

Growth of E-Learning in Small Remote Aboriginal Communities: Implications for University Teacher Education Programs

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Study Overview



Overall intent to identify factors that can potentially enhance success for Aboriginal high school students engaged in web-based learning in Canada

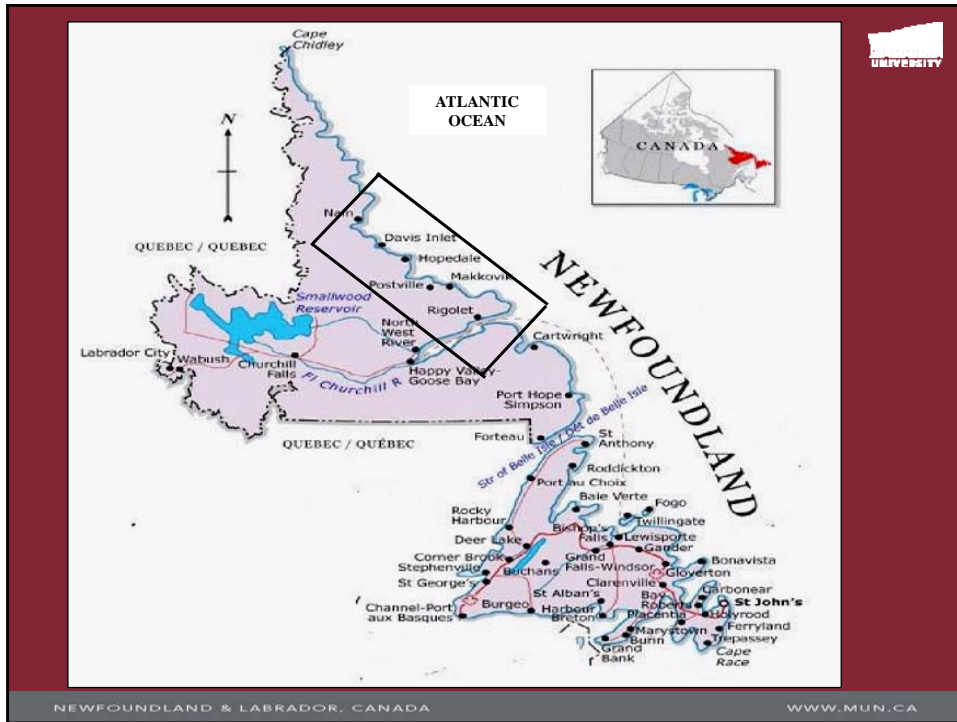
Supported by SSHRC Community-University Research Alliance funding

Study phases to date:

1. **An Examination of the effectiveness of web-delivered courses in 5 Aboriginal communities in Labrador, Canada**
2. **A pan-Canadian exploration of challenges and success factors in web-delivered courses in Aboriginal communities**

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Phase 1



- On-site interviews and focus group work with students, parents, teachers and school administrators
- Data from provincial, district and school records
- Synchronous e-learning course delivery, set schedule
- Widespread recognition of the critical importance of e-learning in these communities
- CDLI courses provided an opportunity to receive a level and richness of education which would otherwise not be available
- Overall, students did as well in CDLI courses as their other courses
- Sense of surprise and relief from participants that students were able to meet with academic success in these courses and compete with provincial counterparts


BUT.....several issues and challenges identified



AREAS FOR IMPROVEMENT

| ORGANIZATIONAL | COMMUNICATIONS | MOTIVATIONAL | CONTEXTUAL |
|--|---|---|---|
| Improve scheduling | Improve communication between CDLI teachers and parents | Improve student readiness skills for CDLI courses | Consider alternate physical space for CDLI courses within schools |
| Improve onsite supervision | Improve communication between parents and school | Identify and develop student attributes for success in CDLI courses | Improve technical support |
| Limit student access to distraction, eg Facebook, | Improve communication between CDLI teachers and students | Improve design of selected CDLI courses so they are less text-based | Provide curriculum specialist supports for these schools |
| Increase financial support for CDLI courses in schools for materials, etc. | Improve communication between CDLI teachers and onsite supervising teachers | | Provide support for social and emotional issues that may potentially impact student success in CDLI courses |
| Improve onsite technical support | | | |

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Phase 2 – Pan-Canadian study

- **Web-based HS course delivery in wide use across Canada and increasingly seen as viable and essential for students in remote Aboriginal communities**
- **Anticipated that results would help further inform/confirm phase 1 findings**
- **Identified and interviewed 25 “key informants” who were recognised and recommended to us as provincial/territorial leaders/educators involved in web-based course delivery**
- **All regions of country represented**

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What we asked



In your delivery of web-based courses to aboriginal populations, what challenges have you experienced and how did you address these with respect to:

- Organizational issues?
- Communication issues?
- Motivation issues?
- Contextual issues?
- Other issues? E.g. teacher readiness and in-service development?

