percent."

**Practice 3: Be transparent.** Don't keep your district community wondering. To avoid a continual litany of calls, emails and questions in meetings, just put the decisions out there for



everybody to see. For example, allow schools to choose how the equipment will be distributed in their classrooms. And let them know exactly what kind of allotment to expect each year and when — online through your district's website.

**Practice 4: Don't forget the extras.** The computer is just one component. There are many others involved: device cases, headsets, keyboards, mice and the rest of it. One Utah school district provides a small number of extra machines, based on a formula, to each of its schools as replacement devices. But it expects the schools to find the funding for extras, such as protective covers and keyboards. If a school wants an upgraded configuration for its machines (such as the addition of a touchscreen), it's also expected to cover that additional cost.

**Practice 5: Extend your investment.** Rather than hitting the upper end of capability with every student device, consider maintaining two levels. Outfit students with what will meet their typical needs day in and day out. And then outfit a cart at each school with special machines with more oomph for those times when classroom computing needs are more demanding due to specific projects.

**Practice 6: Exploit your new schools.** When you have newly constructed campuses, which are often outfitted with the newest equipment from the get-go, have them join the refresh program at the end of their first year of operation. As computers are taken out of those new schools, they can be distributed to other schools in the district that are experiencing a shortfall.



# 7 Lessons Every IT User in Your District Ought to Learn

Come up with a way to train every user in your district— including students— on these cybersecurity lessons.

**R**ansomware imposes a Faustian bargain on school IT leaders: Do you pay the bad guys in cyber currency in the hopes of getting back your data unblemished — even though law enforcement (and every cell of your being) advises against it — or do you hold onto the money you'd pay out in ransom, start afresh and hope it never happens again? Hope, as the book says, is not a strategy. Last year saw a bumper crop of school system intrusions, not just ransomware but data breaches, phishing and denial-of-service and other run-of-the-mill malware — some 770 cybersecurity events since the beginning of 2016, according to the “[K-12 Cyber Incident Map](#).”

Schools are hotbeds of vulnerabilities. Even if you put in a sturdy firewall and tough endpoint security for getting on the network in the first place, there are always new ways to break in. Therefore, spend some time with your IT team figuring out how to

train every user in your district on these key lessons.

**Lesson 1: Bad stuff can come in impressive packages.** The most common way for any kind of malware to infect a network is by somebody clicking on a link in an email or opening a file attachment. The email always looks legitimate and trustworthy and probably comes across as important or highly entertaining. It's IT's job to teach people to be suspicious. If a message doesn't pass the sniff test — it has misspellings, the graphics are a little off, it's unexpected, it includes an extraordinary request, you're the wrong person to have received it, it landed in your spam folder first — pause before opening it or clicking on anything it contains. As the National Cyber Security Alliance advises: “Stop. Think. Connect.”

**Lesson 2: Updates are essential.** Your school-owned devices may be updated on a regular basis because IT has set that up as an automated activity. But if users don't keep their personal

devices updated with the latest security fixes, there's no telling what havoc they can wreak. That includes smart phones, gaming consoles and USB drives. The message here: If IT can't manage these devices to make sure they fit an approved profile before they're allowed on the main network, they'll either be denied access to Wi-Fi or shunted off to the guest network to limit their reach and potential damage.

**Lesson 3: If a file isn't backed up to the server, IT isn't responsible for it.** IT can only encourage users to back up often — a job that's made easier if the user will allow IT to set up automated backup. That's the surest way to recover quickly from malware damage.

**Lesson 4: There's a good reason to be stingy about administrative privileges.** Some people believe they need access to the deepest reaches of your applications. IT has to educate them

on why they don't want (or need) that kind of responsibility. If they're not interested in getting extensive training on exactly how the software works, where its data goes or what it does, they can be slotted in like everyone else as a regular ol' user.

**Lesson 5: Whitelisting is intended to keep you safe.** No, IT isn't trying to constrain users from using the apps they love. But, like seatbelts, whitelisting can prevent bad things from happening unexpectedly. In an era when legitimate programs can be hijacked, imposing an extra layer of consideration to decisions about installing new software is essential. (Of course, in return, IT must promise not to become the bottleneck everybody wants to work around.)

