

Small School Technology Administrators and the Computer Network

Claude Bastien, Teaching Principal, Windsor SDA School, Windsor, ON

Something that I wished to accomplish at my school from the moment of my arrival, was to make the Internet, word processing and other programs available to my students on a slightly grander scale than one machine for every 12 children. I also wanted the computers to be close at hand, rather than located in a lab, so they could be accessed when needed. This meant removing a beautiful cabinet containing a single computer, from each of the two classrooms and replacing them with sturdy shelving that could withstand the weight of several monitors and computers. Computers for Schools supplied ten, free, Pentium-class computers. I was delighted.

I had previously networked Macintosh computers with relative ease. PC networking was something very new to me.

I have discovered that there are many ways to create a PC network, but mine would be just a simple peer-to-peer setup. (In this scenario, each computer is a stand alone and can operate independently of the others, having its own hard drive with the programs installed that it wishes to run. It does not require a server). That seemed pretty simple to me. The hardware needed included: network adapters, the latter of which were already installed, Ethernet cables, hubs or switches, and because I wanted Internet access for all computers, a router. I purchased all the necessary items from what was then called Radio Shack.

If you had walked into my classroom two weeks before school began in 2003, you would have seen me lying on my back on my classroom's cold tile floor trying to make sense of all the cables that powered and linked that would-be, small, computer network. That job accomplished, one unit at a time, I inputted the required information, being careful that each machine's settings were identical. With the exception of one stubborn computer, I had accomplished what I felt was necessary for the classroom to function more efficiently. The Internet was now available. I could access, as well as print, from 7 of the 8 computers. That eighth computer never networked, and had a very strange habit of disabling the router if I attempted to run Internet Explorer.

A couple of days before school began in September, I turned everything on, and behold, seven of my babies would not network, let alone print or access the Internet. How could this happen? I was certain that no one had been in my room, and the units were all password protected, so I eliminated the possibility of sabotage from my list of suspected problems. I checked every wire/cable/interface and again went over the settings. Nothing had changed, yet I was back to square one. I was not happy! This was my first and nearly my last attempt to create a computer network.

We managed to limp through that year, using unreliable, easily corrupted, 3.5 inch floppies, to exchange information and transport files to the computer with the attached printer. During that time, we had a newer computer donated and purchased a second, both running Windows XP, and retired two in their place. This had a positive effect on the network. Happily, the new computers could talk to one another, and occasionally, for

some inexplicable reason, the Internet would be available to three or four computers, but that was the limit of my network.

In May of the previous year, I had requested 5 computers from Computers for Schools. These had arrived in July, nearly a year since my failure with the network. While six of my other computers were still running Windows 98, these five were installed with Windows 2000. I have heard negative remarks about this operating system, but from my perspective, this was the beginning of a beautiful friendship. I completed the settings with the help of a Wizard on the first computer, saved the settings to a USB storage device (Some people refer to these as thumb or stick drives) and then transferred this information to each of the other computers. Ta Da! We were in business.

Small schools often do not have recourse to computer savvy people who are able to look after the school's equipment and even when these folk are available, their accessibility due to their own hours of employment is often not conducive to the need of the moment. "I can come over next Tuesday," does not solve my problem today and often that means that an assignment or project must be put on hold, not a happy prospect for the teacher who had planned what they deemed to be an exciting class period using the computers.

When techies are not available, the principal, or the most technologically up-to-date staff member becomes the school technology administrator where lessons are often learned by trial and error.

These are a few of the things that I have learned since becoming the default technology administrator.

1. If you get advice from an expert, write it down or you will soon forget.
2. Some computers or operating systems are easier to work with than others.
3. Computers, particularly older ones, can take up a lot of your time, if you let them.
4. Computers get dirty inside and need to be opened and cleaned occasionally.
5. Some things on a computer are easy and inexpensive to repair – replacement of floppy and CD drives, insertion of cards or memory.
6. Don't throw away old computers without taking them apart to see what makes them tick. Some of the parts may be of use in another computer. (floppy/CD Drives, Ethernet cards, etc.) This will give you confidence to tackle number 5. *Don't do this with a monitor. There is a serious shock hazard under that plastic cover.
7. Fixing a problem brings a great deal of satisfaction.
8. All computers are just machines, but some, it seems, have a consciousness and are malicious.