

The Conference Board of Canada  
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**Final Report** October 2005

# **Formative Evaluation of the Sunchild E-Learning Community**

**Prepared for:  
Sunchild E-Learning Community  
Board of Directors**

**Prepared by:  
The Conference Board of Canada**

## **Acknowledgements**

This report was authored by David Greenall, Senior Research Associate, The Conference Board of Canada under the direction of Dr. Michael Bloom, Executive Director, Strategic Projects and Initiatives, & Education and Learning, The Conference Board of Canada.

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Finally, our thanks to the staff and students of the Sunchild E-Learning Community and the Sunchild First Nation for taking the time to participate in the research, and to provide insights that will help the Sunchild model to move forward on a strong and sustainable basis.

### **About The Conference Board of Canada**

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## Executive Summary

Education is central to aboriginal human development. Despite recent improvements in educational attainment levels by First Nations learners, there still remains a substantial gap compared with non-First Nations peers. On-line learning programs, appropriately resourced, designed and delivered, represent a potential solution to the learning and skills development needs of aboriginal learners that can help to close the gap.

From January to June 2005, The Conference Board of Canada conducted an independent, formative evaluation of the Sunchild E-Learning Community. The Board was contracted by the Sunchild E-Learning Community Board of Directors, with financial support provided by the Government of Canada and the Government of Alberta.

The purpose of the evaluation was to:

- Evaluate the effectiveness and impact (‘educational value’) of the distributed e-learning model on the educational and skills attainments of First Nations learners;
- Evaluate the extent and appropriateness of integration of culturally-relevant instructional design and pedagogical principles into curriculum and delivery mechanisms.
- Identify areas for improvement and recommend strategies for future action by the Sunchild E-Learning Community Board, federal and provincial government agencies and corporate partners.

The objective of the Sunchild E-Learning Community is to increase the successful retention of aboriginal learners, to support the academic achievement of aboriginal learners at all levels of education, and to do so at a reasonable financial cost. Based on our review, The Conference Board is of the

opinion that, in the context of current financial realities, the Sunchild E-Learning Community presents a unique, First Nations oriented, learner-centric and reasonable cost education service that delivers positive educational results.

The Conference Board recommends that the Sunchild E-Learning Community continue to focus on delivering on current strengths, and to take, where appropriate, action to address suggested areas for enhancement. In some areas, the Sunchild E-Learning Community will be able to undertake unilateral action; in many cases, administrators indicate that it is already doing so. In other areas, all stakeholders in the Sunchild model have a role to play in helping to make Sunchild a sustained success, including learners, administrators, educators, communities, and funding partners such as government and the private sector.

By following on the recommendations of this report, the Conference Board believes that the Sunchild E-Learning Community will be in a strong position to continue offering a unique, effective solution to the estimated 28 year education gap that persists between First Nations and Canadian society as a whole.

### **The following Sunchild E-Learning Community strengths were identified:**

- **Sunchild E-Learning Community exhibits a “culture of success.”**  
Sunchild E-Learning Community administrators and teachers are strongly committed to improving First Nations learners’ educational outcomes and ensuring that students stay in school, graduate and develop essential skills that will enable them to succeed in all aspects of life. This commitment is both expressed by administrators and teachers, as well as being perceived by program stakeholders.

- **Sunchild E-Learning Community delivers positive educational results.** Over the 4 year history of the Sunchild E-Learning model, 73 per cent of enrolled learners participated in their on-line course, with 65 per cent of participating learners successfully completing their courses. Over the course of 4 years, 27 Sunchild learners, either through a stand-alone or blended program, have graduated (out of a possible 36 learners). Tracked over a three year period, there was 100 per cent graduation (6 of 9 graduates after 1 year, remaining 3 graduates after 2 years).
- **Sunchild E-Learning Community has achieved positive educational results at a reasonable financial cost.** On a per-course basis, total expenditures (including but not limited to instructional costs) equal \$1,272.34. This figure is comparable to recent provincial estimates of instructional funding for a two-semester, 8-12 course public secondary school student in Alberta. An additional cost savings is found in the fact that delivery of traditional education services could be expected to be significantly more costly in remote communities.
- **The Sunchild E-Learning Community offers benefits to individual learners and communities that are important, yet not always quantifiable.** For example, by offering high-quality education in First Nations communities with no other community-based schooling options, the program gives secondary and adult learners the ability to finish high-school and to up-grade essential skills without having to reside outside their own community. In effect, Sunchild makes an absolute difference for people in these communities. They would not otherwise have educational opportunity. The presence of Sunchild changes their educational outcome.
- **The Sunchild E-Learning Community is based on the Alberta Program of Studies.** Where relevant, and taking into account the cultural heterogeneity of First Nations program sites, the program is also adapted to the learning and cultural needs of individual First Nations learners. First Nations elders, staff members and other cultural experts are consulted before making changes to the curriculum.
- **In site communities, the use of a local, First Nations student mentor is a primary success factor.** The student mentor is responsible for:
  - tracking learner progress
  - dealing with technological issues
  - providing counseling about personal challenges, and
  - encouraging and helping learners to manage their time effectively in a paced, self-motivated learning environment.
- **The Sunchild E-Learning Community consists of a mix of live instruction and archived tutorials.** This combination enables individual learners to work in a structured, interactive environment while simultaneously providing for flexibility and individual pacing. This mix provides learners with a high-quality education offering that, in particular for adult learners, fits with their work and family situations.
- **The Sunchild E-Learning Community governance structure helps to mitigate many of the political and accountability challenges faced by band-operated reserve schools.** The Sunchild E-Learning Community is incorporated as a not-for-profit corporation. A Board of Directors, consisting of Sunchild and independent directors, governs the corporation. This governance structure separates the Sunchild E-Learning Community from the local band administration. The

presence of community directors ensures that the program reflects community values, while also helping to cultivate a sense of community pride and ownership.

- **Learners are expected to take responsibility for their own future, and to be accountable for their actions.** The Sunchild E-Learning Community expects all students to perform at levels equal to or above those of their aboriginal and non-aboriginal cohorts. Upon entry to the program, students must sign a contract affirming their commitment to success, and agree to work towards achieving such success.
- **The Sunchild E-Learning Community employs highly experienced, knowledgeable and motivated teaching staff.** The use of an e-learning platform eliminates the geographic barrier that limits the ability of many First Nations schools to attract and retain high-quality teachers. While teachers are independent contractors, the Sunchild E-Learning Community commits time and resources towards their professional growth and development. This commitment is viewed by the administration as vital to maintaining a highly-knowledgeable and technologically competent staff of educators.
- **Technology is viewed as a learning enabler ('learning through technology'), but not the sole solution to First Nations education.** The starting point for educational delivery remains with the interaction between educator and individual learner. Then the focus is placed on understanding how technology can be used to assist and facilitate this relationship, to create new opportunities for learning, and to create an effective learning environment conducive to academic success.

- **There is anecdotal evidence that the Sunchild E-Learning Community contributes to the development of learners' essential fundamental skills.** Although the Sunchild E-Learning Community does not explicitly target the development of essential skills, it has expressed a commitment to their development as a natural by-product of the delivery of a quality learning experience. Interviewed stakeholders suggested that essential skills development occurs through the on-line learning experience.
- **Sunchild E-Learning Community administrators are viewed by stakeholders as having strong outreach competencies.** Significant effort is placed on reaching out and engaging with site community educational authorities, band administrators and local support staff. Also, administrators actively work to engage, share information with and be accountable to the e-learning model sponsors and supporters.

**The following recommendations for program enhancement by the Sunchild E-Learning Community are made:**

- **Evaluate the governance and corporate performance management system.** The Sunchild E-Learning Community should take steps to clarify and communicate roles and responsibilities of the executive arm. It should also clarify how performance data is integrated into corporate strategic planning and improvement strategies. Further steps include setting clear, quantifiable targets and developing short and long-range goals and objectives. It should also expand current statistical record keeping to track and correlate additional indicators such as attrition, attendance and year-to-year retention. This is an important issue and should be acted upon.

- **Work to ensure that appropriate community financial, technical and human resources are available and appropriately directed to support and make the program work as it is intended.** This may include examining options for the Sunchild E-Learning Community to hire and employ local student mentors within site communities. This also means taking steps to ensure the quality of site learning environments. Quality of learning environment varies from site to site, potentially affecting the motivation and retention of learners.
- **Tighten the site selection process to ensure that the right communities are selected to participate in the Sunchild E-Learning Community.** Not all site communities have been a success. In some cases, lack of success can be linked to the communities not fully understanding what is required for their students to succeed. Some unsuccessful communities also did not commit and direct appropriate financial resources and time for the student mentor to function effectively or, to create an environment for learning.
- **Ensure that the right students are selected for entry to the Sunchild E-Learning Community.** While a screening process currently exists, some teachers are concerned that learners, in particular adult learners, often gain entry to the program without sufficient academic pre-requisites or adequate computer skills. As a result, they are often not prepared for the demands of an on-line learning environment. A rigorous, up-front needs assessment, undertaken collaboratively with site communities would help to identify students in need of advance upgrading. A pre-orientation course could further help to reduce the start-up time spent by course teachers on bringing students up to a minimum level of competence. To support a higher level of screening and program entry, the Sunchild E-Learning Community will need to examine the current funding model that is based on selling packages of course seats.
- **Clarify to learners the role and responsibilities of the student mentor.** Student mentors indicate that learners are often confused about the student mentor role and mandate, which sometimes leads to frustration on the part of learners. While the Sunchild E-Learning Community provides each student with a handbook explaining the student mentor position, more effort is required to effectively instill this message in students.
- **Train course and student mentors in cross-cultural instructional techniques and interventions, and align with technological capabilities:** Content and instructional design and delivery are essential components of education programming. The Sunchild E-Learning Community should consider the need for and opportunities to provide course and student mentors (where non-Aboriginal) with training (new or ‘refresher’) on learning theory and cross-cultural communication in order to meet the needs of learners.
- **Implement a student tracking methodology to better understand outcomes.** Implementing a tracking mechanism would help the Sunchild E-Learning Community administration to understand the utility and value of the model, and help to communicate such value to prospective learners and partners in government and business, as well as to other First Nations communities.
- **Examine the course delivery schedule and quality of archived materials.** The Sunchild E-Learning Community should consider conducting a needs assessment of adult learners to determine their

requirements, willingness, and ability to participate in live, synchronous tutorials during the evening.

