

Managing Technology Resourcefully

PART II: WORKING WITH YOUR DISTRICT'S TECHNOLOGY



By Richard Weeks, RSBA

The secret to coping with technologists is to understand their motivations,” humorist Scott Adams shares in his book *The Dilbert Principle* (1996). He says, “The fastest way to get your technologist to solve a problem is to declare that the problem is unsolvable. No technologist can walk away from an unsolvable problem until it’s solved. No illness or distraction is sufficient to get the technologist off the case. These types of challenges quickly become personal—a battle between the technologist and the laws of nature. It is good for a lay person not to stand between the technologist and the problem. The technologist will set upon the problem like a starved Chihuahua on a pork chop.”

Every school district is different, so technology management depends on district resources.

Your school district may have a rabid technologist in its ranks—or not. Every district is different. Generally, however, a large school district may have a technology department staffed by a chief technology officer who supervises two or more directors of operations, project managers, and technicians. On the other hand, a small district may employ an information technologist who works with technicians, consultants, volunteers with a knack for technology, and instructional personnel who might receive stipends for extra work outside the classroom.

ASBO International recently partnered with the Consortium for School Networking, SchoolDude, and *eSchool News* to conduct a national survey of technology staffing. The survey compared technology use in schools with technology use in business.

Businesses typically had 100 computers for every technician; the ratio of computers to technicians in school districts was 488 to 1. Not only do school technologists have an inordinate number of computers to keep up and running, they also have an expansive inventory of outdated operating systems and increasingly obsolete hardware. Still, like businesses, schools expect their information technology personnel to be available 24–7 to troubleshoot problems.

Technology personnel are a part of the district team and should be treated as any other business office professional. In their book *The School Business Administrator*, Kenneth Stevenson and Don Tharpe (1999, p. 14) suggest: “Because the team approach is such an integral part of successful school operations today . . . school business administrators must create a work environment that promotes an open exchange of ideas and rewards staff for creativity and productivity. . . . Staffing must be viewed as ongoing. Job tasks change, resources come and go. Effective school business administrators are constantly reviewing staff allocations and assignments and adjusting these as changing priorities dictate.”

School Business Operations

Regardless of the size of the technology department, the software that school business administrators use most frequently can be neatly bundled into the category “operations technology.” This operations software can be installed from CDs or downloaded onto your business office’s computers. Online software leasing has quickly become more popular than CDs during the past few years. Users pay an annual subscription fee for software use, as well as fees for implementation and staff training.

When purchasing a service, ensure that your contract states that the company will securely inventory your school district’s data on its servers and that it will not sell or market information from the database to other vendors. An effective software service should have browser-based access to all applications, maintain authorized

security clearance, and have the ability to create, update, and rearrange the layout of reports and forms.

Here is a sampling of some operations software:

- **Financial management software.** Various modules can be leased that include general ledger, accounts payable and receivable, bank reconciliation, payroll, financial and budget reporting, and purchase orders.
- **Data certification software.** This has become the fastest-growing category of educational management software during the past several years, spurred by school districts’ increasing need to comply with education accountability mandates at the state and federal levels. Traditionally written for tracking student attendance, progress reports, report cards, and school scheduling, data certification software now provides administrators with the resources to track data for mandates related to adequate yearly progress, dropout rates, special education, free or reduced-price lunch eligibility, student discipline, and teacher certification. Some vendors’ software has portals for parents and students to access their personal information related to academic performance and progress.
- **Facilities management software.** A plethora of modules is available to help your district manage janitorial duties, routine and preventative maintenance tasks, use-of-facilities and event scheduling, fixed-asset inventories, infrastructure monitoring, utilities, and planning for capital improvement projects. Vendors have written the software so that it is well suited for use on many PDAs.
- **Human resource software.** Brought to new life by the Internal Revenue Service’s recently mandated 403(b) tax-shelter annuity requirements, human resource software has expanded to include forms for the employment application process; collection of data that pertain to licenses, emergency medical information, insurance, and the Consolidated Omnibus Budget Reconciliation Act; Occupational Health and Safety Administration or similar state agency reporting; and other employee training, wage, promotion, and discipline information.
- **School busing software.** This may include vehicle performance and instrument tracking software, onboard visual recorders, and traditional school bus routing.
- **School lunch software.** Such software is helpful for inventory control, purchasing, personnel scheduling, point-of-sale cash management, compliance reporting to state and federal agencies, commodity ordering, and reimbursement requests.

