

# It's Budget Planning Time in the Educational Space

In an annual ritual that can have a lot riding on it, network managers and their companion bean-counters are trying to figure out what they need to carefully account for in next year's budget. I'm a 20-year vet of the educational wireless game, and I'm happy to share my perspective on the topic.

Depending on how big a school is, what funding models are in play, and what recent projects have been completed, everybody's reality will vary. But when it comes to wireless networking specifically, I hope that a broad cross-section of my colleagues are thinking about the following.

## The Wi-Fi Environment Itself

There's a lot here to consider. Are your APs up for lifecycle replacement? If so, are your switches up to the task of the 802.3at Power over Ethernet that new .11ac access points will need? Are you contemplating holding off for .11ax given that we may see the standard ratified in the next year or so? Whatever path you are going down, you should at least be in tune with what you have, what's available, and what comes next.

There is no one right or wrong way to plan your transition to the next step, but it should be based on current and anticipated needs and (minimally) whether you can get another year out of what you have while still meeting requirements.

If you are like me, you probably have a diverse range of space types to take care of. Make sure you are aware of any space changes that have taken place, and whether you should be altering the WLAN in targeted areas accordingly. If you have had code changes throughout the academic year, it might be worth budgeting some man hours to spot-checking critical areas to make sure that nothing has changed from your last understanding of what it feels like where your Wi-Fi rubber meets the road.

## Client Device Analysis

This is an area that's easy to let slide given that it always seems to be changing. But investing some time here might help make for a better network experience for a number of constituents. For example, maybe you've had legacy data rates enabled for years for some oddball client device. When is the last time you verified that those problem clients were still in use- or talked with the users about upgrading them so you can retune the network? For that matter, are there places where the wired network is hardly used given that so many devices have moved to Wi-Fi? You might be able to draw down your switch counts with a thorough analysis, freeing up more scarce cash to improve the WLAN. Changes in network usage can sneak up on you- budget time is a great opportunity to cast a wide net to make sure you understand how your environment is really being used.

## Tools and Training

As your WLAN evolves, your tools and staff knowledge also need to freshen themselves up. There are a lot of old-name WLAN tools out there with expensive support agreements that just haven't updated in any meaningful way in years. You may not have to part with old favorites, but I would recommend deciding whether you are getting any value from long-running support agreements versus putting those dollars towards state-of-the-art tools like Ekahau's Sidekick or NETSCOUT's AirCheck G2. These modern weapons in the war on poor Wi-Fi are force multipliers, and can actually save money in the long run by reducing design and support time to resolution.

If you do take the plunge on new tools, just remember that if they end up in unskilled hands, the investment can lose its luster. The WLAN environment has become far too critical to throw IT generalists at it. You'll do well to get staff trained up to CWNP's vendor-neutral certifications, and to make

sure those who will use products like Ekahau's Enterprise Site Survey get schooled by a qualified trainer. That is money well-spent.

Where it's impractical to put a top-tier tool like Sidekick in every technician's bag, you can still do well by making sure that each tech has a decent dual-boot Mac laptop that lets them support both Windows and Mac environments and to enjoy the tools that work on the different sides of the platform. Many of us also play the role of help deskers on occasion- and so must be familiar with as many operating systems as possible. It's OK to standardize on staff devices, just don't paint yourself into a corner when doing it.

## Stay Up on EOS/EOL

When devices like firewalls, gateways and controllers work well, it's easy to forget them as the years tick by. Make sure that you don't let another budget cycle slip by without considering what may go End of Sale or End of Life in the months to come. Even if your WLAN is "safe" many of the bits and pieces it integrates with may not be. Look hard at your RADIUS servers, NAC components, guest wireless gateways and anything else that is part of the wireless ecosystem. It really stinks to have a critical device around that is no longer eligible for support because the vendor pulled the plug.

## Policy

Though it may not have direct budget ramifications, all school IT programs are governed by policies. Ideally, every policy would enable operational goals while meeting security requirements, and have executive buy-in (otherwise enforcement becomes a mess). Policies shape technical solutions, and it's important to make sure that any newly-funded initiatives are in compliance with policy, or will drive changes to policy that is agreed to by management. Sounds red-tapish, I know- but this is an important aspect of new solutions.

## Don't Forget That "Other" Wireless Stuff

Many of us in the education space have wireless point-to-point links. If we chose and installed well when the link was new, this is another important component that you can forget about because they tend to just work. I'm dealing with an old link that

is fairly reliable, but the company that made the bridges is on its last leg. I recently needed a proprietary power injector for it, and had to look hard to find one. Ultimately I got gouged pretty good on price. Needless to say, I have budgeted for a new solution in the coming fiscal year. Bridge links can also outgrow their current capacity as the far end gets busier, and this is an area that you should audit (if your monitoring tools aren't already doing that).

If you do your own in-building cellular solutions, the same premise comes into play. Make sure you're not pushing the limits on capacity, and verify that you have spares of the important parts.

## Need Help Remembering It All? Consider a Checklist

We all get busy, and it's easy to put off the budgeting process until the last minute. It's also really easy to leave important items unaddressed or forgotten about as a result. Regardless of whether you recommend or approve budgetary items, there is benefit to approaching the process with a list, broken down by "annual/every three years/etc." It will help you to leave out the important things as well as those easily overlooked. The challenge is keeping the list up to date as different components come and go, but even mostly-accurate is better than nothing in this regard.

For many of us, the budget process can be agonizing, and fairly unforgiving. If we don't get it right, it may be another year (or sometimes more) before we get to correct what we botched on this go-round. Be thoughtful, talk with your team, and make sure you view the process as a task that can bring great rewards for your wireless realm- including staff and clients- if you get it right. Approach it as an exercise in misery, and you run the risk of creating a self-fulfilling prophecy.

Learn more about Ekahau's solutions to design, optimize and troubleshoot Wi-Fi networks at [www.ekahau.com](http://www.ekahau.com) or contact us at **1-866-435-2428**.