- **Directly and explicitly target skills development and skills-based outcomes.** The Sunchild E-Learning Community should move away from treating skills as a by-product of achieving educational outcomes. It should adopt a systematic focus on achieving skills-based outcomes, assisted by skills measurement and evaluation projects, such as the Conference Board's on-line SkillsSolutionsNet and associated 'Skills Credentialing Tool.' Sunchild E-Learning should also work with industry and government partners to align skills development strategies with workforce needs.

**The following recommendations are made to provincial and federal governments:**

- Evaluate the relevance of the Sunchild E-Learning Community to federal and provincial First Nations education and economic development policy and programming objectives. This evaluation should be part of the governments' ongoing effort to address the 28-year education gap between First Nations and non-First Nations, as identified by the Auditor General of Canada.

- Consider ways to support the delivery of Sunchild E-Learning Community services to existing sites, and to support the extension of services to additional First Nations reserves. Work collaboratively to explore the feasibility of extending Sunchild E-Learning Community services to off-reserve, urban First Nations peoples.

**The following recommendations are made to private sector corporations:**

- Collaborate with program administrators to identify industry sector workforce needs, and to align the Sunchild E-Learning Community educational and skills development strategies to these needs.
- Collaborate with program administrators to identify communities that are appropriately suited to the program, and to ensure that First Nations community education authorities understand and support the requirements of participation.

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## Introduction

As the Government of Canada has recognized, Aboriginal learners are the most disadvantaged segment of the Canadian school population<sup>1</sup>.

While educational attainment statistics have somewhat improved for First Nations learners over the past decade, a recent report by the Auditor General estimated that, at current rates, it will take 28 years to close the education gap<sup>2</sup>. There remains significant room for further improvement, particularly for First Nations people in Western Canada.

According to research conducted by the Canada West Foundation, Aboriginal students in Western Canada are most likely to leave school between grades 9 and 12. The percentage of Aboriginal individuals in western Canada with less than a high school diploma is considerably greater than that of the general population. In 2001, for example, 49.8 per cent of the Aboriginal population in the West who were over 15 and not attending school possessed less than a high school diploma compared to 31.3 per cent of the general population. For on-reserve students, the scene is even more stark. Over 60 per cent of on-reserve residents in Western Canada have withdrawn from school prior to earning a high school graduation certificate – a strong contrast to 45 per cent of off-reserve residents.<sup>3</sup>

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<sup>1</sup> Government of Canada (2002), *Knowledge Matters – Skills and Learning for Canadians*.

<sup>2</sup> Auditor General of Canada. (2004). *2004 Report of the Auditor General of Canada: Chapter 5 – Indian and Northern Affairs Canada – Education Program and Post-Secondary Student Support*. The estimate is calculated by comparing the number of people, over the age of 15, with a high school education, for the census years 1991, 1996 and 2001. The achievement rate for non-aboriginal peoples is assumed to be held constant, while the rate of change in educational achievement between the 1996 and 2001 census years is extrapolated forward.

<sup>3</sup> Brunnen, B. (2003) *Encouraging Success: Ensuring Aboriginal Youth Stay in School*. Canada West Foundation. p.8-10.

In a knowledge economy, there is an urgent need to improve high school completion rates, in particular amongst First Nations learners living on reserve. There is also a need to ensure that high-school and adult First Nations learners have the essential skills and competencies that will enable them to compete with learners graduating from non-First Nations schools. For First Nations learners in Alberta, Saskatchewan and Manitoba, labour market pressures make these needs particularly acute.

In 2001<sup>4</sup>, The Conference Board of Canada identified the need for greater understanding, both within and outside of the First Nations education system, of how e-learning and blended learning solutions can help to address the specific needs of First Nations learners. The critical importance of advancing such understanding has been subsequently affirmed and reinforced by the Province of Alberta<sup>5</sup> and the Government of Canada<sup>6</sup>. Understanding how e-learning strategies can benefit First Nations learners is an important part of developing and implementing strategies designed to address these education challenges.

The Sunchild E-Learning Community (from this point forward, referred to as *Sunchild*) is a private, non-profit, non-government funded and incorporated school that provides access to education choices such as high school diploma courses, basic adult upgrading, trades, industry training and university courses to First Nations learners through an e-learning delivery service. It is a concrete example of how First Nations are exerting control over their educational futures by embracing the benefits of

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<sup>4</sup> Greenall, D. and S. Loizides (2001) *Aboriginal Digital Opportunities: Addressing Aboriginal Learning Needs Through the Use of Learning Technologies*. The Conference Board of Canada

<sup>5</sup> Government of Alberta (2003). *Every Child Learns. Every Child Succeeds. Report and Recommendations Alberta's Commission on Learning*; Government of Alberta (2004), *Learning Technology Policy Framework. Alberta Learning*.

<sup>6</sup> Government of Canada (2002). *Knowledge Matters: Skills and Learning for Canadians*.

technology in order to meet the specific learning needs of First Nations learners.

From January 2005 to June 2005, The Conference Board of Canada conducted an independent, formative evaluation of the Sunchild E-Learning Community. The Board was contracted by the Sunchild E-Learning Board of Directors, with financial support provided by the Government of Canada and the Government of Alberta.

The purpose of the evaluation was to:

- Evaluate the effectiveness and impact ('educational value') of the distributed e-learning model on the educational and skills attainments of First Nations learners;
- Evaluate the extent and appropriateness of integration of culturally-relevant instructional design and pedagogical principles into curriculum and delivery mechanisms; and
- Identify areas for improvement and recommend strategies for future action by the Sunchild E-Learning Community Board, provincial/federal government agencies and corporate partners.

This report presents the findings of the Conference Board's evaluation.

## Chapter 1

# Sunchild E-Learning Community Description

**S**unchild is a First Nations controlled alternative to formal, state-run schooling. Sunchild is a private, non-profit, non-government, incorporated funded school that provides access to comprehensive education choices such as high school diploma courses, basic adult upgrading, trades, industry training

and university courses to aboriginal learners (of all ages) through an e-learning service. As of the 2003-04 school year, Sunchild offers Grades 9 to 12 courses, basic adult upgrading, and pre-apprenticeship screening and readiness for 12 First Nations in Alberta (including Sunchild First Nation). Grade 7 and 8 courses have been developed for the 2005-06 school year.

In the 2003-04 school year, there were 441 course enrollments, with 246 course participants. 182 of the participating courses were delivered to First Nations learners off-Sunchild reserve. 18 of the participating courses were delivered to Sunchild/O'Chiese adult education (outside of the Sunchild First Nation School).

### Governance

Sunchild is incorporated as a not-for-profit corporation<sup>7</sup>. A Board of Directors, consisting of 5 members, governs the corporation. Currently, these members are:

- Martin Sacher, Chief Executive Officer/ Program Administrator
- Nelson Daychief, Chair, Director of Education, Sunchild First Nation Education Authority
- Harry Goodrunning, Education Portfolio, Sunchild Chief and Council
- Gelaine Goodrunning, Community Member at Large
- Dave Schepens, Secretary, Consultant/Advisor to Sunchild First Nation Education Authority

Martin Sacher, Principal of the Sunchild First Nation reserve school, devotes administrative time towards the Sunchild E-Learning Community.

<sup>7</sup> Sunchild E-Learning Community By-Law No.1; Letter of Patent, June 3, 2004.

## Participating Reserves

As of the 2003-04 school year, Sunchild delivered education services to 12 First Nations communities in Alberta:

- O'Chiese (reserve + adult education)
- Peigan
- Sunchild (reserve + adult education)
- Saddle Lake
- Whitefish
- Aseniwuche Winewak
- Fort Chipewyan (Athabasca Delta)
- Fort McKay
- Fort McMurray
- Chipewyan Prairie
- Alexis
- Louis Bull

In 2005<sup>8</sup>, Sunchild is also servicing the following communities, schools and colleges:

- Tsui Tina
- Old Sun College
- Red Crowe College
- Siksika High School
- Kainai High School

Many of the First Nations communities to which Sunchild delivers services are characterized by the typical challenges faced by First Nations schools. Many communities do not have on-site secondary schools, or for those that do, are unable to offer high-quality courses in Grade 10-12 Maths and Sciences. It is also not financially feasible for communities with small enrolments to hire subject specialist teachers. Learners in these reserves wishing to pursue high-school studies are often faced with the prospect of having to move away from home, or face a long-distance commute to the nearest education centre. For example, Fort McKay offers kindergarten to Grade 8 schooling on reserve. The closest

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<sup>8</sup>As of the 2004-05 school year, Sunchild served 184 students in 16 communities (314 courses). Sunchild estimates the 2005-06 school year will serve 280 students in 21 communities (600 courses) including: Doig, Aboriginal Futures, Driftpile, ColdLake

high-school is located 60 kilometers away in Fort McMurray.

## Education Objectives and Philosophy

The stated objective of Sunchild is to increase the successful retention of aboriginal learners, to support the academic achievement for aboriginal learners in all levels of education, and to do so at a reasonable cost<sup>9</sup>. To do so, the school was designed to deliver the best student centered learning experience possible for any student, whether high school age or adult learners. The ultimate intention of the model is increase access to learning opportunities in order to prepare First Nations learners to finish high school with a full, accredited, diploma that would prepare them for a post-secondary school environment, whether in trades, college or university.

Sunchild is founded on a philosophy of transforming indigenous education through the pursuit of academic excellence. Sunchild is an alternative for learners who may find it difficult to follow a regular pace and schedule when completing their course work. Lessons and classes are intended to be challenging – to compete with the best schools. Courses are designed to be content rich, accompanied by real time instruction delivered by highly qualified, certified teachers.

Principles underlying the development of Sunchild are:

- *Student centered teaching and learning:* design and implement an instructional environment that is particularly suited to the specific learning styles, needs and challenges of individual First Nations learners;
- *Flexibility:* decentralize learning while maintaining teacher-student interaction and peer collaboration;
- *Respect:* obtain elders and First Nations colleagues' advice and approval when

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<sup>9</sup> Sunchild Business Plan (2003), p.1

integrating First Nations values and culture into the program content;

- *Collaboration*: bring together and build on the unique strengths, connections and wisdom of community stakeholders (including learners, elders, teachers, administrators, corporate partners<sup>10</sup>, other First Nations, government and post-secondary learning institutions);
- *Cultural adaptability*: prepare learners to be productive citizens in both First Nations and non-First Nations worlds;
- *Essential skills*: focus on curriculum design to enhance learners' literacy and numeracy skills;
- *Rich learning environment*: build on the Program of Study and Diploma Examination foundations, while also creating opportunities for learners to explore issues that are of direct interest and relevance to them; and
- *Accountability*: regularly review and assess educational outcomes and adjust to address performance gaps. Individual learners are also expected to take responsibility for their own education future.

