

**Video Conferencing at McBride Secondary School:
Methodology Report**

Rosemary Raygada Watanabe

Community Development Institute



University Of Northern British Columbia

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Rosemary Raygada
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Availability

Copies of all reports associated with the “Video Conferencing at McBride Secondary School Project” are available in a number of locations. In McBride, copies have been deposited with the Village Office and the public library. Copies of this report have also been sent to McBride Secondary School, Prince George Secondary School, Kelly Road Secondary School, and the Robson Valley Home Support Society. At the University of Northern British Columbia, copies have been deposited at the Weller Library or can be accessed on the Community Development Institute website: <http://www.unbc.ca/cdi/research.html>.

Project Reports

- Executive Summary
- Methodology Report
- McBride Case Study and Recommendations

Contact Information

For further information about this topic and the project, feel free to contact Greg Halseth, Acting Director of UNBC’s Community Development Institute:

Greg Halseth
Geography Program
University of Northern BC
Prince George, BC
V2N 4Z9
Tel: 250-960-5826
Fax: 250-960-6533
E-mail: halseth@unbc.ca
<http://web.unbc.ca/geography/faculty/greg>

Video Conferencing at McBride Secondary School: Methodology Report

1.0 Project Description

Technology plays a crucial role in the transformation of society. Communities are integrating the tools of these technologies in their own development processes. The education sector – one of the cornerstones of society’s development – uses these tools to enhance the process of teaching/learning, and to address the educational needs of those who are unable to attend schools, universities, and other educational institutions for various reasons.

Schools in northern British Columbia, as in other rural locations in Canada, have the capability to use video conferencing as a tool to reach students in remote locations and to provide them with the same opportunities for learning as students in urban centres. However, it is important to understand how video conferencing contributes to student learning, to teaching methods, and to community capacity building.

This project assesses a video conferencing pilot project started by McBride Secondary School in conjunction with Prince George Secondary School and Kelly Road Secondary School. The project operated for four years between 2003 and 2007. Teachers involved in the project have been working to overcome a number of challenges associated with video conferencing classes. Aside from the provision of technology, there has been limited support from School District #57. They have been faced with many technical challenges, have invested much of their own time in adapting materials from traditional classes to video conferencing, and have tried to motivate and involve students without any special training.

This report includes the methodology details and materials for the key informant interviews.

2.0 Methodology

A case study methodology was used to explore how a small town secondary school organized with schools in a larger regional centre to deliver / receive courses in real time using video conferencing. Three schools were involved in this research, including McBride Secondary School, Kelly Road Secondary School (KRSS), and Prince George Secondary School (PGSS) – all of which belong to School District #57 and were involved in a partnership to deliver education through video conferencing. This partnership was spearheaded by McBride Secondary School with KRSS and PGSS joining as partners in 2003.

Data for this exploratory research was collected through:

- in-depth, key informant interviews;
- a review of the Robson Valley Times newspaper (from 2003 to 2006), “AchieveBC” news (Ministry of Education “BCEd On-line”), and School District #57 reports and publications; and
- a review of school statistics in British Columbia using ICT, the Internet, and web conferencing tools; and communities with broadband.

Key Informant Interviews

A total of 9 in-depth interviews were conducted with key informants during the spring of 2007 (Table 1). The purpose of the interviews was to draw upon the experiences of administrators, teachers, students, and parents involved with the delivery of video conference courses to meet distance education needs for youth in McBride, BC, as well as the experiences of community group representatives involved in using video conferencing facilities for local capacity building initiatives.

Interview Respondents

	Number of Respondents	% of Respondents
Administrators	1	11.1
Teachers	4	44.4
Students / parents	2	22.2
Other	2	22.2
Total	9	

Source: Video Conferencing at McBride Secondary School Project.

Potential interview participants were contacted by telephone to describe the project, describe research ethics / consent issues, how they were identified as a key informant, and to ask if they would be willing to participate. For those willing to participate, we arranged a meeting at a time and place convenient to the key informant. Prior to the interview, the participants were again advised of the purpose of the research. During the interview, the interviewer recorded the interviews and took handwritten notes for the responses. All interviewees received a copy of the Executive Summary Report.

Questions were designed to explore the planning, delivery, monitoring, and evaluation of video conferencing in a rural high school classroom setting, as well as any challenges, expectations, or unique achievements. A copy of the interview guide is attached (Appendix A).

The analysis was conducted to explore four key themes including management, delivery, teaching capacity, and student capacity. These themes are outlined in more detail below:

- management (classroom support, validation, and funding networks);
- delivery (methods);
- teacher capacity (training, support, and addressing student expectations); and
- student capacity (support, roles, and expectation).