General findings



- **There are wide regional differences in the organization and delivery across Canada**
- **Web-based learning is viewed as a viable option given the geography and isolation of many communities**
- **There is no clear cut web-based learning approach that could be considered a panacea....solutions need to fit the local context**
- **While most web-based course providers favour asynchronous communication, synchronous delivery is very successful in some regions**
- **Regardless of approach, it is clearly evident that a system of student supports and motivation (especially on site) is needed**

General findings (cont.)



- **Local communities differ in levels of support and commitment for web-based courses and education in general, but are an integral part of successful web-based learning and need to be involved directly in decisions and management**
- **Need for leadership and commitment to web-based learning at different levels (provincial, school district, individual school sites)**
- **Continued development of technical infrastructure and on-site support required along with committed funding –reliable infrastructure essential**
- **Literacy skills and a readiness for web-based courses often cited as a challenge for many students**

General findings (cont.)



- **Preparing teachers and support personnel for web-based course in aboriginal communities is a key issue**
- **Financial issues were frequently mentioned in terms of responsibility at local sites**
- **For some students, web-based courses fill gaps in local on-site offerings, but constitute the whole HS program for others, or can be an opportunity to continue upgrading / high school for adults**
- **Develop student essential skills and attributes in readiness for e-learning**
- **Need for effective communication between teachers, onsite personnel, students, parents, community**

Strategies for success - organizational



- **Strong leadership, responsibility and commitment at all levels**
- **Pre-service development and ongoing in-service for teachers**
- **Technical support and access to help as needed for teachers and on-site personnel**
- **Trained and motivated on-site mentors, facilitators with manageable workloads**
- **Develop community support for education and in developing culturally relevant content – engage elders, community leaders**
- **Adequate resourcing (web-based learning is not a cheap option if it is to be effective)**
- **Facilitate students who may miss schooling for periods of time**

Strategies for success - motivational



- **Development of a student learning culture and community:**
connecting students to students
on-line social activities, assemblies, etc.
- **Employ interactive delivery approaches**
- **Develop curriculum with culturally relevant connections**
- **Have available archived course lessons, materials, recordings, etc.**
- **Easily accessed and convenient technology support for students**
- **Have onsite coordinator, learning facilitator, and/or teacher with time dedicated to e-learning and student mentoring**
- **Use locally qualified people for on site student help**

Teachers for Aboriginal Student E-Learning



(Current situation from interview data)

- **Pre-service (B.Ed.) preparation lacks specific hiring needs e.g.**
 - Online pedagogy
 - Web-based technology for online learning
 - Aboriginal culture and perspectives on learning
- **Hiring preference for “good” teachers with expert subject knowledge**
- **Mixed opinion on hiring “new” or “experienced” teachers**
- **Provinces / Territories do not typically list or mandate specific online teacher hiring requirements (just teacher certification)**
- **In-service preparation (initial and ongoing) critical**

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Current Mix of Challenges



(location dependent)

- **Finding the “right” teachers for e-learning in an Aboriginal context**
- **Difficulties of recruiting into small isolated Aboriginal communities**
- **Community attitudes toward education & e-learning**
- **Working with a mix of students (literacy levels, age range, etc.)**
- **Establishing working relationship with community leaders, elders, parents**
- **Establishing & maintaining on-going in-service for teachers**
- **Articulation with post-secondary education and training**

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Expectations for E-Learning Teachers



- **Work with a diverse group of Aboriginal students**
- **Embed culturally relevant content into courses & respect cultural traditions**
- **Have good level of comfort & expertise with e-learning technologies**
- **Develop trust / confidence of Aboriginal students**
- **Manage open entry, exit & individualized programs**
- **Manage online resources (and community-based facilities)**
- **Work / liaise with community members (including parents)**

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Recommendation for Teacher Education Pre-Service Programs



- **Have online teaching as an optional core component (specialization?), to include, for example:**
 - Web-based technologies & environments
 - Online learning initiatives
 - Developing, managing & using online resources
- **Embed online course experience within degree programs**
- **AND, for working with Aboriginal high school students, include for example:**
 - Understanding and working with Aboriginal cultures & learning perspectives
 - Developing and using Aboriginal cultural content
 - Managing individualized student programs
 - Addressing learner diversity (literacy levels, age range, etc.)
 - Developing an awareness of living in small, isolated Aboriginal communities & working with community members

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Thank you.....

Questions?

Access to reports on Killick Centre for E-Learning site -
<http://www.mun.ca/killick/home/>