

## Thinking Outside The Box

*Kent Rusk, Teacher, Cariboo Adventist Academy, Williams Lake, BC*

The race for technology is a marathon with no end in sight. But how are we running? In some of our schools, we have purchased top-of-the-line jogging suits, brandname sneakers, gold-lined water bottles, and so on. Others have opted for cut-off jean shorts, an old t-shirt, and a bottle of water from the nearest 7-11. There are benefits to both. But now, the playing field is laid level by one single factor; the cost of software.

Recently, my school, Cariboo Adventist Academy, received a donation of 20+ computers from a local company who was upgrading their technology. This finally allowed us to place enough computers in every classroom to make it a meaningful tool for teachers and students. The only problem is that we do not own licenses to be able to run Windows on all of them. Even if (that is a big if) we could get licensing for close to \$200 per machine, for Windows 2000, that adds up to over \$4000 that we do not have available. For a 25-site license of Windows 2000 Advanced Server, we would pay an additional \$5000 or so. That is a grand total of \$9000 just to legitimately operate our machines in a network! And the operating system is only the first requirement! All of these machines need current Office application software. That will be an additional cost per computer and is every bit as necessary.

The computers that were donated to us all came with software on them. This is called "casual copying." Essentially, the company that gave us the computers could get in more trouble than we could, which would be very negative in terms of future donations. But more importantly, I think that especially in our schools, we need to be diligent in obeying the authorities over us, wherever possible, which means we need to pay very careful attention to things like software copyrights.

So here is the problem: How do we afford to remain legitimate in the use of our software while continuing to offer software that is current and mainstream enough to train our young people adequately? Enter a possible solution...

As I have considered this issue, I have come to a conclusion. Remaining current and affordable are two equally important factors. One must not be sacrificed for the other. Many, or dare I say, most, of our schools cannot afford the horrendous cost of continually upgrading their software. The market is relentless, so we need a solution that almost defies the market while remaining abreast of it.

This year, at Cariboo Academy, we are piloting the use of Unix-based operating systems that are totally public-license--they're free! We are having a lot of success so far with ASP Linux, Mandrake Linux and Red Hat Linux. These operating systems can run on both PC and Mac platforms. Also, both Mandrake and Red Hat show promising potential as serving platforms. Red Hat even includes necessary software for sharing files and printers with Mac and Windows machines! And best of all, email, internet, and the Microsoft Office and Adobe PDF-compatible OpenOffice.org suite of applications come standard!

It sounds almost too good, right? Well, there are some challenges. First, your windows-based software will not work without some reprogramming...that's right...source code junkie heaven! Since I am nearly C + illiterate, it has been a challenge for me to setup some features. No more easy-to-run EXE files... Software availability is not great yet. Also, open-source software is usually experimental, and constantly

undergoing changes which can lead to all kinds of little issues especially with older hardware, which is usually not a big deal, but can sometimes test your patience.

My dream is to eventually have the whole school running Linux, but first the issue of how to use Windows software on this platform must be overcome, merely as a means of broadening the base of useable software. At this point, I highly recommend any of the three distros I mentioned, for anyone who is running standalone machines and needs to get legit quickly. As far as serving, I hope there are others who are also experimenting with this kind of thing who wouldn't mind giving me some pointers and direction.

There is an expression, "You gotta think outside the box." Perhaps we can find more ways to become increasingly cost-effective in our acquisition and use of necessary technologies, while still remaining current. If you have ideas, please share them with whoever will listen!