Laptops for Teachers

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Funding for education technology has improved considerably in this state with the assistance of Digital High School funds, Knox grant money, E-Rate and other initiatives. With the added resources available, the issue of purchasing laptops for teacher use continues to be a topic of discussion. Should schools purchase these relatively vulnerable yet expensive pieces of technology or is it better to stick with the tried and true use of desktop computers? Does the risk and cost outweigh the benefits? Read on to see what many technology coordinators are saying about these and other related questions.

The benefits to equipping your site teachers with laptops are plentiful.

Access From Home

Teachers with laptops are guaranteed access to computer technology no matter where they are. If a teacher has Internet access from home, then he/she could dial up from home and connect to Internet servers on their school network. This would make it more feasible for teachers to integrate shared folders with others. These may include an assignment folder for students to retrieve assignments, a homework drop box for students to deposit their assignments, a curriculum folder to share ideas and resources with other educators, and personal directories to store curriculum and resources for future use. Easy and reliable access to the school resources from home makes it more feasible for teachers to truly integrate the school's system resources into their daily curriculum.

Staff Development

One of the most difficult things to find is time for teachers to practice and learn to use technology tools. If a teacher had a laptop, they would have access to the technology wherever they take the computer. This would obviously lead to increased use and a greater understanding and familiarity with the technology. Getting teachers to be familiar with and use the technology is one of the greatest challenges of technology integration. Teachers are very busy with just preparing for the next day's lessons, running copies, attending meetings and parent conferences, correcting papers, etc. It is rare for a teacher to have extra time during the school hours to devote to learning and exploring new technology skills and resources. A laptop can eliminate the need for the learning to take place only while at school and during school hours. Having 24/7 access to the technology is sure to increase computer use both in and outside of the classroom, which is an ultimate goal of all technology staff development.

Laptop by Night, Desktop by Day

A successful laptop program might also include docking stations for the laptops at school and if possible at home as well. A docking station would make connecting the laptop to the local area network simple and quick. The teacher would simply slide the laptop into the dock and all the power cables and network connection would be engaged. In addition to making the daily transition from laptop to a networked computer simpler, a docking station offers the option of having a full size keyboard, mouse and monitor, thereby containing all the luxuries of a desktop.

In addition, the laptop that is toted back and forth between school and home can be turned into a student workstation while at school, thereby decreasing the student to computer ratio. Not all teachers would feel comfortable with this plan due to the concern of sensitive files on the laptop and/or technical issues relating to students' abilities to changing settings and otherwise cause havoc on the machine. Of course desktop security software can alleviate these concerns.

Here, There and Everywhere

One of the largest issues that computer users are still faced with is translation of documents between platforms and applications. Mac files that are sent through the Internet need to be encoded and most files should be compressed to save on disk space and up/download time. This transferring process then requires additional utilities to un-encode the documents and decompress large files. Laptops enable teachers to transport files that are larger than what fits on a floppy disk, and also avoid the need for translation between applications and computer platforms. For example, if they have Microsoft Word 2000 on a desktop computer at home but Microsoft Word 97 on their desktop at work, they would need to consistently save documents in the older version to assure compatibility. This is made even more difficult if the same vendor, such as Microsoft in this case, did not make both applications. But if the laptop is brought back and forth between home and school, then the teacher can rest assured that the application they are familiar with and depend on in one location will be available when they arrive at their next destination.

An added benefit to laptops is that the need to purchase duplicate licenses for applications is decreased because the applications (and their licenses) travel with the laptop, hence no need to install the application onto two separate computers in two different locations.

On The Go!

Laptops also have the obvious benefit of being in more places than just the classroom and the home office. Laptops are available for teachers to bring to staff meetings for lab-style instruction, parent conferences to demonstrate student multimedia presentations, educational conferences for note taking and email communication, vacation time at the lake, field trips, and an endless amount of locations. This makes the technology that much more readily available for use. Teachers would choose when and where to do their class preparation and not be limited to accessing technology while only at the school site.

Specifications

It is important that we do not sacrifice quality for portability. A laptop needs as much power as a desktop and should be purchased accordingly. A laptop that has a CD ROM drive, 6GB hard drive, 64MB RAM (128MB preferred), a fast processor (G3 or Pentium lll 400Mhz), video out port (for presentations in the classroom), modem, and an Ethernet card would be quite sufficient for the average teacher. An average laptop with these specifications may cost about $1500 but I have seen some brands offer similar specifications for under $1,000. Remember that screen and hard disk size is not as important for most educators yet can effect the price considerably. Be sure to check for

educational discounts that many vendors offer schools. Yes laptops are more expensive than desktop computers, but the cost continues to drop and they are becoming a more and more viable choice for the classroom.

The concerns that surround the concept of teacher laptops are valid yet many can be mitigated.

Security
Probably the number one issue that arises for schools looking to purchase laptops is security. Laptops can fit nicely into a backpack and hence could disappear easily. Laptops are known to fall off desks due to careless placement or a clumsy movement in close vicinity. Although loss, damage and theft are realistic and valid concerns, teachers are able to care for laptops the way educators care for other expensive school supplies. A brief "Caring for your laptop" class can help alert teachers to the threats of loss, theft, or damage and greatly reduce the total cost of ownership of the product.

Damage Control
Teachers should be encouraged to transport the laptop in a padded bag designed for the computer. These bags are not very expensive but can greatly reduce the damage inflicted by a rough landing on a tabletop or floor. When purchasing laptop bags, it is advisable to not purchase bags that have a large computer logo on the side or otherwise clearly indicate the contents of the bag. Airports and other public terminals are a common place for laptops to disappear and the more discrete the bag, the less of a target it will be.

Laptops use expensive batteries to power the machine when not plugged into a wall AC outlet. These batteries have a life of only 2-3 years so factor in the cost of replacing the battery (about $100/machine) when figuring out the total cost of ownership for your laptop program.

Technical Support
Purchasing an extended warrantee for the laptop will help with maintaining the computer for years. Although the warrantee will not cover damage from being dropped, it will increase the long-term viability of the computer. Generally speaking, laptops are more expensive to repair than desktops simply because the replacement parts are more expensive. Therefore an extended warrantee can easily pay for itself within the first couple of years.

Keeping Track
Every laptop program needs someone to keep track of the computers and who they are checked out to. This can be done through the library system at your site or separately with a database and an attentive person. There needs to be special forms (visit www.sccs.santacruz.k12.ca.us/edtech/cue for some sample forms) for teachers to sign to check out a computer. These forms emphasize the responsibility for the laptop resides with the teacher. This is an issue that should be raised with the teacher union to seek support. Teachers can talk with their homeowners or renter's insurance provider to see

about getting the laptop covered under their plan while it is in their possession. Also check to see if the district insurance will cover the laptops when off campus.

Laptop computers offer a tremendous amount of flexibility for the educator. From staff meeting presentations and staff development advantages, to 24/7 access to school resources, a laptop's advantages can outweigh the risks of loss or damage. With costs dropping almost weekly and the funding for education technology increasing, laptop programs hold a promising place in the school of today. Your comments and thoughts on this and other issues pertaining to technology coordination are always welcome. Visit www.sccs.santacruz.k12.ca.us/edtech/cue for information about subscribing to the Technology Coordinators Listserv.