### Education Model and Delivery

All Sunchild courses are based on the Alberta program of studies. In developing the curriculum, Sunchild started with and maintained the high academic standards of the Alberta program of studies. Doing so ensured that Sunchild learners get a full, rich curriculum that equals that of other Alberta learners (aboriginal and non-aboriginal). Sunchild then incorporated culturally-relevant content, where possible, that was matched to the needs of First Nations learners. Given the distributed nature of programs, from the beginning of the design process, Sunchild curriculum designers employed a 'bio-regional' method to make

native content as relevant as possible. Sunchild administrators and course teachers interacted (and continue to) with aboriginal colleagues, community elders and First Nations experts in order to identify and gain approval for culturally-relevant content. Taking a generalized, homogeneous approach to building in aboriginal content was perceived by administrators to not respect the specific language, culture, environment and perceived "sovereignty" of each First Nation.

Prospective learners are screened by site 'student mentors.' Sunchild provides screening guidance, and has identified the following traits of successful on-line learners<sup>11</sup>:

- Perseverance,
- Consistent communication with student mentor, and
- General good attendance

Sunchild operates like a traditional school with timetables, calendared due dates, and tutorials. The program is offered as either a blended program (with complementary classroom based instruction) or a stand-alone program depending upon the education programs currently existing on reserve. In the blended program, learners take some of their courses through the e-learning system and others through the regular high school program. In a stand-alone situation, no other high school courses are offered on reserve – either due to a lack of facilities, or in some cases, a lack of teachers. In this situation, the entire high school program is offered through the E-Learning model.

Learners are provided with a blend of real-time instructor supported e-learning which involves audio, whiteboard and chat capabilities enabled by compressed software (WebCT and Elluminate Live) operating over a common phone line<sup>12</sup>. Learners are expected to attend class and participate in tutorials. In addition, an archiving feature

<sup>10</sup> Corporate partners are Burlington Resources, ConocoPhillips, Nexen, Shell Canada, Suncor Energy, Syncrude and TransCanada.

<sup>11</sup> Sunchild (2004), *Student Mentor Handbook*, p.4

<sup>12</sup> Student technological requirements are listed in Appendix B.

enables learners to access archived classroom instruction in real time.

A key feature of the Sunchild model is the Aboriginal student mentor support staff. Described by many stakeholders as the ‘lynchpin’ of the program, each site employs a student mentor to provide in-class mentorship and support to learners. The student mentor is ‘built-into’ the learning process, in an effort to ensure that remote learners are not disaffected by the faceless delivery of on-line education.

The student mentor is the local, on-site support resource for learners. While not necessary, in some sites they have chosen to employ a certified teacher. The student mentor acts as community liaison, learner coach and support, technical troubleshooter, and helps keep students on-track with assignments and performance reporting. The student mentor typically comes from the local community, and thus is a vital connection to the immediate issues and challenges that Sunchild learners face. The student mentor is not employed by Sunchild, and is instead resourced by the local community (e.g. education authority or band administration).

Learners are expected to take ownership and responsibility for their education. Prior to enrollment, each student is recommended to submit a completed ‘Sunchild E-Learning Student Letter of Agreement.’ By signing the letter, learners indicate that they are committed to succeeding in the program and that they have set graduation and career goals (as outlined in the letter).

### **Program Outcomes**

According to the report and recommendations of Alberta’s Commission on Learning (2003), “the first and only criterion for judging the success of schools and the education system should be how well every child learns.<sup>13</sup>”

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<sup>13</sup> Government of Alberta, *Every Child Learns. Every Child Succeeds. Report and Recommendations Alberta’s Commission on Learning* (2003), p.4

For the purpose of this review, the Conference Board evaluated program performance by considering the following indicators of learning and school performance:

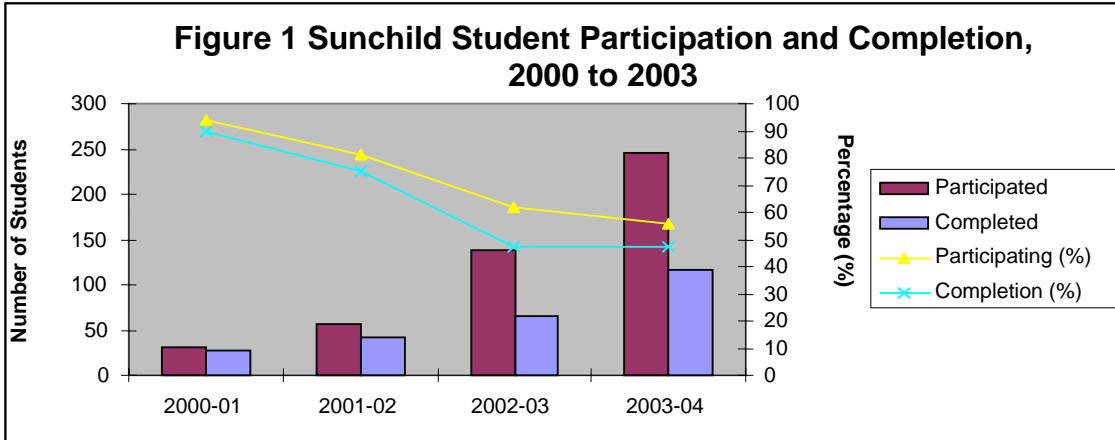
- **Course enrollment:** # of learners taking a course in 1 semester
- **Student participation:** # of learners enrolled in a course and attempting the course (defined as handing in at least 3 assignments)
- **Student non-participation:** # of learners enrolled in a course but not attempting the course (defined as handing in less than 3 assignments)
- **Student completion:** # of learners participating in course who pass their course (achieve  $\geq 50$  per cent)
- **Student incomplection:** # of learners participating in course who did not pass their course (achieve  $< 50$  per cent)
- **Student excelling:** # of learners participating in course who achieved  $\geq 80$  per cent in their course
- **Student completion rate:** percentage of learners participating in course who completed their course

Two important indicators of educational performance are course participation and completion.

Over the 4 year history of Sunchild, 73 per cent of enrolled learners participated in their on-line course, with 65 per cent of participating learners successfully completing their courses (see Figure 1). While successful completion of high-school cannot be attributed solely to Sunchild, it is important to note that over the course of 4 years, 27 Sunchild learners, either through a stand-alone or blended program, have graduated (out of a possible 36 learners).

Tracked over a three year period, there was 100 per cent graduation (6 of 9 graduates after 1 year, remaining 3 graduates after 2 years). Eighteen of these graduates have come from the Sunchild reserve blended-program. Two adult education learners also graduated during this period.

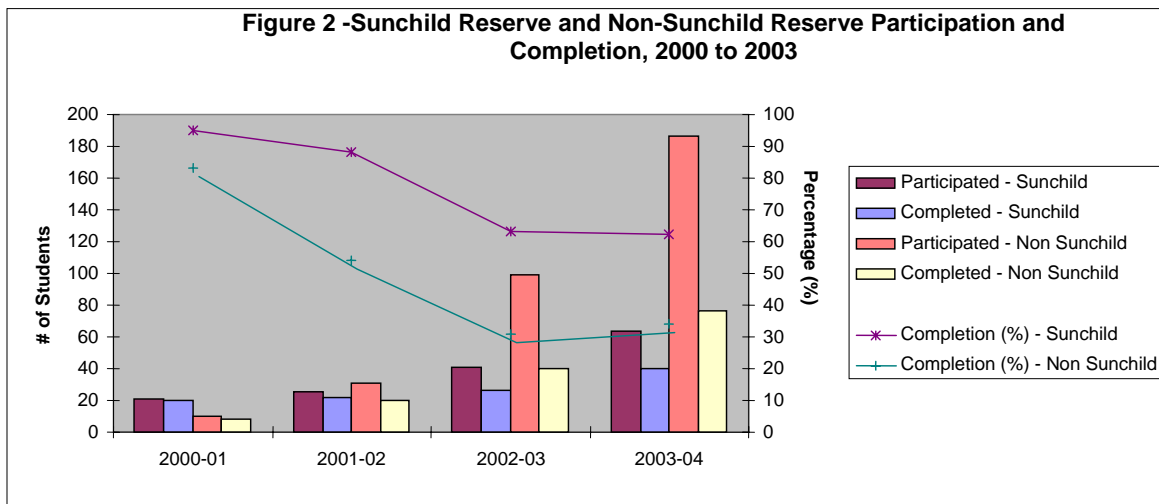
By segmenting the data, it is shown that this downward trend can be correlated to the low performance results of the higher populated student body in external sites (see Figure 2). As Sunchild has expanded its service delivery beyond the Sunchild First Nation School, and its control over the student



This graduation rate must be considered in light of the 60 per cent of on-reserve residents in Western Canada that have withdrawn from school prior to earning a high school graduation certificate.

mentor position and learning environment has decreased, learner success rates have decreased. As of 2003-04, external sites represent nearly two-thirds of the student body. In 2003-04, 62.5 per cent of Sunchild reserve learners completed their courses, while 34 per cent of non-Sunchild reserve learners completed their courses<sup>14</sup>.

While in absolute terms Sunchild has increased the number of courses that it delivers over this time period, a downward trend-line is evident in both student



participation and completion rates (expressed as a percentage).

<sup>14</sup> Site enrollment figures were not provided, and thus are not factored into our evaluation. It would, however, be instructive to gauge the extent to which learners in individual communities are enrolling and not participating.

## Sunchild Cost

As of the 2003-04 school year, the cost of basic program delivery totaled \$30,000 per site per year. For this amount, each site receives the basic high school education package, consisting of 50 courses (1 course = 1 seat enrollment in a particular course offering). The cost per seat per course is \$600<sup>15</sup>. Facility and other site-specific costs are not included in this cost, and are instead borne by the site community (see below for site costs).