Newspaper Archives and Government Reports

Data collected from the Ministry of Education of BC (on-line news), School District #57 (publications and reports), Telus' news (an Internet community service provider), and the Robson Valley Times (newspaper) helped us:

- to identify a timeline and details of events that took place between 2003 to 2006,
- to identify rural schools using web conferencing tools in BC,
- to explore community perceptions of the use of high tech tools in student learning,
- to learn more about the broadband expansion plans for communities across BC, and
- to triangulate information from these secondary sources with information collected in the key informant interviews.

Inventory of Services in McBride

A service inventory lists the services that are available within a place. In the absence of services, information is collected about the closest location where residents can access the services they need. This study draws upon an inventory of services that was conducted by the CDI research team in McBride in 2005. In particular, this inventory tracked available education, health, protection, legal, government, industry, business, community, and recreation services.

Limitations

It was not possible to observe video conferencing events because there were no video conferencing courses during the semester that this study was completed. Further, none of the participating educational institutions kept recordings of video conferencing courses during the past two years. The absence of a web page to provide information about the materials delivered to the students also limited our evaluation of this pilot project. Instead, during visits to participating educational institutions, observational notes were taken in classes where video conferencing courses used to take place (Appendix B).

Appendix A: Interview Guide

Educational Institution: McBride Secondary School

1. Principal's name?
2. How many students are registered in grade 12 at the school?
3. Where do most students come from?
4. How many people work at the school?
5. Which governmental organizations do you coordinate with the most?
6. How do you communicate with the organizations?
7. Can you tell me the three main educational challenges in this district?
8. Do the students and teachers have an e-mail account at the school?
9. Approximately, what percentages of the parents use the Internet to communicate with the school?
10. How is the infrastructure for the video conference?
11. Why did you decided to have video conferencing classes at your school?
12. What did PGSS and Kelly Road want to have as a course delivered from McBride?
13. What courses did the school deliver through video conference?
14. How many students are involved in the video conferencing classes?
15. Did the students in McBride have a tutor?
16. What are the advantages of the experience using video conferencing?
17. Were any surveys conducted to evaluate student experience with using video conferencing?
18. What are the main challenges with the video conferencing courses?
19. What is the specific challenge for delivering video conferencing courses in McBride?
20. Was an agreement established between schools for delivering courses through video conferencing?
21. Does the community in McBride use this facility?
22. Do the teachers have training using video conferencing?
23. What suggestions do you have to improve these courses, and how do you see the future of video conferencing?

Former Students In Video Conferencing

1. Describe your experiences with courses delivered through video conferencing?
2. What opportunities did you have to share experiences with other students in video conferencing courses?
3. In the future are you going to take video conferencing courses?

Parent's Advisory Committee McBride School

1. What do you know about the student experiences with courses delivered through video conferencing?
2. What challenges do the students experience with the use of video conferencing?
3. What changes should the school make with video conferencing courses?
4. McBride is an isolated village, so another possibility for students is to use the program Learn BC. Do you know about this experience in distance education?

Teachers

1. What motivated you to use video-conferencing?
2. When you started teaching through video conference. Did you receive instructions from the school about how to use the video conference equipment (i.e. camera, microphone, etc)?
3. Does the school plan video conference courses with other schools?
4. How did you plan your classes using the video conference?
5. How well were you able to communicate and receive feed back from students in McBride?
6. In order to involve students from McBride, did you plan different follow up activities for them? How did they participate in class?
7. How well did students perform in learning tasks through video conferencing in McBride?
8. Did you know that the students were in the video conference class with no other coordinator in McBride?
9. Did you test the students from McBride? How did the students feel about learning from you through a video conference method? Did the students offer any comments or suggestions to improve the use of video conferencing in future classes?
10. Did your school record the video conference? (Have you even seen your class recorded?).
11. Are the schools training teachers to use video conferencing equipment or other technologies?

Appendix B: Video Conferencing Photos



Screen and TV in Video Conferencing



Screen in Video Conferencing

Appendix C: Useful Resources for Video Conferencing

Websites

Alberta Education. *Video Conferencing Research, Community of Practice Research Report*. Edmonton: Alberta Education. Website: http://www.vcalberta.ca/community/Research_Summary_Report_word_version_final.pdf.

