Student Mobile Learning Devices: A Summary of Two District Case Studies

**CoSN Value of Investment**

Value of investment (VOI) is a methodology to help school leaders determine the cost and benefits of proposed projects. Unlike for-profit businesses, many of the benefits of investments made by schools cannot be measured in terms of top- or bottom-line revenues. The benefits of a given project are better measured in terms of student achievement, student behavior, student equity, community relationships, staff retention or 21st century skills. CoSN’s VOI Leadership Initiative is designed to help school leaders evaluate these qualitative benefits, along with the traditional benefits of projects designed to save money. The VOI methodology, with tools, resources and other case studies can be found at www.cosn.org/voi.

**Two Mobile Learning Device Case Studies**

In late 2010, CoSN conducted VOI case studies with two school districts that have implemented student mobile learning device pilots. The in-depth case studies with specific TCO costs and measurable benefits are available for use by CoSN members at www.cosn.org/mycosn.

Rockdale Independent School District (ISD) is a school district of about 1,600 students in rural Texas. Based on an internal grant request from the junior high school sixth grade teachers, Apple iPod Touches were distributed to 150 sixth grade students, initially for use in class. This effort is likely a starting point for a larger district initiative around mobile devices which will expand to incorporating student-owned devices in the high school next year. The VOI cost analysis is applied to both efforts and shows the areas of greater and lesser expense for each approach (devices provided by the district and student-owned devices).

Katy ISD is a larger school district with 59,000 students and includes 32 elementary schools. After an initial successful fifth grade pilot in one school, which showed significant student learning gains compared to achievement levels for the same cohort the year prior and compared to the same grade the year before, Katy ISD is rolling out Droid-based mobile phones to eleven fifth grade classes. After a six-week period of in-class use, these fifth grade students will take these mobile devices home to be used on homework and collaborative projects.

Both of these districts purchased and provided the mobile devices to a small segment of the student population. If successful, both districts plan to expand mobile learning capability throughout the district. To make a district-wide implementation affordable, both districts are looking towards student-provided devices, at least in the higher grade levels.

**Cost-benefits Summary**

Not surprisingly, both case study districts determined similar cost savings when compared to a typical laptop implementation and both identified similar benefits for their mobile learning initiative.

**COSTS**

Initial device costs for Rockdale ISD was about half that for a laptop, although useful life may be a bit shorter. With smart phones, Katy ISD had an even lower initial
device cost, but is burdened with a monthly carrier data plan. Initial planning, training and implementation costs are roughly equivalent to a similar laptop roll-out.

Ongoing IT support costs appear to be lower than those for laptop or traditional computer support. However, that lower cost is balanced somewhat by higher teacher time spent in casual learning and supporting students. This additional teacher time is expected to decrease as the mobile devices become more imbedded into the curriculum and pedagogy, as teachers learn to use productivity tools and as students become proficient in using the mobile device.

These costs are broken down, and the Rockdale school-provided iPod versus anticipated bring-your-own costs are compared, in the case studies.

**BENEFITS**

Benefits, including means of measurement by the teachers and principals in both districts are provided in the case studies.

**Value of Investment Analysis**

While it is clear in both districts that mobile device initiatives benefit student learning, student engagement, teacher effectiveness and efficiency, and student behavior, it is important for these and other educational institutions to actually measure the benefits as a means of project justification and sustainability. The case studies document the efforts by these two districts to determine measurements for these benefits. Neither district has completed the process of putting hard numbers to these qualitative outcomes. To date, they have been able to document the costs involved and the Rockdale VOI study has compared the costs of a district-provided devices and a bring-your-own-technology approach. The Katy ISD case study has provided convincing evidence of the benefits to student learning of a mobile device initiative in general.

The two CoSN Student Mobile Learning Value of Investment case studies are available for free to CoSN members and can be downloaded or viewed by logging into CoSN's website at www.cosn.org. Not a Member? Join Now. www.cosn.org/membership