**Lesson 6: Freeze!** If something unexpected shows up on the screen — especially something that sounds scary, threatening or embarrassing — don't touch anything. Call IT. Assure users that

IT won't get mad and they won't be called an idiot (at least not to their faces). And in return, IT will make sure every staff member has a protocol to follow when a user makes contact. Who knows? The ransomware could just be "scareware."

**Lesson 7: This is not a test — or is it?** In some districts users receive regular training — often annually — to keep them aware of the latest cyber dangers. Oftentimes, they're tested at the end of the training. But sometimes the testing comes when it's unexpected -- just like malware. If the user clicks on the wrong link (which goes to a sandbox), he or she is scheduled for more training. That's how effective assessment works.

Nobody wants the network to go down. By helping users understand these cybersecurity basics, IT can go a long way in keeping the malware out and its reputation positive.

## When, Not If

Let's face it. A data breach or ransomware hitting your district should really be considered a "when" not "if" scenario. Make sure you have an equipment plan laid out up front to mitigate those times when people ignore these lessons. Investing in equipment that comes with built-in service and support will help your IT team get schools back on their feet when something happens despite your best efforts.



# Upping the Game

How to improve your professional development approach for IT in eight steps.

**F**or the third year in a row, the latest [Consortium for School Networking “K-12 IT Leadership” report](#) named professional development as one of the top three challenges (alongside budget and departmental silos) faced by IT leaders. While the learning opportunities for teachers have exploded in the last several years — encompassing virtual conferences, Twitter meetups, microcredentials and online communities of practice — skill development for the technology experts seems to have lagged. That includes the people assigned to help teachers keep their computers running on individual campuses, as well as to those in the central office overseeing the servers.

How can you improve your operations and support your educators if your tech experts aren’t staying up on what’s new, useful and relevant? You could send your entire staff off for a week of hotel living to attend that once-a-year conference put on by your multi-state regional service center. Or you could try this step-by-step approach closer to home.

**Step 1: Figure out what career paths look like for your IT team.** Committing to personal improvement always goes better when you’re working toward a goal you can visualize. If there isn’t a pathway, maybe it’s time to reconfigure the roles

in your department to recognize the varying levels of expertise that individuals bring to their work — and to lay out a scaffold for growth and rising up through the ranks.

**Step 2: Do a skills assessment of each staffer.** Have your staff do an inventory of their education, formal training, certifications, and what they currently do, with ratings for their levels of proficiency. This can uncover surprising skill sets. One Texas district divides self-assessment into four categories: soft skills, systems skills, end-user support and technical skills. Also use data generated from your help system to figure out where people are having difficulty solving problems on the job.

**Step 3: Identify the gaps.** You may discover a preponderance of essential skills among the techs that work in high schools and too little of those same skills among techs in your elementaries. Use the combination of skills assessments and troubleshooting data to define learning programs for each person, based on a combination of district or school need and personal interest.

**Step 4: Turn to your in-house experts.** Call on your own crew members to train others in what they know. But don’t make it informal; give it structure. Schedule a meeting time with a set of learning objectives. Have presenters prepare slides or demonstrations and rehearse them in front of some-

body else. And have your people sign up ahead of time as a commitment to attending.