### Sunchild E-Learning Community Registration and Seat Count Policy

- Learners registered on the semester start date and still active after the drop date are counted as 1 seat
- Learners registered on the semester start date and leave the course prior to the drop date are not counted as a seat
- Learners registered on the semester start date and are inactive after the drop date are counted as 1 seat
- Learners who have not completed the course during the semester, and want to carry the course into the second semester will be counted as 2 seats taken

For the 2003-04 fiscal year, expenditures spent on day-to-day operations totaled \$561,100<sup>16</sup>. On a per-course basis, operating expenses equal \$1,272.34 a year<sup>17</sup>. While comparing financial costs of programs is difficult, it is useful to note that the Government of Alberta's 2005-06 Funding Manual indicates that the base instructional annual funding for 37 credit enrollment units (Grades 9 to 12) is \$5232.34 (corresponding to 8 to 12 courses per year). Additional annual funding amounts to be considered include First Nations education (\$1,040),

<sup>15</sup> A sliding cost scale is used. For 50 to 75 seats, the cost is \$500 per seat. For 75 to 100 seats, the cost is \$450 per seat.

<sup>16</sup> Based on Projected Income and Cash Flow Statement for Fiscal Year April 03 to March 04. Not audited or verified.

<sup>17</sup> Calculated using 441 course enrollments for 2003-04 school year.

socio-economic status (\$416) and northern allowance (\$936)<sup>18</sup>. Other programs also contribute funds to support instruction. The actual cost of overall public school education is also likely much higher due to additional costs associated with operating costs, capital expenditures and infrastructure expenditures.

Alberta Human Resources and Employment's estimates that the cost of delivering adult academic upgrading courses is approximately \$ 2,400 per learner for tuition and books for one semester (4 courses), \$4,800 for two semesters (8 courses). If the learner's living allowance (\$2,700 for a learner who is single) is factored in, the cost per learner to HRE is approximately \$7,500 per year for tuition, books and living allowance. It is noted that HRE is only one source of funding that First Nations students must access through a combination of agencies, including HRE, INAC, and Social Assistance. Using Sunchild's estimates, the cost of living allowances and other hard costs (such as textbooks) can add as high as \$10,000 to the cost of off-reserve schooling, on a per student basis. The fact that Sunchild learners can remain in their home communities represents a significant cost savings.

Sunchild's costs of operation do not reflect costs that must be absorbed by the site community. These unaccounted costs include student mentor salary and benefits (covering, optimally 50 per cent to 100 per cent of their time), site maintenance, textbooks<sup>19</sup>, travel, and technology capital and maintenance costs (outlined below).

The current funding model is based on revenues generated by matching contributions from site communities and corporate sponsors. Typically, corporate sponsors cover 50 per cent of the cost, with a funding arrangement whereby the

<sup>18</sup> For more information, see [http://www.education.gov.ab.ca/funding/FundingManual/pdf/7\\_1.pdf](http://www.education.gov.ab.ca/funding/FundingManual/pdf/7_1.pdf)

<sup>19</sup> Textbook costs are charged to individual learners. Learners are reimbursed upon return of the books at year end.



community pays the other 50 per cent of course costs. In some cases, however, corporate sponsorship covers 100 per cent of the course costs. Starting in 2003, corporate sponsors agreed to a funding commitment of 3 years, after which each community is required to cover the costs in full. In addition, the 4 original corporate sponsors each contributed \$25,000 to cover program start-up costs.

A total of \$225,000, or 40 per cent of total expenditures, was spent on instruction (teacher salaries). Another 8 per cent of total expenditures, or \$45,100, was spent on program administration, in the form of administrative salary.

### **Technology Requirements and Costs**

Most Sunchild sites access the Internet through dial-up modem. The lack of access to high-speed connectivity limits the high-bandwidth programs, although the on-line learning platform, vClass and Illuminate live still operate with little disruption. The future launch of Alberta's Supernet should also help to make the speed of technology delivery even more efficient.

The technological needs of each site are assessed individually with the costs of satellite and/or Internet hook-up covered by the communities. The cost of satellite hook-up is estimated by Sunchild to be approximately a \$3,500 initial cost plus \$100 per month in connection charges.

The basic desktop configuration required by each student is a monitor, hardware, printer, sound card and microphone at an approximate cost of \$750 per unit. The lifespan of each unit is approximately 5 years. Amortized over this period, the cost of each unit per course seat is approximately \$75.

Each community is required to procure and cover the costs of technology required for learners to access Sunchild education services.

A full description of technological requirements is provided in Appendix A.

### **Performance Measurement and Reporting**

Sunchild tracks assignment completion and test results on a weekly basis. Assignments are graded by course teachers, while quizzes and exams are administered by site 'student mentors.' On a weekly basis, student mentors are required to check the status of their learners' progress. Student mentors and the Sunchild E-Learning Community principal are sent monthly reports on student marks. Immediate reporting allows opportunity for immediate intervention and support for learners.

Student mentors are required to develop report cards for distribution to learners, parents and local educational authorities.

For Sunchild learners that do not have a host school (e.g. only enrolled in Sunchild courses), Sunchild administration is responsible for submitting final grades to Alberta Learning.

### **Staff**

Sunchild employs 8 course teachers. Course teachers are certified and, in general, highly-educated and experienced. Professional teaching experience ranges from 1 to 24 years, with a mean of 14.1 years and median of 18 years.

There are 12 site student mentors, employed by the site community. Student mentors may or may not be certified, but are members of the local community. They typically do not have teaching experience, but are resourced from the local community to provide coaching and community liaison support.

### **Staff Training and Support**

Each year, the administration hosts a Sunchild E-Learning Community Intensive Workshop (see Community Outreach section). Course teachers are encouraged to work with the administration on 'professional growth plans,' and are, on an annual basis, given an opportunity to attend a conference on 'on-line learning.'



At the start of the school year, student mentors are given a 'Checklist' with guidance on position roles and responsibilities. The 'Checklist' document covers key questions for both student mentors and learners regarding pre-school year activities, student orientation, and daily/weekly/monthly/semester activities. Student mentors are also provided with a Student Mentor Handbook that provides step-by-step guidance on technical troubleshooting, roles and responsibilities. At the start of each school year, course teachers are given an updated 'E-Learning Teacher Manual.' The teacher manual is a technical manual that covers roles and responsibilities and troubleshooting insight. An Operational Policy document is also provided to course teachers, outlining the school calendar with deadlines.

### **Partnerships with Other Institutions**

In an effort to expand its reach, and to offer additional learning opportunities, Sunchild has recently entered into 2 partnerships with external organizations:

- (1) Southern Alberta Institute of Technology (SAIT)

A Memorandum of Understanding was signed in 2005 to jointly explore opportunities associated with:

- The Alberta Learning/SAID Collaborative Server Based Computing Project
- Developing Pathways for Sunchild learners to explore career opportunities that are available to them. SAIT will also provide opportunities for qualified learners to start their programs of study while still in school.
- Developing training relationships in Canada's north to help address education and training requirements in the energy sector, specifically in the oil sands and pipeline projects.
- Establishment of an Aboriginal high school located on the SAIT main campus. The Aboriginal high school

would be part of the SAIT Polytechnic Academy that is designed to address the needs of learners wishing to pursue a post-secondary diploma/degree.

- (2) National Aboriginal Achievement Foundation (NAAF)

A Memorandum of Understanding has been signed to explore opportunities to develop and deliver on-line "Industry in the Classroom" to Aboriginal communities through the Sunchild network. The MOU also specifies the need to pilot test the "Railway in the Classroom" segment through the Sunchild learning community.

### **Community Outreach**

Sunchild has developed a communications document called the "Template for Success." This document is used by Sunchild to build site community leader awareness of the program—what it is, what financial/human/technological support it requires to be successful, who should be responsible and accountable for action items, and deadlines for completion. When a new delivery site is selected, Sunchild administration conducts on-site sessions, helping community leader's to work through and understand the Sunchild vision and how it is delivered.

Every August, Sunchild hosts a two day Sunchild E-Learning Community Intensive Workshop. The workshop is for community leaders, student mentors, corporate sponsors and professional staff. The purpose of the workshop is to create common understanding of Sunchild's vision, pedagogy, and operational procedures. The workshop is also an opportunity for staff to learn about changes and upgrades to Sunchild technology.

# Chapter 2

## Evaluation Study Methodology/ Approach

Program evaluation has two main purposes

- to help design or improve the design of policies, programs and initiatives; and
- to provide, where appropriate, periodic assessments of policy or program effectiveness, of impacts both intended and unintended, and of alternative ways of achieving expected results.<sup>20</sup>

The Conference Board's formative evaluation addresses both purposes.

### Design of the Evaluation Methodology

A systematic, data-based approach to evaluation was used. Given the absence of complete pre-program baseline measurements (e.g. education data for Sunchild site communities) and a comparative control population, the evaluation used a post-program difference-estimate design. This approach asks what can be inferred, based on quantitative and qualitative information, about the effect that the program has likely had on education delivery and learners' achievements.

Evaluation contains both objective and subjective dimensions. To accommodate this reality, the Conference Board used evaluation techniques belonging to both the rational and constructivist<sup>21</sup> fields of

enquiry. Alongside the collection of quantitative metrics, such as financial data, educational attainment and staffing data, the Board conducted a multi-stakeholder interview exercise that enabled deeper, qualitative insight to varying perceptions about the 'success' of the Sunchild program. In doing so, it also allowed the Board to identify and consider factors relating to program and educational performance, which might not be captured by 'objective' quantitative-based evaluation methods.

All design stages of the evaluation methodology were reviewed with the Sunchild administration. All steps were approved by Sunchild administration prior to moving forward. Where relevant, Sunchild administration provided input and feedback regarding ideas and options for improving the process.

The evaluation sequence was as follows:

- Definition and agreement on evaluation scope and terms of reference
- Site visit (Sunchild reserve)
- Preliminary scoping interview with Sunchild administration
- Stakeholder identification and mapping
- Document request and review
- Development and delivery of on-line questionnaire to Sunchild learners
- Development and delivery of on-line questionnaire to Sunchild course teachers and student mentors
- Stakeholder interviews and follow-up interviews with Sunchild teachers
- Additional resource request and question clarification

In the areas of educational outcome and cost, the Board was able to undertake some basic benchmark comparisons. These comparisons provide insight to similarities and variations between Sunchild data and corresponding provincial data. Overall, the absence of publicly available data regarding provincial First Nations educational outcomes made further benchmarking impossible.

