



4.1 Newfoundland and Labrador (NL)

Pop: 526,702
K–12 Schools: 268
K–12 Students: 67,604

of K–12 DE Programmes: 1
of K–12 DE Students: 1,232

K–12 distance education was introduced to the Province of Newfoundland and Labrador in 1988–89, with the delivery of a single advanced mathematics course using a telematics or audiographics delivery system. This programme began to be phased out in 2000–01. A Ministerial Panel recommended the creation of the Centre for Distance Learning and Innovation (CDLI). The CDLI utilized a Web-based model of distance education that had developed from the traditional distance education programme, as well as several district-based initiatives.

Distance Programmes

The CDLI is the sole provider of K–12 distance education in the province. During the 2012–13 school year, 1,232 students accounted for 2,064 course registrations in 40 different courses—including six courses delivered in French to the province’s French-first language students.

In the fall of 2012 the CDLI offered online course review for five public exam courses for students availing of supplementary examinations. These online course reviews for public exam courses were offered again in spring 2012 for students taking public examinations.

Governance and Regulation

At present, the CDLI operates within the Primary, Elementary and Secondary Branch of the Ministry of Education. It receives a block funding allocation from the provincial Government that funds the administration, all teacher and staff salaries, course development activities, Internet/network connectivity costs for 110 schools, K–12 technology integration and some provision learning for the provincial K–12 school system. The CDLI also purchases and deploys all hardware and software required for the delivery of its online learning programme, including

all required computer equipment, videoconferencing equipment and other learning resources that enhance the distance learning experience.

At this time there is no language in the *Education Act* related to K–12 distance education. There are also no policies or regulation specifically related to K–12 distance education within the Ministry of Education beyond those utilized by the CDLI itself. The Ministry of Education continues to track the method of delivery that students complete their studies and these data are available through the *K–12 School Profile System*.

Vignette: Technology Education through CDLI

“Okay guys so I’ve shown you how to do it. Now it’s your turn. See if you can finish off your drawings and get them in the portfolio before class on Friday. Work on them for the rest of class. I’m here to help so raise your hand or text me if you need it.” With that Tim Goodyear, CDLI’s Tech. Ed. Instructor, clicks the “Talk” button in his *Blackboard Collaborate* room to mute his microphone and turns his eyes to the smaller renditions of the students’ desktops tiled across two of his four monitors. He sends private messages to two students he sees from his remote console their focus is not on the task at hand, before taking a look at the recently-arrived course email.

“Students expect quick replies,” he says, “and I do the best I can to keep up, but it can be hard sometimes as I have students in three different courses and spread across two time zones.” There’s a lot of equipment in Tim’s room. Besides the aforementioned 4-monitor PC, there’s also a Videoconference Unit with a 42” monitor, assorted power tools and a heavy cube, approximately 1 m by 1 m by 1 m, encased in safety glass. “That’s a computer Numerical Controlled (CNC) router, same as the one we have installed at each of the student sites,” explains Tim. “In this course, Design and Fabrication, the students will follow a design process in which they will go from spotting a need, proposing a solution, then building, testing and subsequently refining and evaluating the solution. The CNC Router is the machine they will ultimately use to construct the working solution. Right now they are at the proposal stage, completing 2D drawings of the solution. Later we’ll move to 3D and then fabricate it.”

Tim keeps a constant eye on the class. He has many things to watch. His *Blackboard Collaborate* room is open all the time class is running and all students stay logged in even when they are doing other tasks such as preparing materials, drawing using 2D or 3D software and updating their design portfolios. When they have questions, most simply choose to message Tim, who responds privately, but some do just key their mikes and ask out-loud. During this particular session a pair of students called in to Tim’s videoconference unit as they had a question about a part they were fabricating and needed to show the trouble spot to Tim for advice. Because of the Videoconference bridge, Tim has eyes in all of the classrooms any time he wants. When it’s time for periodic presentations, Tim gets all of the students to dial in and whoever has been selected to present at that time. Today, the Videoconference is not used much; it varies with the tasks.

Tim keeps a constant eye at the two rightmost monitors. The ones at the left display the *Blackboard Collaborate* room and the *Desire2Learn* room, respectively. The ones on the right, though, are devoted to showing the students' desktops. Not only does this ensure that Tim has a means of ensuring that the students are all on task, but it also helps him spot trouble, when necessary. From time to time Tim does need to offer direct assistance with students who experience particular difficulties. One student didn't quite get the instructions on how to render back the drawing so Tim opened up a Bomgar remote access session with the student. Using the application Tim can take the student step by step through the process, even taking control when necessary. "With the Bomgar I can work directly with any student's computer right here from my desktop. It's the same as if I was sitting beside every student whenever that's needed. I can even shut off the CNC device in their school from right here in my office if I need to," says Tim.

I turn back to Tim to ask another question but discover that he has put his headset back on and has gathered the whole class back to his *Blackboard Collaborate* room. He's finishing off today's session, debriefing the students and reminding them what needs to happen before the next class. I can see the Goodbye messages scrolling up the text window as the students sign off. They're not just directed at Tim. His class is as big as the province.