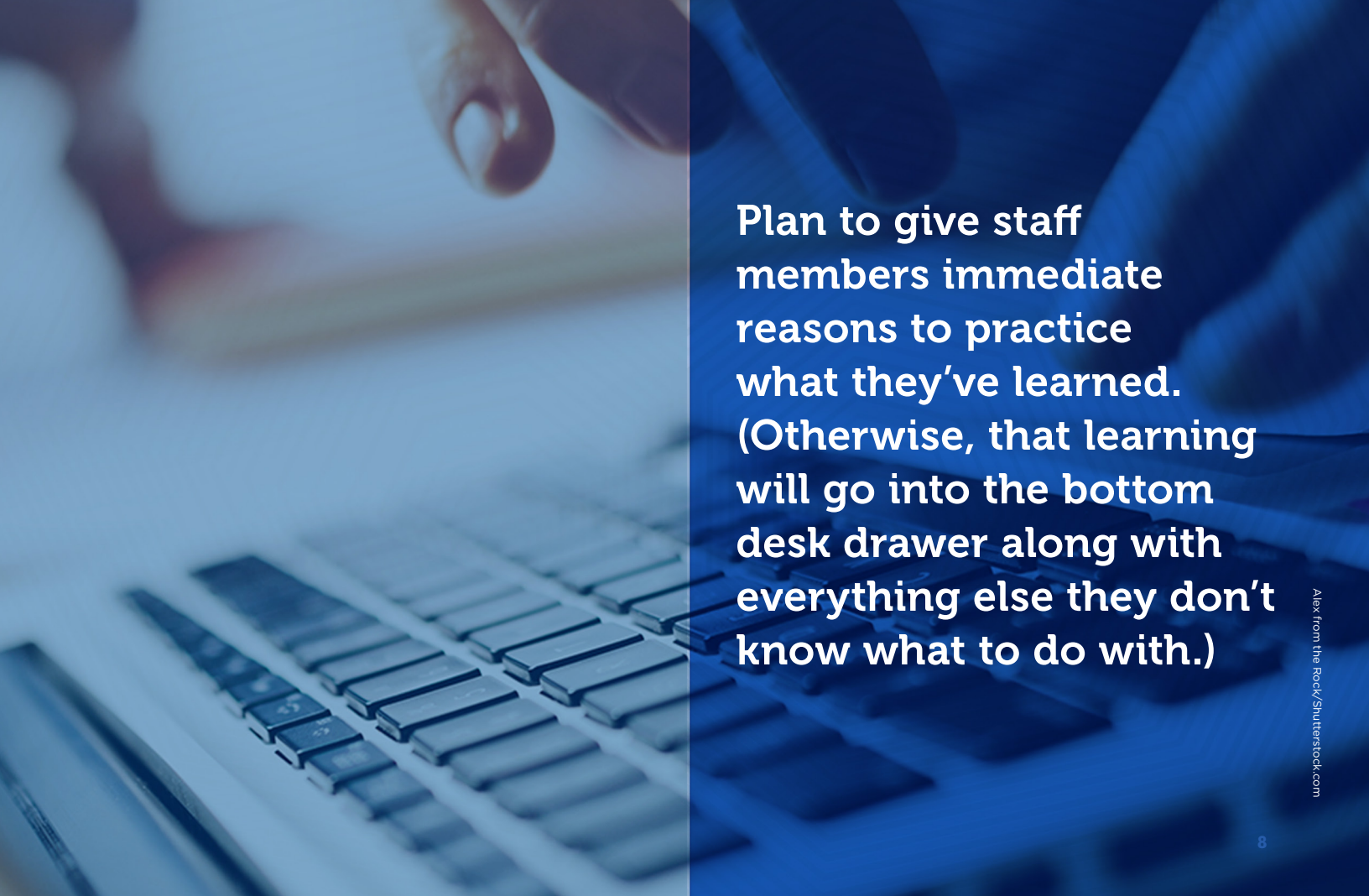
**Step 5: Bring in training from outside.** One resource that a lot of districts don't think about are the coaches that your vendors can provide. These are carefully vetted professionals who bring insight and experience from a wide variety of schools and will customize their program to suit your specific needs. While you're at it, don't try to cram too much into the training schedule. Make sure your scheduling fits the amount of training and practice required by the job.

**Step 6: Put the training into practice.** Plan to give staff members immediate reasons to practice what they've learned. (Otherwise, that learning will go into the bottom desk drawer along with everything else they don't know what to do with.) For example, that Texas district that performs the skills assessment also assigns specific trouble tickets to newly trained technicians to confirm their learning.

**Step 7: Assess the results.** Create quick checklists for people to assess their fellow employees. Keep these quick and easy — and anonymous — for best results. Then use the results of those mini-surveys along with support system data to gauge how well each staffer is doing against goals and to figure out what's next for that individual.