<sup>20</sup> Treasury Board Secretariat [www.tbs.ca](http://www.tbs.ca)

<sup>21</sup> Constructivist research is founded on the understanding that knowledge is context dependent and the result of perspective. As Guba and Lincoln (1994) note, constructivism is concerned with the co-development of knowledge through interactions between the researcher and subject. Bias can therefore not be eliminated from scientific inquiry.

## Data Collection Instruments and Activities

All financial, administrative and education documents relating to the scope of this evaluation were requested by the Board, and were provided by Sunchild. A full review of these documents was undertaken. The list of documents is provided in Appendix B.

An initial site visit was conducted in February 2005. The Sunchild school and computer facilities were visited. Upfront scoping interviews were held with Martin Sacher (Program Administrator), Jim Moreau (Principal), Nelson Daychief (Director of Education, Sunchild First Nation Education Authority), Dave Scheppens (Consultant), Bev Latter (Business Development Manager) and Jim Brennan (Sunchild student mentor). A questionnaire was developed by the Board to help guide the scoping process. The questionnaire is provided in Appendix C. A number of informal conversations with learners were also held to gauge their perspectives on the program.

An on-line questionnaire was developed by the Board for Sunchild learners. The questionnaire is provided in Appendix D. The questionnaire solicited student feedback on issues such as their learning experience, the utility and effectiveness of technology, the role of the student mentor and how instruction and content are delivered by course teachers. Twenty-four Sunchild learners participated in the on-line survey.

An on-line questionnaire was developed by the Board for Sunchild course teachers and 'student mentors'. The questionnaire is provided in Appendix E. The questionnaire solicited course and student mentor feedback on various issues, including those questions asked of learners. The intent was to understand these issues from the perspective of various stakeholders. All eight course teachers participated in the on-line survey. Six 'student mentors' participated in the on-line survey.

Follow-up interviews were conducted with course and 'student mentors' by telephone.

The purpose of these interviews was explore issues raised in the on-line survey, as well as to provide course and 'student mentors' the opportunity to raise additional issues, concerns and perspectives.

In-person and telephone interviews were also conducted with various corporate partners. These interviews offered insight to corporate perspectives about the utility and efficacy of the Sunchild program. Five corporate partners were interviewed.

## Evaluation Caveats

- Evaluation timing: this report is based on the Board's independent analysis of 4 years of education performance and financial data. Data was used for the 2000-01, 2001-02, 2002-03, and 2003-04 school years. The Conference Board's findings do not reflect more recent information and as such should not be interpreted as reflecting the current academic performance and financial situation of Sunchild.
- Data quality and comprehensiveness: all educational performance and financial data was supplied by Sunchild administration. The Board did not assess the veracity of reported data. Community site baseline education data and financial information was unavailable.
- Student population: this report examines together the Sunchild E-Learning Community results for *all* learners and course offerings. Included are youth and adults, as well as high school, basic adult upgrading and industry training programs.

Wherever possible, to facilitate accurate comparison and benchmarking, the Board attempted to align Sunchild metrics with comparative metrics used by the province of Alberta and government of Canada. However, this was not always possible, as such data is often publicly unavailable.

Due to privacy restrictions, the Board was not able to examine individual student's

provincial test results. Assessing this information would have been useful in order to gauge improvements in the overall level of education amongst participating learners (compared to pre-Sunchild enrollment provincial test results).

## Chapter 3

### Evaluation Findings

This section presents the findings from the Conference Board's evaluation. Findings from the evaluation are presented under the following headings:

- Sunchild E-Learning Community strengths
- Areas for enhancement

Based on our review, The Conference Board is of the opinion that the Sunchild E-Learning Community presents a unique, First Nations oriented, learner-centric and reasonable cost education service that delivers positive educational results.

Sunchild's expressed commitment to excellence in education has generated these results. Sunchild clearly has the potential, and in large measure is delivering on this potential, to positively impact the educational futures of First Nations youth and adult learners. By leveraging the potential of on-line technology, Sunchild has increased on-reserve learners' opportunities to access high-quality learning, and has motivated participating learners to attend, stay in and complete school. This has been achieved by building on the provincial Program of Study to design and deliver a flexible, culturally-appropriate and learner-centric educational environment at reasonable cost.

The Board commends Sunchild on these achievements. However, it is also clear that there remain challenges to be addressed for the program to achieve its full potential. One important challenge is that a strength of

Sunchild is also its potential Achilles heel. The student mentor position is, in the view of most stakeholders, the 'lynchpin' of the education offering. The student mentor in each community is the primary contact person for learners. They are responsible for tracking learners, dealing with technical issues, and dealing with personal challenges faced by learners, and encouraging and helping learners. A consensus stakeholder view is that a "good student mentor is the difference between a successful year with Sunchild, and an unsuccessful one."

Sunchild counsels local communities on the role, responsibilities and expectations for the student mentor position, but ultimately does not fund and therefore does not exercise control of the position. Inadequate local educational authority resourcing (e.g. time, facilities), and in some cases lack of individual commitment and competence on the part of the student mentor was repeatedly cited by stakeholders as a main reason why several Sunchild sites have been unsuccessful. Ultimately, the utility, value and quality of the Sunchild service may be undermined by a critical success factor outside of the direct control of its administration. Sunchild needs to examine ways to exert further control over this position, including seeking additional operating funds.

#### Sunchild E-Learning Community Strengths

##### **The Sunchild E-Learning Community exhibits a "culture of success":**

Interviewed stakeholders cite the passion and vision of Sunchild administrators as driving forces behind the creation and positive achievements of the Sunchild e-learning community. The principal and administrator are cited as having a strong commitment to improving First Nations learners' learning outcomes and ensuring that learners stay in school, graduate and develop essential skills that will enable them to succeed in all aspects of life.

The early decision to focus on creating a high-quality, accessible educational service

dedicated to meeting individual learner needs, and supported by the best in on-line technology, was identified as being critical to Sunchild's success. The design of Sunchild's curriculum and model was done purposefully, with its foundation grounded in research about on-line learning, and First Nations education and learning. The program administrator and principal are identified as being solution-oriented, and open to ideas about how to address challenges and pursue new avenues in order to serve the organization's mandate. Faculty, through monthly on-line meeting and the annual retreat are involved in decision-making about the school.

The school also has a vision of its medium and long-term development potential, and associated needs.

As one interviewee remarked, "First Nations learners are no different from other learners concerning ability. They need a reinforced structure (space, time, resource access, encouragement and flexibility at times) to improve their success. The value of education is not always there (among First Nations peoples) for various and valid reasons. If learners are convinced that education will benefit them and improve their chances of success in life they will be more likely to succeed. Sunchild gives them the opportunity to succeed.

**Sunchild offers benefits to individual learners and communities that are important, yet not always quantifiable:**

In the case of one community, the recent graduation of a Sunchild student was the first ever graduation for that reserve. In other cases, by offering high-quality education in First Nations communities with no other schooling options, the program gives secondary and adult learners the ability to finish high-school and to up-grade essential skills. In effect, Sunchild makes an absolute difference for people in these communities. They would not otherwise have educational opportunity. The presence of Sunchild changes their educational outcome.

**Sunchild provides a strong education platform adapted to the particular learning and cultural needs of First Nations learners:**

As a starting point, Sunchild is based on the Alberta Program of Studies. The learning environment is further designed to be culturally inclusive and relevant, enabling First Nations learners to feel like they belong in school. The mix of synchronous (e.g. scheduled class time with live teachers) and asynchronous technologies (e.g. archived tutorials) give learners a schedule and the autonomy, freedom and flexibility to work at their own pace. First Nations students indicate that they really enjoy the anonymity that Sunchild provides. Learners and teachers alike suggest that First Nations learners tend to be shy, and avoid interaction and speaking out in traditional classroom situations. Teachers and learners both also indicate that the anonymity provided by Sunchild seems to "encourage a greater amount of participation in discussions."

Teaching staff also feel that instructional materials and equipment are of sufficient quality and scope to support the aims of the program. First Nations culture is respected, and has been incorporated by both Sunchild curriculum designers and teachers where appropriate. Community elders, First Nations colleagues and cultural experts, on an ad-hoc basis, are consulted regarding the appropriateness of content.

**In site communities, the use of a local, First Nations student mentor is a primary success factor:**

Without the student mentor to coach, mentor and provide assistance, interviewed stakeholders indicate that student motivation would be difficult to sustain. The student mentor is responsible for:

- Tracking learner progress
- Dealing with technological issues
- Providing counseling about personal challenges and
- Encouraging and helping learners manage their time effectively in a paced, self-motivated learning environment

**Sunchild consists of a mix of live instruction and archived tutorials:**

Live instruction differentiates Sunchild from many on-line distance education services. Live instruction using the best in interactive technology is what Sunchild learners and teachers cite as a key factor in attracting and retaining them. For learners, this combination enables them to work in a structured, interactive environment while simultaneously providing for flexibility and individual pacing. As one interviewed stakeholder stated, “If a learner knows that someone is waiting on them to show at a class, that learner will be more likely to put a concentrated effort in showing up for that class.” Live instruction also allows learners to interact with their teacher in real-time to ask questions or to interact with peers.

**The Sunchild E-Learning Community governance structure helps to mitigate many of the political and accountability challenges faced by band-operated reserve schools:**

The incorporation of Sunchild as an independent, not-for-profit entity enables it to operate outside of the political environment within which most First Nations’ schools are subject. This autonomy allows for more fiscal authority and responsibility, as well as organizational flexibility and adaptability. At the same time, there is a sense of pride and ownership on the part of the Sunchild First Nation community regarding the mission and success of Sunchild.

**Learners are expected to take responsibility for their own future, and to be accountable for their actions:**

Sunchild expects all students to perform at levels equal to or above those of their aboriginal and non-aboriginal peers. Upon entry to the program, students must sign a contract affirming their commitment to success, and agree to work towards achieving that success. Weekly, tracked assignments are intended to keep learners on track. The student mentor, working in partnership with the course teacher and Sunchild administration, is responsible for highlighting performance gaps (e.g. missed

assignments). This collaborative process, in turn, enables timely and targeted interventions by course teachers and Sunchild administration to address learner issues as they arise.

