As local schools continue to find creative ways they think can stretch budget dollars, we as parents may be experiencing the “Bring Your Own Device” fad growing in your community. In fact, many publications have written about adoption strategies (such as the following tip sheet or this micro-site). There are even resources to help address some of the challenges that schools face with BYOD, such as the following article or tip sheet.

The fascination for BYOD continues to expand, as schools believe they lack the necessary budgets to afford devices for all children. Let’s face it, in theory it appears much easier to pass that financial burden onto someone else rather than the school. But in discussions, I have yet to find a district that, if budgets were no concern, would consider a BYOD model to be the most instructionally sound or equitable.

BYOD has not only done more to re-emphasize the digital divide that exists in our schools, but it is introducing a whole host of issues that schools and many of the industry leaders have failed to truly consider, or are prepared to address.

BYOD a Problem, Not a Solution

Before I get into the reasons that BYOD will fail to be the magic bullet for education, I want to debunk the belief that schools cannot afford to adopt 1:1 learning models within their existing budgets. Some of the recent research from ProjectRED has confirmed that, when adopted properly, 1:1 programs can save, on average, approximately $450 per student annually. But the key words are “adopted properly.”

Unfortunately, most 1:1 programs are device-centric – they already decide on a laptop or tablet long before they have considered the instructional goals, the correct digital tools to support those goals and then the decision about what technology will be able to support those tools. They may not realize their device choice doesn’t access 25-50% of the content and tools they want to use.

Flaws with BYOD

But if the charm and quick-fix approach of BYOD still appeals to some officials in a local school system, I encourage them to consider some, if not all, of the following issues. Whether focusing on social-emotional issues, privacy, cost, or reliability, each of these will impact a school adopting BYOD, much of which can have negative consequences. While this list could go into further detail (i.e. security, networking), I have opted to focus on a few academic, financial and legal considerations:
**Social-emotional aspect** - School leaders have gone to great lengths to blur social lines in their schools in past years. School food service programs have automated breakfast and lunch programs so a simple swipe of an ID card masks whether a child paid or received a subsidized meal. For a BYOD program, families of affluence will have no problem purchasing the fastest computers with the best features and refresh those devices as often as they want. Families of need will be given standard devices paid by the school system, perhaps not with as much speed and refreshed not as often. And families in between will face pressure to spend extra dollars as the BYOD-inspired device becomes a new fashion statement, rather than merely an instructional tool for their child. How many low-income students will see an increase in absences as a result of the stigma of being seen with the “poor child” computer?

**Financial Impact/Double Taxing Parents** - BYOD is simply passing the buck financially to local parents. In addition to their school taxes, you are now hitting them with a second tax for their children. How will your BYOD program financially strap families currently struggling with bills? BYOD also fails to benefit from the same economy of scale that schools see with their own purchases. Not only are devices cheaper, but software licenses to a school system can be dramatically less expensive than one purchased by a consumer for their own machine. Some schools have attempted to install district-owned software on students’ personal devices, but such an act would violate many licenses. To make matters worse, forcing parents to buy essential gear would, for some districts, actually violate their states’ laws that prevent schools from charging parents additional fees.

**Lack of Standards Impacts Learning** – In most BYOD programs, schools allow students a wide selection of devices they can bring to school, but how many of them will actually impede learning? A recent study of tablet compatibility confirmed that, of the 400 most popular web sites, the ability to view the web page without errors varied from over 95% readable to below 72%, depending on the device, impacting their content consumption. When students are unable to complete online homework assignments because their device cannot use the publisher’s site, the complaint calls start coming in. Similar issues for content creation also occur, as another study highlighted many examples of how simple Office files do not load correctly in other operating systems, resulting in incorrect calculations in an Excel worksheet, for example.

**Theft** - When a student brings the shiny new device to school, how are you prepared to handle thefts inside or outside school, a problem that also occurs with the introduction of the newest cell phones? School systems typically engage security measures to make their devices less desirable to thieves (etching, CompuTrace installed in the Bios) but consumers often don’t do this. With so many educators and industry experts speaking about the importance of STEM education, so few students explore STEM careers. How can emerging technology help inspire imagination and creativity, much of the foundation for future leaders in this space?
Disruptions to Learning – In a BYOD program, if a child’s machine breaks, is damaged or stolen, how long will the child go without that device before it can be repaired or replaced? Often it can be several weeks for consumers to get devices repaired, and often at significant costs. How will students access all of their applications and files? District-run programs, in contrast, often receive loaner units as part of their deal, and full warranty and accidental damage policies are typically purchased. If we look to higher education, where most students are on their own with devices, we see the potential for problems exists here.

Control/Classroom Management – A student is legally permitted to install any software they want on their personal device. While schools with traditional 1:1 programs often use classroom management tools like HP Classroom Manager or LanSchool to limit what the child does on their device during class, the same can’t be said for most BYOD programs. Can a school require a student to install software they don’t want on their machine? Does the software publisher permit you to do so? If the device experiences technical problems, who is now responsible to correct it?

CIPA Compliance – If students are using their personal device in school, and are able to circumvent the network with their own built-in broadband connections, does this violate the requirements behind CIPA – the Children’s Internet Privacy Act? Schools “must include monitoring the online activities of minors” or risk losing Federal E-Rate funds.

Privacy – This one is the 800-pound gorilla in the room regarding BYOD. Normally, school-owned equipment is subject to search no different than any other school-owned property (i.e. lockers). School leaders have learned difficult lessons that their use of the school-owned computer can come back to haunt them, as was the case a decade ago when a city newspaper leveraged Freedom of Information requests to view the internet use logs of school superintendents throughout the region. Students are no strangers to inappropriate use of technology either, but in a BYOD model that can lead to new legal issues. If a school were to do a normal security scan of a child’s laptop and find inappropriate material on the device, can they take action? If they do, do they open the door to a privacy violation suit, or does their inaction invite another suit for quietly condoning the inappropriate behavior? Either decision a school makes will likely lead to litigation these days.

I’m aware that there are some educators and technologists who would object to my opinions, but I welcome a healthy debate on this topic. Most school systems I’ve encountered with BYOD to date were mostly affluent who assume the parents “can afford it.” My concern isn’t simply about budget, but about the health and welfare of the student, just as I would not support high school football players using a Bring Your Own Helmet program.

An Alternative Solution….PYOD

But there is a solution that can work for schools, and proactively address the financial concerns that many schools. I call it PYOD.....Pay for Your Own Device. The school system negotiates and purchases/leases the technology, so families benefit from economy of scale, lower software
costs, full warranties, accidental damage, loaner devices and the ability to fully control and scan the devices. The stigma is also eliminated as everyone in the class has the same exact device. CIPA compliance is maintained and privacy worries are resolved using existing policies.

When it comes to payment, schools can create a process and policy that allows those that cannot afford a device to receive one for free, those who can afford it pay a monthly or annual rental fee, and those families in the middle can benefit from a sliding scale, with some of the costs being supported with local tax dollars. At HP, we and our partners have done such mandatory and “highly recommended” programs at colleges for over a decade and the response has been very positive.

While I still believe that through proper planning, following the 1:1 planning guide offered by ProjectRED, at least exploring a PYOD model will ensure equity and eliminate many of the problems inherent with the growing BYOD fad.

While it’s very clear that consumerization is having a direct impact on technology use in schools, it doesn’t necessarily mean that we should be sending families off to the mall or a big box retailer to decide the best fit for our classrooms. Let’s leave that to the local educators. Encourage your local school to share their answers and policies for all of these issues, or perhaps reconsider the entire BYOD model with more sound ones.

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