

Technology Turns Disposable

Forget amortizing—buy new every year

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At a recent luncheon honoring Liz Rohatyn, founder and outgoing chairman of the terrific organization Teaching Matters (teachingmatter.org), Olga Votis, the new chairman, pointed out that the storage in the \$5 USB key that they were giving away to every guest would have cost, 5 years ago, hundreds of dollars.

That got me thinking. OK, storage is now disposable. What other technology is? Does it, in fact, make sense, at the speed at which prices are coming down, to think of *any* devices (particularly devices that students use) as having a multiple year life, or should schools just buy each year the best device available and just hand it out, thinking of it as a “disposable,” like pencils and notebooks.

From the students’ point of view, this makes terrific sense. They are incredibly frustrated by the age and out-datedness of most of the technology they get to use in their schools. How lame it is for students to be using even last year’s technology again.

In my new book *Teaching Digital Natives: Partnering for Real Learning* (coming from Corwin in March 2010) I make the distinction between “verbs” and “nouns.” Verbs are the unchanging things we always want all students to do (e.g. communicate, analyze, present, understand, create); nouns are the rapidly changing tools for doing these things. Ideally, all students should always be using the latest, best noun for each verb. One year that may be a laptop, the next a netbook, the next an iPhone, a Droid, and, of course, whatever comes after those.

From the teachers’ point of view, this may at first appear like this means even more technology to learn, but that’s really not the case, for two reasons.

First, software far outlasts hardware. Most software programs migrate from platform to platform with minimal relearning required. But more importantly, it is not the teachers' job to master and use *any* software or hardware, that is the students' job. Teachers who are technophiles can learn and use technology to model and demo, but, if the technology—whether computers, whiteboards, PowerPoint or whatever—is to have any real effect, the overwhelming majority of the usage must be by students.

“Don't try to keep up with technology, you'll only look stupid,” said a student on one of my panels, addressing a roomful of teachers. Teachers can look smart, instead, by understanding the capabilities of each new generation of technology to help learning, and by letting the students figure out how to use the devices, teach each other, and, ultimately, teach the teachers as well.

From the standpoint of CTOs, CIOs, tech directors, and tech coordinators, this should also make sense. No more long term maintenance or outdated equipment. Only one kind of device to maintain every year. We are now talking about devices in the \$200-400 range, and probably, soon, even less. While that's roughly \$3 million per year per 10,000 students, much of that amount, if we are smart—and clever politically—could be taken from not purchasing the textbooks that the students, and the best teachers no longer even use.

Every kid would start out every year fresh, with the best and the latest equipment. At the end of the year the devices could either be sold, to further reduce overall costs, or, even better, given to the kids to share with their families, lessening the digital divide all around.

The tech people, freed of maintaining old stuff that is more likely to break down, can focus on communications infrastructure such as great community-wide wi-fi, on storage and administrative infrastructure (increasingly in the clouds, free, and controllable through software switches), on appropriate security (hopefully with a little more humanity than the Chicago system's loud siren that goes off — implying “guilty, guilty, guilty” — whenever a kid goes to a “banned” site, even Facebook) and on teaching kids to protect and use their state-of-the-art equipment wisely.

I'm not sure that many districts are prepared to go “disposable” today, but it is definitely time to begin thinking in these terms. First, because the speed of change (and the falling prices) demands it, and, much more importantly, because if we want our students to be the best (not just at taking tests, but at creating, following their passion, self-actualizing, and innovating) they

require the latest, best technology tools there are. One might even say that those tools are their birthright as students in the early twenty-first century.

Would we deny our kids their birthright?

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