No one company can provide all your operations technology needs. You must carefully select products that fit your particular school district’s requirements and that are cost-effective.

Get Up to Date

In a recent *Esquire* magazine interview, technology guru Vint Cerf said: “You don’t have to be young to learn about technology. You have to feel young” (Fussman 2008, p. 118). One of the acknowledged creators of the Internet, Cerf codesigned TCP/IP protocols—the formats that computers use to communicate over the Internet.

So, feel young. Discover what has to be done to make the most of technology in your district, lobby for funds, and plan another round of upgrades. If you have some catching up to do to close the disparity gap, here are some ideas:

- Add electrical wiring and service to the schools to handle the new technology. If your community has this option, wire the buildings with fiber-optic cable for better data transmission. It will accelerate Internet transmission from about 1.5 megabits per second for dial-up access to about 50 mps. The Internet will be almost 35 times faster. If you are using a cable company connection, the Internet speed would increase from about 6 mps to 50 mps, or about 8 times faster.
- Install new phone systems that use VoIP (voice over Internet protocol) to improve communication with all rooms in the schools for better security. Consider classroom sound augmentation systems that raise the decibel levels of teachers’ voices and equitably distribute the audio transmission throughout the classrooms.
- Equip all classrooms with interactive whiteboards, or erasable boards that are like suspended blackboards and display Internet sites and computer desktop files. The boards use touch-sensitive displays that allow teachers to tap, write, or erase on the boards using software applications. Simple whiteboards work well with the newer models of document cameras.
- Buy new computers and printers to replace those that are breaking and becoming obsolete. Most schools today acquire stand-alone personal computers with separate components, or portable units in varieties we refer to as “laptops.” The high-tech industry has been working to develop a new generation of learning devices by converging laptops with other handheld devices.

Schools prefer computers with monitors, keypads, and CPUs. They allow staff to easily and affordably replace components as they wear out. Although most consumers prefer to purchase laptops from retail stores, administrators generally purchase large quantities of these components directly from multinational brand-name companies or through local purchasing collaboratives.

Laptops are problematic in that they can be stolen easily or accidentally damaged by unintentional mishandling. Because the cost of laptops decreases every year, some districts provide one for every student.

During the past several years, many of our schools’ administrative personnel have shifted to printing docu-

ments on desktop printers instead of using traditional photocopiers. Despite the convenience, it may not be very cost-effective. Desktop printer copies can cost around 10 cents per page. If you need copies of more than a few pages, it might be better to send your documents to the nearest photocopier from your computer via your local area network, where the cost can be about a penny per copy. For instructional purposes, high-speed digital duplicators continue to be effective for high copy output. You can make this cost-benefit analysis by examining vendor lease or purchase agreements, invoices, and copy counts on your own equipment.

School business administrators can expect to continue to purchase considerable “low-tech” equipment, including typewriters, adding machines, and shredders. Computer chips have found their way into this equipment as well. Our cohorts of a generation ago might be surprised to see all the shredders in schools, and would even be more disturbed to learn that their presence is due partially to the meanness of identity theft.

In the End

The views on managing technology in our schools vary. One view is that “new” is not always better. Before school business administrators make the leap to a new technology application, they should ask themselves these questions: Has one or more of my colleagues recommended it? Will it work with my school district’s size, culture, and existing technology systems? Will it improve student learning and help make the business of education more cost-effective?

Another view is that we should walk through our routines with our eyes and ears wide open in childlike wonder. Technology is an area of our profession that we can manage as pioneers on a new frontier. We don’t have much guidance or many how-to books for assistance.

Keep in mind what Vint Cerf said in the *Esquire* interview: “I’d like to know what the Internet is going to look like in 2050. Thinking about it makes me wish I were eight years old” (Fussman 2008, p. 118).

References

- Adams, S. 1996. *The Dilbert principle*. New York: HarperCollins.
- ASBO International. 2008. National survey of technology support staffing. Reston, Va.: ASBO International, Consortium for School Networking, SchoolDude, and *eSchool News*, Reston, VA.
- Fussman, C. 2008. What I’ve learned: Vint Cerf. *Esquire*, May, p. 118.
- Stevenson, K. R., and D. I. Tharpe. 1999. *The school business administrator*. Lanham, Md.: Rowman & Littlefield.

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