Though not articulated in any one document, Sunchild administration has designed an accountability framework that provides learners, ‘student mentors’ and course teachers with guidance. This framework, elements of which can be found in the Student Letter of Agreement, student mentor Handbook and Checklist, and Template for Success documents, embodies several of the principles of effective accountability cited in the 2004 report of the Auditor General<sup>22</sup>:

- √ *Clear Roles and Responsibilities*: for all partners in the learning process;
- √ *Clear Performance Expectations*: learners are expected to meet the fundamental learning objectives outlined by the provincial Program of Study;
- √ *Credible Reporting*: timely tracking and reporting of performance information enables both learner and teacher to understand how they are performing relative to the class schedule and Program of Study expectations; and
- √ *Review and Adjustment*: ‘student mentors’ are the local connection, and are able to identify extenuating personal or community circumstances that may explain student performance. Where performance gaps are identified, collaborative intervention and correction action has been taken.

**Sunchild employs a highly experienced, knowledgeable and motivated teaching staff:**

The decentralization of teaching removes the geographic barrier that limits the ability of many First Nations schools to hire the best teachers. In doing so, Sunchild has been able to recruit, and retain, a staff of highly-experienced and highly competent

<sup>22</sup> Auditor General of Canada (2004). *Report of the Auditor General of Canada*, p.22

instructors. All Sunchild teachers are highly-educated and tend to have significant experience teaching First Nations learners (albeit in traditional classroom environments). There is an expressed commitment on the part of every Sunchild teacher to student success. Teachers also indicate a willingness to adapt teaching methods to suit learning needs of individual learners.

Sunchild is also committed to staff development by providing opportunity for, and expecting participation in professional growth and development. Staff development is viewed by the administration as vital to maintaining a highly-knowledgeable and technologically competent staff. There is an upfront orientation program for new teachers and ongoing guidance. Although teachers are independent contractors, teacher professional growth plans are discussed with Sunchild administration. Teachers are appreciative of the opportunity to enhance their on-line teaching knowledge and skills with the support of Sunchild (e.g. by attending an annual conference on ICT).

**Technology is viewed as a learning enabler, but not the sole solution to First Nations education:**

The primary focus is on the individual learner, and how technology can be used to challenge them for academic success. While the overall Sunchild pedagogical approach is one of student-centred learning, interviewed teachers indicate that they use a variety of approaches to instructional design and delivery. There is no one dominant instructional style. In some cases (the course topic is, of course, a factor), teachers are using constructivist approaches, while others are more didactic, using Socratic enquiry<sup>23</sup> to explore concepts and issues. Most teachers indicate that they believe First Nations learners are auditory learners. Thus, they see great value in using web conferencing and the interactive white-board

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<sup>23</sup> Didactic instruction involves step-by-step textbook and lecture instruction. The Socratic method refers to a continual process of question and answer, intended to move the learner forward through critical thinking.

to deliver a combination of written, verbal, video and hands-on teaching.

**Sunchild contributes to the development of essential fundamental skills:**

Sunchild does not explicitly target the development of essential skills; rather, Sunchild has expressed a commitment to their development as a natural by-product of the delivery of a quality learning experience (e.g. keyboarding and computer-related skills). While there are no tracking mechanisms in-place by which the Board could gauge the extent of skills development, a survey of the course and student mentors (n=14) conducted as part of this evaluation indicates that, in general, Sunchild is perceived to have the following impact (compared to learning in a 'regular' classroom) on essential fundamental skills<sup>24</sup>:

- √ *Reading*: 78 per cent respond positive to significant positive impact
- √ *Writing*: 77 per cent respond positive to significant positive impact
- √ *Speaking*: 43 per cent respond positive to significant positive impact
- √ *Time Management*: 77 per cent respond positive to significant positive impact
- √ *Creative Thinking*: 86 per cent respond positive to significant positive impact
- √ *Critical Thinking*: 78 per cent respond positive to significant positive impact
- √ *Problem Solving*: 93 per cent respond positive to significant positive impact
- √ *Reasoning*: 77 per cent respond positive to significant positive impact
- √ *Following Instructions*: 86 per cent respond positive to significant positive impact
- √ *Working Collaboratively*: 28 per cent respond positive to significant positive impact

**Sunchild administrators are viewed by stakeholders as having strong outreach competencies:**

Sunchild administrators actively work with site administrators to co-create an

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<sup>24</sup> Respondents were asked to score their answers along a 5-point scale, ranging from Significant Negative Impact to Significant Positive Impact.

understanding of the program, and what local resources and supports are required for the program to function effectively. The Structuring for Success template is a valuable rubric and self-evaluation document for communities to work through and to understand the commitment they are required to make.

Corporate partners also believe that Sunchild administrators are open and are striving to be transparent. However, partners also indicate that they are somewhat unclear about the indicators being used, and what they really mean. Partners would also like to see more evidence and reporting on student performance, on a site-by-site basis.

## **Value for Money**

In this evaluation, it is not possible to quantify the value of the Sunchild program using mainstream metrics such as changes in performance outcomes as a function of operating dollars spent. Clearly, Sunchild has achieved educational success at a comparable cost. To gain an understanding of value for money spent, one would need site-specific baseline performance information against which to compare educational outcomes (e.g. to understand how investment in certain areas might have resulted in change). Such information is not available, as site educational authorities, not Sunchild, controls such data.

Another reason is that many of the benefits of the Sunchild learning experience cannot be captured through linear, input-output analysis; rather, a more comprehensive, holistic understanding of generated benefits is necessary.

For example, during our review, anecdotal evidence was cited that Sunchild was the only 'real' learning opportunity that First Nations learners could access, aside from moving to the nearest education centre or quitting their full-time jobs, neither of which was an acceptable option. Without the Sunchild option, many Sunchild learners simply would not have continued with their secondary studies. Many adult learners

would also not have pursued academic upgrading in pursuit of minimum entry qualifications for skilled trades and post-secondary education.

Learners also cited the sense of confidence and pride that they felt having achieved success. For many, the traditional classroom was an uncomfortable environment; one where they had trouble learning. Sunchild offered them a different way to learn, conducive to their own needs, learning styles and personal circumstance.

Finally, it is impossible to capture, in quantitative terms, the value that Sunchild brings to the community in terms of helping members attain educational goals. In the case of one Sunchild site community, the opportunity offered by Sunchild was clearly identified as the primary reason why a student had recently graduated from high-school. It was the first time that member of the community had ever graduated. Without Sunchild, it was felt, that student would never have continued with his studies and completed high-school.

## **Areas for Sunchild E-Learning Community Enhancement**

### **Student mentor and Community Outreach:**

Despite the efforts of Sunchild administration, some site student mentors are not being given the mandate, support resources or adequate time to fulfill the demands of the position. In some cases, 'student mentors' are giving as little as 1/10<sup>th</sup> of their time to the student mentor position, with other demands occupying the rest of their time. This has resulted in some student mentors not being around to open up computers for study and archived lesson time, or when the space is opened up, not being around to coach, and provide assistance and structure to the learners. As one student mentor indicated, "the learners would not have success without the student mentor present onsite. I know that the days when I am absent the learners get little work completed."



**Governance and administration:**

While considered to be an overall strength of the program, some stakeholders also suggest that the 'executive' functions could be better structured, with administrator and principal roles more clearly separated and communicated. There is a perception of an overlap in responsibilities between the two functions. This perceived overlap is also considered to constrain the ability of these individuals to fully deliver on the needs of their positions. For example, there is a sense that, with a clearer distinction regarding role, the administrator could be free to focus on governance, partnerships and business development issues, while the principal would be more available to attend to academic and local site issues.

It is unclear how the performance and professional growth opportunities of Sunchild executive, and those with governance responsibilities, are evaluated.

**Performance Measurement and Evaluation:**

While Sunchild tracks individual learner performance, it is not clear how it measures its own corporate performance. Although Sunchild administration and teachers indicate that individual learners as well as courses are continually assessed and modified according to performance, no corporate-level performance setting, objectives articulation or measurement mechanisms were identified. The Conference Board was unable to determine the process by which the organization establishes strategy, identifies performance targets and objectives, and aligns activities to achieve goals. The lack of such information makes it impossible to understand how remedial and continuous improvement action is identified and prioritized. This is a significant weakness that needs to be addressed.

Clearly, at this early stage in its evolution, Sunchild faces the same challenge that many new organizations must grapple with: balancing the demands of program delivery with putting in place the institutional processes that will assist it in ensuring a continuous and sustainable high-level of

educational delivery. The Sunchild administration cites a lack of financial and human resources, as well as time, as the reason for the current state of its corporate performance management system.

**Student Fit and Preparedness:**

The Sunchild administration works with site student mentors to evaluate individual learners. Students seeking to enrol in math and humanities courses are prescreened for pre-requisites. However, there is a sense on the part of course and student mentors that many learners still enter the program unprepared for the curriculum and for working in an on-line environment. Some learners, particularly adults returning to school, are perceived to be unprepared for the demands of an on-line learning environment. Aside from basic essential skills, which many require upgrading in, technological competencies are often cited as lacking. As one teacher indicated, "the biggest stumbling block last year was technology. Some of the learners did not know how to use the programs and thus were not productive. While I gave some basic orientation to the learners, this detracted from their course learning time."

**Some Sunchild learners do not understand the difference between the course and student mentor positions:**

Confusion on the part of the learners regarding the role and responsibilities of the student mentor position is perceived by some course and student mentors as having had an impact on student motivation. While Sunchild has taken steps to outline, through its Student Mentor Handbook, the roles and responsibilities, it has been the experience of student mentors that learners are often unable to grasp its meaning. Learners often expect them to be knowledgeable in course material (which is not their role). This indicates that there may be an expectations gap that sometimes leads to student frustration and de-motivation.

**Instructional Design and Delivery:**

While Sunchild provides common instructional design templates in order to maintain a common "look and feel", actual course teaching strategies are left to the

discretion of individual course teachers, all of whom have significant experience teaching First Nations learners.

There is, however, no clear articulation or guidance provided by Sunchild on its educational philosophy, or the extent to which it has explored the need for corporate guidance on First Nations learning and motivational styles and cross-cultural interaction techniques (course teachers are typically non-Aboriginal).

As identified in the *Sharing Our Success* report (p.38), the influence of teachers on the educational process is well documented, and there is a high correlation between teacher efficacy and student performance. While research on teachers working with Aboriginal learners is limited, it is consistent with general research on effective teacher qualities. Teacher attitudes and expectations for their learners, knowledge of subject matter, and cultural understanding of their learners and communities have all been shown to positively influence academic performance and behaviour (Yagi, 1985).

