

Supernet makes life better at Northern Lakes College
Joe McWilliams
Lakeside Leader

Supernet was worth the wait. That's the consensus at Northern Lakes College, where the long-overdue broadband telecommunications system is in use and making distance delivery of education faster and easier and cheaper than it was before.

With 30 campuses spread out over a huge chunk of northern Alberta, delivering courses at Northern Lakes College is more than an academic challenge. It's a massive technical one.

"We (have) 35 courses on line, 212 offerings, 30 campuses," says NLC President Rick Neidig. "This is a big, big step to have this turned on."

Until recently, the college relied largely on low-speed dial-up connections. It got the job done, in a clunky sort of way, but left a lot to be desired.

Shelley Gionet teaches science and math to academic upgrading students. Typically she'll have half a dozen in the room with her in the Slave Lake campus, with another 20 or so in other locations, communicating with them by voice and visually through a computer program called Centra Symposium. But with dial-up connections, many of Centra's features were unusable.

"No video, for example," says Gionet. "Now (with Supernet) I can see them and they can see me demo a lab."

She can also do such things as calling up the image of a calculator on the screen, and her math students in remote campuses can see her demonstrate its use. Such applications were impossible in the days of the 56k modem.

Application-sharing capabilities in general are much enhanced. Computer training and synchronized web searching are two examples.

"All students see the same thing their instructor is seeing," Neidig says. "The pipe is big enough now. It's a little better learning experience."

There are other advantages to having a high-speed network connecting all the college campuses. One is in the area of computer troubleshooting.

NLC network technicians René Ouellette and Colin Ross are already doing remote diagnosis of college computers in other communities. From their shop in the Slave Lake campus they can log into any computer on the network, and 'take it over' for diagnostic purposes. In some cases, remote diagnosis leads to remote solutions, eliminating the need for a visit.

"I'm anticipating we'll be able to cut our service cost to those small communities by half," Neidig says.

Those aren't the only savings. Saying goodbye to dial-up access should save the college "at least \$150,000 a year on telecommunications," Neidig says.

Switching to Supernet has cost money too, though. The system came to the college campuses at no cost to the college, but everything after that had a price tag. Neidig estimates NLC has so far spent \$800,000 to \$1 million on various items of hardware and software needed to harness what Supernet offers.

The Supernet system is mainly comprised of buried fibre optic cable. In the case of a few communities the connection to the fibre optic system is by wireless connection. The

Supernet is provincewide, tying every community into a government-funded, dedicated broadband network.

Another Supernet feature in each community a Point of Presence (POP), made up of routing and switching gear. This is where the connections are made between the network and the institutions that qualify to use Supernet. Cable goes out from the POP to schools, hospitals, libraries, government offices and other public institutions.

At least a year-and-half overdue, the first college connection to Supernet was in May, between Slave Lake and the Stony Point campus in Wabasca. Since then, one campus after another has been coming on line.

Ouellette says from the technician's point of view, it's been a 100 per cent positive move. "Northern areas have been screaming for decent connectivity. Some of our connections we've gone literally 100 times faster."

Neidig says he's "very pleased" with Supernet benefits to the college so far, and looks forward to more. There will be more applications coming on line, including a college-wide file storage system – something that was difficult if not impossible before.

But the meat and potatoes of the college remains distance delivery of courses, and that's where the Supernet is most notably helping – in improved learning experience at lower cost to the college.

All colleges in Alberta have access to Supernet, but Neidig thinks NLC probably gets the most out of it.

"The benefit to us is huge. It's probably appreciated a lot more by us than an urban post-secondary institution. It's necessary for us and an 'option' for urban (schools).

"Most post-secondary institutions are into distance delivery, but historically we're way out in front. The wait for Supernet has probably set us back 10 years."

With the impediment of slow telecommunications now removed, the college is making up for lost time.

Still another area of Supernet benefit is in the relationship between post-secondary institutions. The borders between colleges are getting blurrier all the time, and the Supernet speeds that process. Northern Lakes College belongs to a group of northern post-secondary institutions called 'Alberta North' that have been moving gradually towards a state where each offers some of the other's courses, the better to serve local students. With Supernet, Neidig says, "We can do a better job of receiving their courses and serving students in those (other colleges') areas." Neidig says.

"It extends our boundaries."

Meanwhile, two or three days a week, Gionet sits down with her students in Slave Lake, Wabasca, Ft. Vermilion or wherever. Thanks to Supernet, it's an enhanced experience for all of them.

"It's been a great semester so far," she says. Previously, "It's like you had a Cadillac, but all you could do was drive it – you couldn't use the air conditioning."

