To: Dr. Gladhart

From: Carla Schierholt

Re: Technology Plan and Expenditure of Money

Date: November 13, 2004

The following are the requested recommendations for the revised technology plan for Kenny Lake School. Percentages of the total budget are given along with an explanation and / or research that support these recommendations for improving technology integration at our school. Many of these recommendations are based on the Technology Needs Assessment conducted in the Fall 2004.

**Hardware and Computer Upgrades 60% of the Budget**

Copper River School District needs to work towards obtaining a three-year lease agreement with Dell for upgrading our computers. Computers would be replaced every three years with the newest upgrades available. This would not only be cost effective, but it would also eliminate many of the hardware and operating system errors that we frequently have with our computers (Kinnman, 1998). The cost per client each year averages about $300. This lease agreement includes technology support and covers some maintenance.

Also included in this component of the budget would be upgrades and maintenance of network components such as switches, hubs, wiring. These infrastructure expenses are relatively low, however “most network professionals say that the bulk of the problems a network could encounter come from a poor infrastructure” (Whitehead, Jensen & Boschee, 2003, p171). Although our school has a fairly good infrastructure in place, it will be important for it to be maintained and upgraded so that the network is reliable, more flexible, and simple to support and use.

A priority in the 3 year plan should be to find funds to purchase a mobile 20 client laptop lab with airport connections throughout our school. This would allow for more flexible use of computers in various classrooms and further enhance how technology is integrated into the curriculum (Whitehead, Jensen & Boschee, 2003).

**Staff Development 25% of the Budget**

“The budget item that arguably is most critical to a school district's ability to achieve its technology goals is staff development. If teachers and other staff members do not understand how to use new technologies and incorporate them into the classroom, a district's technological investment will not achieve its desired results.

To underscore this point, the U.S. Department of Education has recommended that school districts set aside 30 percent of their technology budgets for staff training and development. Today many state departments of education require that districts devote between 20 and 30 percent of their state technology grant money to staff development” (CoSN, 2004).
As the Technology Needs Assessment revealed, we have several staff members that have technology expertise that are willing to share their knowledge and skills. Much of this staff development money should be used to provide substitutes for classroom teachers to work with these colleagues and prepare lessons that integrate technology. Knowledgeable staff members could also present inservice days. Staff development money would financially compensate them for their time preparing for the presentation. Or to purchase equipment for the teachers to use? I love this one. Often the amount of money isn’t enough to justify it once the taxes take a chunk so I try to get payment in equipment at times. “One of the keys to successful staff development in technology is simply to have teachers teach other teachers.” (Whitehead, Jensen & Boschee, 2003, p71).

**Software 15% of the Budget**

The portion of the software budget should be used to provide district, school, or individual classroom licenses for programs that are researched based and will be utilized to integrate technology into the curriculum. However, a more urgent use of these funds is to provide good security filtering systems throughout the school. One of the first places our district should spend money on is upgrading the antivirus and firewall protection for our network system (Millard, 2004). Fortunately, these software systems are coming down in price and come in all-in-one type packages that can make it financially feasible with only 15% of the budget designated for software.

Below is the recommendation for spending the $25,000 that was earmarked for upgrading the technology at Kenny Lake School this year.

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$13,200  **11 Dell Desktop Computers** 512 MB Ram CD Burner / DVD player

$1,200 each

9 new Dells will go to each of the teachers. Currently the 98 operating systems are very slow and make it difficult for teachers to do the required work needed for PowerSchool grading and daily attendance as well as run other large programs.

2 new Dells will go to the administrative office--one for the secretary and one for the Principal. These are needed in order to keep up with the many databases and reports that are school must maintain for NCLB and the district office.

The former teacher computers will stay in the classroom for student use. The 12 computers in the computer lab will be dispersed one to each of the teachers, one to our Library and two for use with mobile computer centers with LCD projector and documentation camera (See below). This will give each classroom teacher two student computers and one teacher computer. The Library can utilize one of the older lab computers for study hall students and others who need to utilize the computer for research, word processing, or multimedia presentations. “Developing classroom-networked computer technology centers is one of the best ways to integrate technology and enhance teaching” (Whitehead, Jensen & Boschee, 2003, p 91) By putting these lab
computers into the classrooms, they will be more readily accessible to students as they work on projects in other content areas. Most of our class sizes are more than 12 students, so the lab has not been effectively used because there are not enough computers for a whole class of students. This change will increase their use and improve how technology is integrated into our classrooms. According to many studies done by James Kulik, a research scientist at the Center for Research on Learning and Teaching at the University of Michigan, students had more in-depth exposure to the curriculum and gained the equivalent of about three months of regular classroom learning progress when they had technology learning centers in their classrooms (Kulik, 1994).

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$2,600  2 Elmo Documentation Cameras: Model EV2000AF $1,300 each
$2,000  2 InFocus LCD Projectors     $1,000 each
$   500  Cases and Cables for these two units
$1,000  2 Movable computer carts for these units

The purchase of these two technologies will greatly improve technology integration into the classroom. The Elmo will allow teachers to project students written work, models they have created, demonstrate science concepts, Math problem solutions, etc. The LCD projector is necessary to project the camera’s images or project a screen from the computer. The LCD projector will allow teachers to project Internet sites that can enhance their curriculum. It also can be used to teach whole group lessons on how to utilize a particular software program and basic computer terms and processes. These will be shared among the staff with the hope of obtaining more if the demand for their use in the classroom increases.

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$2,000  5 Digital Cameras   Canon PowerShot                  $400 each
$   700  1 Digital Video Camera

There are endless uses of the digital camera and video for integrating technology into all areas of the curriculum. Teachers will share a digital camera with another teacher so that they are easily accessible. To improve communication and inspire more parental involvement in the school, digital photos can be used in weekly newsletters, and newspaper articles that students or teachers write. Digital photos can be used for documenting steps in a scientific process or as a writing prompt.

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$1,000  CD’s, Digital Video tapes, Camera cases, Extra Batteries/ Chargers
$2,000  Software Licenses Teachers should be surveyed as to what types of programs they would like to have or need. School site licenses may be required if utilized throughout the school

These are a few suggestions based on conversations with other teachers:  
*Inspiration / Kidspiration*  
*Hyper Studio*  
*All the Write Type*  
*Image Blender* (I want this one too)  
*Video Factory* (digital video editing program)
$25,000 Total Expenditures

References