While the research literature on pedagogy and Aboriginal learning styles is still nascent, and it is unclear as to whether differences in learning styles actually makes any significant differences in academic performance, some studies<sup>25</sup> do suggest that First Nations learners can generally be considered to be holistic thinkers. Backes

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<sup>25</sup> The Four Worlds Development Project (1989). *Recreating Native Education: A Case Study in Program Evaluation and Design*. The University of Lethbridge: Four Worlds Development Project. The Four Worlds Development Project identified the following differences between the educational needs of First Nations and other learners:

- FN learners learn better in a cooperative rather than competitive classroom environment;
- FN learners better understand subject matter presented in a holistic manner before individual facts or skills are taught;
- FN learners respond better to visual information than they do oral;
- FN learners are accustomed to learning by having skills modeled for them, as opposed to have processes described; and
- A non-directive and egalitarian management and teaching style are more effective for them

(1993)<sup>26</sup> for example, describes First Nations learners as abstract-random learners, who prefer deductive, holistically presented information. According to his study, holistic thinkers benefit from (a) an overview of concepts prior to explanations of segments or details, (b) discussions focusing on overarching themes and use of metaphors, and (c) use of visual presentations. To some extent, each teacher interviewed is employing these methods, though not explicitly as part of an explicit particular pedagogical orientation.

Another issue is the scheduling of live VClasses and the quality of archived tutorials. Adult learners tend to access Sunchild in the evening (due to work, family commitments), and are typically not able to participate in the live, synchronous exchanges that are scheduled during the day (oriented to high school learners). Learners and teachers indicate that the archived tutorials contain a lot of ‘white space,’ such as long-pauses that occur when a teacher draws on the whiteboard. While these pauses are due to technological limitations of the software, interviewees suggest that these white spaces can be a challenge to work through, and can sometimes be demotivational for learners working on their own.

#### **Instructional Facilities:**

Some sites have a safe, modern learning environment that helps to motivate learners. Other sites are considered by learners and staff alike to be inadequate (although likely the best possible option given the community circumstances). The quality of learning environment has been shown to be a factor in the motivation and retention of learners.

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<sup>26</sup> Backes, J.S. (1993) *The American Indian High School Drop Out Rate: A Matter of Style?* *Journal of American Indian Education*, 32(3). p.16-29.

# Chapter 4

## Recommendations for Sunchild E- Learning Community Enhancement

The following recommendations are provided for:

- Sunchild administration
- Provincial and federal governments
- Corporations

### Recommendations for Sunchild Administration

#### Evaluate the governance and corporate performance management system:

- Clarify and communicate roles and responsibilities of the executive arm; Clarify how performance data is integrated into corporate strategic planning and improvement strategies. Set clear, quantifiable targets. Develop short and long-range goals and objectives. Make explicit how annual performance reviews are used to ensure strategic direction and supporting objectives and goals are being met. Evaluate progress towards reaching targets. This is an important area requiring addressal;
- Use holistic measures appropriate to a First Nations educational program, and explain why measures were selected. Identify how measures are important to furthering a First Nations culture of learning. Include community feedback and measures of client satisfaction; and

- Expand current statistical record keeping to track and correlate additional indicators such as attrition, attendance and year-to-year retention. Doing so would help Sunchild to identify opportunities for process improvement and associated educational outcome (e.g. are learners making more or less use of synchronous/asynchronous learning opportunities, and how does this relate to attendance, course completion and educational outcomes?). It would also be valuable to be able to relate baseline indicators of pre-Sunchild academic performance of learners to the success that they achieve through Sunchild (to understand the ‘Sunchild impact’).

#### **Work to ensure that appropriate community financial, technical and human resources are available and appropriately directed to support and make Sunchild work as it is intended:**

The success of Sunchild rests, in large measure, on the extent to which site communities value education and give their student mentor the time, resources and institutional supports to deliver on the requirements of the position. If not already doing so, Sunchild should consider directing even more upfront time to community outreach in order to generate understanding on the part of site administrators of the program requirements.

Also, Sunchild should consider re-examining ways to help site communities identify and train qualified and competent local student mentors. While being sensitive to First Nations political considerations, assuring the quality of the overall learning experience may require Sunchild to play a greater role. As one stakeholder identified, “You can have the best program in the world, but if the community does not take ownership, it won’t succeed.”

Further, Sunchild should also examine options for hiring and employing student mentors as Sunchild staff.

**Tighten the site selection process to ensure that the right communities are selected to participate in the Sunchild E-Learning Community:**

Sunchild administration must more rigorously screen prospective site community leadership and capacity before approving the site, and work with approved communities on an on-going basis. While Sunchild indicates that they have declined sites in the past, the fact that some participating sites have not met expected standards of commitment means that Sunchild needs to be more judicious in its selection process. Sunchild may have to decline future potential sites if they cannot demonstrate a sufficient state of readiness and commitment.

Longer time frames for conducting diligence, and an extended, graduated introduction of programs in new sights might be useful. Sunchild indicates that course piloting is now taking place. This is a positive step. Course pilots, at a smaller scale than normal (e.g. less seats available), need to have an interim evaluation conducted of how the program is functioning. If successful, pilot delivery could be expanded to normal delivery.

**Ensure that the right students are selected for entry to the Sunchild E-Learning Community:**

While Sunchild already takes steps to screen learners, the perceived quality of the program may, to the external observer, be judged on the basis of academic success. On-line learning clearly is not for every student. Thus, Sunchild should consider taking steps to state an admission policy, supported by an upfront admissions interview (beyond the current letter of agreement and student mentor interview) that examines the prospective learners' skill levels, aptitudes, support service needs and likelihood of benefiting from the program.

Sunchild should also consider implementing ways to 'pre-orient' new learners, with a focus on basic computer skills. Doing so might help to avoid the loss of beginning

instructional time, and allow for less classroom frustration and greater learning motivation.

Sunchild should also examine the current funding model, based on selling packages of course seats, for potential conflicts with this recommendation.

**Clarify to learners the role and responsibilities of the student mentor:**

Student mentors indicate that learners are often confused about the student mentor role and mandate, which sometimes leads to frustration on the part of learners. While the Sunchild E-Learning Community provides each student with a handbook explaining the student mentor position, more effort is required to effectively instill this message in students.

**Train course and student mentors in cross-cultural instructional techniques and interventions, and align with technological capabilities:**

Content and instructional design and delivery are essential components of education programming. Sunchild should consider the need for and opportunities to provide course and student mentors (where non-Aboriginal) with training (new or 'refresher') on learning theory and cross-cultural communication. As one study of indigenous on-line education indicates, "flexible delivery of educational resources must take account of cultural variables and recognize the specific learning needs, preferences and styles of learners...Considering the micro and macro cultural levels of instructional design is therefore essential if appropriate learning environments are to be created."<sup>27</sup>

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<sup>27</sup> McLoughlin, C. and R. Oliver. (2000) 'Designing Learning Environments for Cultural Inclusivity: A Case Study of Indigenous Online Learning at Tertiary Level, *Australian Journal of Educational Technology* Vol. 16(1), p.58.

**Implement a student tracking methodology to better understand outcomes:**

There is currently no formal, follow on understanding of how Sunchild learners are using their experience in post-secondary education or the workforce (although there is anecdotal evidence of students going on to trade colleges, and of students developing a sense of self-confidence that benefits the rest of their life). Implementing a tracking mechanism would help Sunchild administration to understand the utility and value of the Sunchild experience, and help to communicate such value to prospective learners and partners in government and business, as well as to other First Nations communities.

**Examine the course delivery schedule and quality of archived materials:**

Sunchild should consider conducting a needs assessment of adult learners to determine their requirements, willingness, and ability to participate in live, synchronous tutorials during the evening. The outcome of this assessment will need to be balanced against feasibility and sustainability of associated course delivery costs. In addition, consideration should be given to providing course teachers with time to prepare archived seminars and tutorials that are easier to follow for the flexible learner.

**Directly and explicitly target skills development and skills-based outcomes:**

Move away from treating skills as a by-product of achieving educational outcomes. Adopt a systematic focus on achieving skills-based outcomes as well. Align skills development strategies with workforce needs. Tap into skills measurement and evaluation projects, such as the Board's on-line Skills Solution Net and associated 'Skills Credentialing Tool.

**Recommendations for Provincial and Federal Governments**

**Work collaboratively to evaluate the relevance of Sunchild to policy and programming objectives, such as closing the 28-year education gap:**

As part of ongoing efforts, consider the extent to which Sunchild can contribute to policy goals relating to Aboriginal education and economic development, as well as to complementary policy platforms such as innovation and technology.

Sunchild's model and the educational outcomes it generates are consistent with the strategic priorities recommended by various provincial and federal policy commitments.

For example, the NEPR Advisory Committee in response to the province of Alberta's First Nations, Métis and Inuit (FNMI) Education Policy Framework, recommends strategies to<sup>28</sup>:

- √ Increase First Nations learner access to adult education;
- √ Increase the attendance, retention and graduation rates of First Nations learners attending on-reserve schools.

Sunchild is also consistent with the goals of the Alberta Information Technology Policy Framework:

1. Access to quality learning opportunities is expanded;
2. Learning is enriched;
3. Learning outcomes are improved;
4. Information and communication technology skills of Albertans are enhanced;
5. The efficiency of learning system management is improved;
6. Research and knowledge creation are advanced; and

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<sup>28</sup> Education funding for status on-reserve First Nations learners is the responsibility of the federal government.

7. Markets for learning programs, resources and services are expanded.

The federal government, in response to commitments expressed in recent Speeches from the Throne, and consistent with its fiduciary responsibilities, has identified the importance of adopting a holistic and coordinated approach to addressing the First Nations education gap and promoting life-long learning. In particular, the federal government should consider how Sunchild relates to, and can support, the priorities articulated in the First Nation Education Policy Framework.

**Consider ways to support the delivery of Sunchild services to existing sites, and to support the extension of services to additional First Nations reserves (as well as off-reserve, urban locations where possible)**

## **Recommendations for the Private Sector**

**Collaborate with Sunchild to identify industry sector workforce needs, and to align Sunchild's educational and skills strategies to those needs:**

Private sector corporations should work with Sunchild to identify required skills, and means to systematically target skills development through the delivery of Sunchild instruction. They should also identify and support the development of evaluation and assessment tools to gauge Sunchild developmental progress.