**Step 8. Recognize effort.** This can take multiple forms. If you've developed pathways for your people, promote them when they've reached that new level of skill. Nothing inspires others like seeing true success in the next cubicle. Also, thank your staff presenters in some way — digital badges, a gift card to their favorite coffee shop — so that they know you value their efforts.

Schools may not be able to pay their technical experts as well as the private sector does, but a solid professional development program can go a long way in helping your IT people stay motivated and engaged — and at the top of their game.



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# 7 Ways to Stretch Your District Tech Dollars

No matter how much your district allocates, it never seems to be quite enough. You can help your schools stretch their tech dollars with these seven tactics.

**Tip 1: Use a program that tracks software usage.** IT has been tracking its computer inventory since PCs became mainstream in the front office. What's less common is tracking software usage. That's where tools from [Lightspeed Systems](#), [CatchOn](#) and [GoGuardian](#), among others, can prove useful. By gaining visibility into usage patterns, IT can justify investing more in the products that have gained pickup and make a case for decommissioning the ones nobody's touching. Plus, it'll give you the data you need for better negotiating with your software vendors during renewal season.

**Tip 2: Lease your equipment.** If the prospect of a big capital outlay is too much for your district's tech dreams, look at the lease option. You're still spending the money, but the expense is spread out in a pay-as-you-go option across the term of the contract and shows up as part of the operating budget. Staged leasing can be arranged, where the period of the lease varies depending on what grade is getting those devices (one

year for that grade, two years, for the other grade and so on). Also, because tech never stays still, you might be able to stipulate that each year's allotment of newly leased devices matches what's standard in the market at the time of delivery rather than whatever model you specified two years ago. Some programs are structured to let the district keep the equipment at the end of the lease with a nominal payment or no buyout altogether; and in some cases the leased equipment can be returned to the leasing company for credit on the next round.

**Tip 3: Go for grants.** Have a special need that wasn't budgeted? Make a case for it in a grant proposal. ([THE Journal](#) publishes a weekly list of possible opportunities.) Get teachers involved by holding brownbag sessions that shows them how to put together proposals for [DonorsChoose](#), [AdoptA Classroom.org](#), [PledgeCents](#), [GoFundMe](#) or [Digital Wish](#). (Better yet, get teachers who have had success on any of those platforms to give the talk for you.)

**Tip 4: Get students in on the game.** Let your learners provide the extra muscle you need. They can provide tech support to students, show teachers how that new classroom program works, help with unpacking when those pallets of computers start to arrive and refurbish machines for new uses. The investment you make in running a student technology class or club will not only help promote that STEAM mission your schools promote but also give you extra hands for all kinds of jobs. Wondering how to get started? [The Acer Repair Certification eLearning Program](#) provides the building blocks to set up a student-led program.

**Tip 5: Bump up your student device fee for incentives.** If your school charges a fee to families as a measure of insurance to make sure their students don't lose or break their school-issued computers, bump it up by a fraction and give the increase back if the machine is returned damage-free.

**Tip 6: Get serious about OER.** Your teachers are already using interesting digital resources in the classroom. Find a champion willing to promote the subject of integrating open educational resources in a methodical way. There are any

number of organizations and state education departments that have already taken giant steps to help schools make the move to OER. It's time to press the pedal. [Valdosta State University](#) and [Washington state](#) have both developed comprehensive rosters of useful places to begin the hunt.

**Tip 7: Choose turnkey solutions.** Why not invest up front in tech that will save you money in the long run? Purchasing equipment that comes with service and support and built-in warranties that have realistic terms and last as long as you expect your gear to last ensures that your district will always have the workable equipment it needs for the classroom. A solid example of this is [Acer's Educare](#), a service portfolio for education that extends the life of technology and maximizes schools' return on their IT investments — enabling your IT leaders and professionals to dedicate their time and energy to forward-thinking initiatives and not be stuck in the weeds dealing with equipment issues.

Success in stretching your technology dollars requires trying out lots of small activities in different, more cost-efficient ways. The results can free up dollars for unfunded projects and improve your operations in unexpected ways.



## About Acer

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