



# RACOL

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Rural Advanced Community of Learners

## **Teacher Assistance Course from Calgary to FVSD**

The following report outlines the issues both technical and non technical that were encountered for the Teacher Assistance Course, which ran from January 7<sup>th</sup> to March 31<sup>st</sup> 2004. The course was conducted via video conference from Calgary, where the instructor was located, to the Fort Vermillion School District (FVSD). The course had 9 students enrolled in 4 locations in the FVSD, these locations included Fort Vermillion, Rainbow Lake, La Crete and High Level. In addition to describing the problems that were encountered throughout the course this report will outline how these issues were overcome, the lessons that were learned and recommendations for future courses.

The first technical issue that had to be overcome was how to connect to the FVSD. In the past, whenever a location outside the district wanted to connect they were bridged through Edmonton. This solution was thought to be less than desirable because it would involve another technical support person to be on hand in Edmonton. In addition it would prevent the teacher in Calgary from seeing the students full screen (half of the screen would be used to display the Edmonton Cyberport). After changing the Calgary Cyberport's IP and troubleshooting a few minor issues we were able to connect to the FVSD directly via H.323.

The SMART Boards in Calgary and each of the four locations in FVSD were used to provide the teacher and students with an interactive blackboard. Apart from training the teacher and students on how to use NetMeeting and the SMART Board this aspect of the course was relatively simple.

The first significant challenge was to determine how the students in the four sites could do small group work. Often the teacher would ask the students to break off into small groups of two or three to discuss a topic. Each of the four locations had at least two students except Rainbow Lake (which only had one), as a result this student was isolated and didn't have any other students to do group work with. Initially, this problem was solved by asking the students in the other three sites to go to different parts of the room away from the mics, the student in Rainbow Lake conversed over the main video conference link with a student in Fort Vermillion.

Eventually, this issue was overcome by utilizing the ViaVideo workstations at the back of the classrooms. The student in Rainbow Lake was connected with a student in High Level by using the ViaVideo workstations in each of the locations and initiating a separate H.323 call.

Since there was not a technical support person in each of the locations in FVSD the students at each of the locations had to set up the classroom on their own when they entered the room. This often included logging into their SMART Board PC's, starting up NetMeeting, adjusting the zoom on the camera, and for the students in Rainbow Lake and High Level it also included getting the ViaVideo workstations running and connected. Fortunately, the students in Rainbow Lake and High Level had some experience with computers and after some time was spent getting familiar with the equipment and software the two students were able to connect quite easily.

The course suffered from major technical problems in two of the classes. One class was cut short because of a variety of problems. The start of the class was delayed because of audio problems on the FVSD end, which was eventually solved by resetting the equipment. Part way through the same class the Calgary equipment needed to be reset because the video picture froze. Then later in the class the FVSD equipment needed to be reset again due to audio problems. Since the technical support person on the FVSD end was not available we were unable to get the equipment reset and the course had to end an hour early. In addition, another course was cancelled because the network from Calgary to Edmonton was down. The students in FVSD were able to converse with each other but the only communication the instructor in Calgary had with the students was using the SMART Board. We attempted to bridge the teacher into FVSD via a phone line but the system in Fort Vermillion had not been set up to handle the phone bridge.

Apart from the technical aspect of the course the instructor had to adjust her teaching style to fit the constraints of video conferencing. Due to the setup on the Calgary end it was not feasible for the teacher to walk around the room as she would in a traditional classroom setting. As a result, it took some minor adjustments for the instructor so that she became comfortable teaching from a sitting position. Due to the fact the teacher had to look at the four classrooms on a 27" TV monitor, which was divided into 5 small boxes, it made it very difficult

for the teacher to make out students faces consistently. In addition the teacher had to adjust her lessons accordingly to take into account the missed course time due to technical difficulties.

As a suggestion for future courses such as the Teacher Assistance Course, I would recommend that an extra class be built into the course in case a class has to be cancelled due to technical difficulties. If no problems arise during the year than the last class could be cancelled. Similarly, I would recommend that the course start 15 minutes earlier with a proctor in each classroom. This would allow all of the technical aspects of the course to be sorted out (i.e.: getting the Video Conference up, connecting the Smart Boards, and connecting the ViaVideos) prior to the start of the class so no instructional time is used. If a proctor was not available in each location then having the students arrive 15 minutes early would provide the time required to get the students to set up the room before the instructor was ready to lecture.