This report examines the use of video conferencing technology to deliver education in Fort Vermilion School Division No 52, Red Deer Catholic Regional Division No. 39, Grande Yellowhead Regional Division No. 35, Edmonton public schools, and Prairie Rose School Division No. 8. Key topics include technical support, coordination and delivery, incentives, mentoring and training, and research and evaluation of video conferencing techniques.

Alberta SuperNet. Website: <http://www.albertasupernet.ca>

Provides high-speed connectivity for Alberta's public sector institutions including schools, libraries, health facilities, and government offices. Construction on the SuperNet (a high-speed digital network linking 429 urban and rural communities throughout the province) began in 2002 and was completed in 2005.

British Educational Communications and Technology Agency. Website: <http://becta.org.uk>

Established in 1998, BECTA's mandate is to promote the innovative use of technology to facilitate learning in the UK. This includes initiatives to provide teachers and parents with support to get children learning online, the role of leadership in implementing technology in education and training, and descriptions / evaluation of various types of video conferencing systems.

North Slope Borough School District. Website: <http://www.nsbds.org>

The North Slope Borough School District in Barrow, Alaska started using video conferencing in 1993 in order to deliver education to students of diverse cultures in outlying villages in order to prepare them to work and live in the information age.

The Institute for Distance and Distributed Learning at Virginia Tech. Website: <http://iddl.vt.edu/instructors/ivc/before.php>

Provides tips for teaching through video conferencing (i.e. dress codes for instructors, camera use, how to prepare powerpoint presentations, classroom management).

The Learning and Teaching Scotland Video Conference Hub (VC Hub). Website:
<http://www.ltscotland.org.uk>.

This Website demonstrates the use of various technologies (i.e. video conferencing, podcasts, online magazines, etc.) to deliver education to students, as well as information about teaching support and funding / cost savings programs for software and equipment.

University of Alaska – Office of Information Technology. Website:
<http://www.alaska.edu/oit/vcs/etiquette/etiquette.xml>

This Website provides information about setting up and using video conferencing equipment (i.e. camera placement, lighting, equipment checks, how to dial out, how to receive calls, how to schedule video conferencing sessions, reducing noise, dress codes, etc.).

University of British Columbia – Faculty of Medicine. Website:
http://www.med.ubc.ca/education/distributed_programs/mpaact/etiquette_training.htm

This Website provides information about video conferencing etiquette and training. Video conferencing tips focus on strategies for interacting with remote site participants (i.e. use of gestures, dress codes, time management, managing group sessions, design of presentations, etc.).

University of California – Cooperative Extension. Website:
[http://groups.ucanr.org/VC/Video Conferencing Etiquette and Tips/](http://groups.ucanr.org/VC/Video_Conferencing_Etiquette_and_Tips/)

This Website provides tips for managing meetings through video conferencing (i.e. scheduling video conferencing sessions / troubleshooting technical problems). There are also several links to other universities in the United States that provide video conferencing tips on topics such as setting up video conferencing equipment, how to call and answer remote sites, and troubleshooting technical problems.

University of Victoria. Website: <http://imp.uvic.ca/faculty/documents/etiquette.PDF>

This Website provides a link to a document with tips and etiquettes for tutors working with video conferencing related to the sound (voice and noise), presentation materials, timing (arriving and leaving the room), and camera movements.

University of Washington – How to Videos. Website:
<http://www.uwtpvproduction.org/resources/prodvideos.html>

“The Video Conference Zone” is a video clip that viewers can download from the UWTV Production website. It demonstrates good video conference techniques, as well as some common problems and how to avoid them.

Publications

Belanger, F. and Jordan, D. 2000. *Evaluation and Implementation of Distance Learning: Technologies, tools and techniques*. Hershey, PA: Idea Group Publishing.

Corbett, B. and Willms, J. 2002. Information and communication technology: Access and use. *Education Review Quarterly* 8(4): 8-14.

Hanson, G. and Hanson, G. 1995. *Instructional Telecommunications: A resource and planning guide*. Madison, Wisconsin: Wisconsin Department of Public Instruction.

Johnson, J. 2003. *Distance Education, The complete guide to design, delivery, and improvement*. New York: Teachers College Press, Columbia University.

Lau, L. 2000. *Distance Learning Technologies: Issues, trends ad opportunities*. Hershey, PA: Idea Group Publishing.

Sponder, B. 1991. *Distance Education in Rural Alaska: An overview of teaching and learning practices in audio conference courses*. Fairbanks, Alaska: College of Rural Alaska, University of Alaska Fairbanks.

Whitehead, B. and Jensen, D. 2003. *Planning for Technology*. Thousand Oaks, California: Corwin Press Inc.