Abstract

Kick It Up a Notch with 1-1 and BYOD
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A major trend in the use of technology is K-12 schools is the increasing adoption of “Bring Your Own Device” (BYOD) and 1-1 programs. As educational institutions adopt and implement a multitude of these programs, an essential question is how to efficiently and economically support these programs. For a growing number of educational leaders, the critical question is how to maximize the support and success of such efforts.

“As the cost of technology drops and school districts revise and open up their access policies, it is becoming increasingly common for students to bring their own mobile devices,” according to the 2012 NMC Horizon Project Report. “Many schools are launching BYOD programs so that students can use the devices they already have as learning tools within a traditional classroom setting in addition to informal and out-of-school environments.”

Implementing 1:1 computing and a Bring Your Own Device (BYOD) programs is like cooking the perfect meal: For spectacular results, you must conduct the process slowly and patiently, using the right ingredients at the right time...all the while visualizing the outcome. In K12 schools, 1:1 computing connotes a child having his/her own device. Most school districts believe they are engaging in 1:1 computing when there is a ratio of one computing device, pad or phone for every child. Often, this concept is considered a silver bullet: “If the computer is present, education will occur.”

But in reality, 1:1 computing is a complex system grounded in a vision of educational accomplishment. This may include a cloud-based system that enables customized instructional resources to:

- Deliver measurable, individualized instruction
- Provide teachers with ongoing professional development
- Link all instructional stakeholders (parents, students, teachers, and administrators) toward achieving outcomes

That said, for 1:1 computing to be economically viable, the combined cost of instructional materials and devices must be no greater than (or, even better, less than) what’s currently spent on textbooks. While the cost of materials is coming down, text books still will be around for a while until the adoption cycle ends. Currently, schools have to pay a little more for devices and materials to make 1:1 computing economically viable; however, schools then own more of their intellectual property, thereby lowering costs. Educational publishers must develop new pricing models and licensing options to be acceptable to schools and remain profitable; thus, the economic viability of 1:1 computing still will take some time.