**Collaborate with Sunchild to identify appropriate site communities, and to ensure that site education authorities understand and support the requirements of participation:**

Appropriate site communities must value education and must have the required level of capacity to function effectively. Corporate partners have an important role to play in using their resources and contacts to identify and target First Nations communities that will benefit from Sunchild,

and that are willing to make the commitment required to succeed. They also have a role to play in communicating to the communities the work opportunities with them that will become available to successful students.

## **Conclusion**

**T**he Sunchild E-Learning Community is an example of an innovation that leads to positive results. The Conference Board recommends that the Sunchild E-Learning Community continue to focus on delivering on current strengths, and to take, where appropriate, action to address suggested areas for enhancement.

In some areas, the Sunchild E-Learning Community will be able to undertake unilateral action; in many cases it is already doing so. In other areas, all stakeholders in the Sunchild model have a role to play helping to make Sunchild a sustained success, including learners, administrators, educators, communities, and funding partners such as government and the private sector.

Sunchild is innovative but also in many communities it is also the only viable option. Therefore it is the absolute difference for First Nations learners. There are many other First Nations communities where the Sunchild option, or comparable option, would have a positive impact on a considerable number of First Nations learners.

By following on the recommendations of this report, the Conference Board believes that the Sunchild E-Learning Community will be in a strong position to continue offering a unique, effective solution to the estimated 28 year education gap that persists between First Nations and Canadian society as a whole.

# APPENDIX A

## Sunchild Technological Requirements

### Hardware

- 28.8 kbps or faster internet connection
- Pentium 133 (or equivalent) with 32 MB of RAM memory
- 16 bit sound card
- Headphones with microphone capability

### Software

- Windows 9, Windows ME, Windows 2000 or XP
- Java Webstart (free online)
- Adobe Reader (free online)
- Elluminate (free online)
- WebCT (free online)
- Microsoft Office
- Antivirus Software

# APPENDIX B

## Sunchild E-Learning Documents

DOCUMENT TYPE	RECEIVED
Evaluation Report (Internal/External)	
Governance Policy/Structure/ By-Laws (current & historical)	√ Sunchild E-Learning Community By-Law No.1 √ Articles of Incorporation
Mission/Vision/Mandate	√ Mission/ Vision Statement
Board of Director meeting minutes	√ Board of Directors meeting 2004
Business Plan (current & historical)	√ Sunchild Business Plan 2003
Program Plan (current & historical)	√ Sunchild E-Learning Community Program Overview √ Provincial ELearn Vision
Administrative Records (current & historical)	
Budget (current & historical)	√ Susa Creek Cyber School Budget 2004/05 (draft) √ Sample Site Budget for a 3 Year Corporate Commitment (04-06)
Expenditure Report/ Operating Statement (current & historical)	√ Sunchild FN Statement of Revenues and Expenditures for the Year Ended March 31, 2004 (draft) √ Projected Income and Cash Flow Statement for Fiscal Year April 03 to March 04.
Articulation Agreements with other institutions	√ NAAF √ SAIT
Funding Agreements	
School Policies	√ Sunchild E-Learning Policy/ School Operations (working copy)
Course Descriptions	√ All
Curriculum Planning Documents	
Program Curriculum/Course Content	√ Program Brochure 2003
Teaching Resource Documents	√ E-Learning Teacher Manual 2003-04 √ Student mentor Handbook 2004-05 √ Student mentor Checklist 2003-04 (Teacher Orientation)
Learner Resource Documents	√ Student mentor Checklist 2003-04 (Learner Orientation) √ Student Letter of Agreement (Aseniwuche Winewak Nation, Susa Creek Cyber School)
Admissions Data	
Course(Seat) Enrollment/ Completion/ Attrition/ Graduation Data	√ Compiled results for Sunchild E-Learning Community 2003-04 √ Course Based Marks tracking report Jan 20, 2005
Faculty Data	
Community Reports	√ Monthly Report Dec to Jan – Fort McKay
Staff & Faculty Qualifications	
Satisfaction Data (Learner/ Community)	
Community/ School meeting minutes	
Marketing Materials	√ Susa Creek Cyber School Advertisement √ Program Brochure
Other	√ Template For Success √ Susa Creek Cyber School Goals and Measures 2004 √ Article 'Students Jump at Online Learning' Nov. 4, 2004 √ Location of Sites/Map



# APPENDIX C

## Scoping Question Guide<sup>29</sup>

### **Community Profile**

**Status-** public, private not-for-profit, private for-profit

**Mode of delivery-** balance between on-reserve, distance learning, remote online learning, other.

**Branch campuses**

**Qualifications offered (i.e. high-school diploma, skills certification)**

**Courses offered** (e.g. math, social sciences, natural sciences)

**Number of learners:**

- Full time
- Part time
- Age profiles
- Gender profiles
- Geographic location (on/off reserve)

**Number of academic staff** (full-time equivalent for 20002/03) divided into:

- a. full-time teachers
- b. part-time teachers
- c. teaching assistants

**Funding 2003/04** (or most recent annual figure) by source:

- a. Federal government
- b. Provincial government
- c. Tuition fees
- d. Other sales and services
- e. Non-government grants/ donations (e.g. corporate sponsorships)
- f. Endowments
- g. Other

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<sup>29</sup> Based upon the OECD 'E-Learning Case Studies in Post-Secondary Education & Training' questionnaire, available on-line at <http://www.oecd.org/dataoecd/61/19/31824388.doc>

## Governance and Strategy

How is the Sunchild FN E-Learning Community governed?

Does the Sunchild FN E-Learning Community have a formal, written online learning strategy?

YES                      NO                      Under development

How was the strategy first written (e.g. when was it written, who was involved, and who was consulted).

What were the main rationales for producing the Sunchild FN E-Learning Community e-learning strategy (e.g. relating to learners, staff, potential employers).

Has your strategy been substantially revised since it was first written

How does your e-learning strategy or equivalent relate to your mission or general strategic plan?

Prior to establishing the Sunchild FN E-Learning Community, what estimated proportion (%) of learning programmes/ courses offered by the school/site communities had the following kinds of online component?

### Before

**None or trivial** online presence

\_\_\_\_\_ %

**Web supplemented** (e.g. course outline and lecture notes online, use of email, links to external online resources)

\_\_\_\_\_ %

**Web dependent-** Learners are required to use the Internet for key 'active' elements of the programme- e.g. online discussions, assessment, online project/ collaborative work- but without significant reduction in classroom time.

\_\_\_\_\_ %

**Mixed mode-** Learners are required to participate in online activities, e.g. online discussions, assessment, online project/collaborative work, as part of the course work, which replace part of face-to-face teaching/learning. However, learners are required some physical presence in addition to the online activities.

\_\_\_\_\_ %

**Fully online**

\_\_\_\_\_ %

**Are there significant differences in the balance of different types of e-learning at the Sunchild FN E-Learning Community (i.e. Web supplemented, Web Dependent, Mixed mode and Fully Online) in different subjects and at different levels**

**What plans do you have, if any, to develop this balance over time?**

**Is the Sunchild FN E-Learning Community part of an ‘online learning consortium’ or other significant partnership in this area?**

**Is the Sunchild FN E-Learning Community involved in any outsourcing of infrastructure/maintenance/ operations associated with e-learning provision?**

## **Platforms & Infrastructure**

**What is the principal networking technology supporting the Sunchild FN E-Learning Community?**

**Does your institution deploy an online ‘learning management system’ (e.g. Blackboard or WebCT)?**

**Please comment on your choice and use of learning management systems (LMS)--- a software package designed to help educators create quality online courses**

**To what extent is the LMS(s) integrated with other applications in your institution?**

**Do you have a student portal system?**

**What other tools/ platforms are widely used institution in support of e-learning (e.g. instant messaging, handheld computers, other).**

## **Learners’ access to e-learning**

**What is the Sunchild FN E-Learning Community’s policy on computer/ network access for learners/ staff? Please give details of any policies, the thinking behind them, and impact to date.**

## **Teaching and Learning**

**What has been the ‘teaching and learning’ impact of on-line delivery of education at the Sunchild FN E-Learning Community?**

**In your experience, which subject areas, types/ levels of programme, and learning activities are best suited to e-learning?**

**Who decides how e-learning is delivered?**

**Does the Sunchild FN E-Learning Community offer learners any special assistance/ guidance about learning online?**

**Does the Sunchild FN E-Learning Community formally evaluate the impact of greater use of e-learning in teaching and learning?**

**What has been the cost impact of greater use of e-learning at your institution?**

**Do you have an institutional strategy to support the development of learning objects- LO?**

**What is your strategy with respect to access to online journals and e-books?**

## **Learners and Markets**

**Do you have any evidence that learners respond more or less well to greater use of e-learning within the Sunchild FN E-Learning Community?**

**Do you have any evidence that learners of a particular gender or age respond more or less well to greater use of e-learning the Sunchild FN E-Learning Community?**

**What effect has greater use of e-learning at the Sunchild FN E-Learning Community had on the balance between full-time and part-time learners?**

**How is student support organised?**

**What are the key 'lessons learned' regarding the delivery of distance on-line education to Sunchild FN E-Learning Community learners?**

**Do you have any evidence that investment in e-learning has afforded the Sunchild FN E-Learning Community competitive advantage?**

## **Staff & Materials**

**Please describe any staff development provision offered by your institution concerned with helping faculty utilise e-learning.**

**Please outline key 'lessons learned' from any such staff development activities at your institution.**

**Is the Sunchild FN E-Learning Community a member of a collaborative group for the production of e-learning materials?**

**Have you established any internal mechanisms to ensure collaboration and sharing of e-learning materials within the Sunchild FN E-Learning Community?**

**To what extent are faculty using off-the-shelf course packs such as WebCT/ Blackboard e-packs?**

## **Funding & Government**

**Please describe any special funding the Sunchild FN E-Learning Community has received to undertake e-learning development (e.g. from government, foundations, companies).**

**More generally, to what extent are e-learning developments at the Sunchild FN E-Learning Community dependent upon special funding- whether internal or external?**

### **Organisational change, scenarios & barriers**

**What are/have been the major elements of organisational change at the Sunchild FN school related to greater use of e-learning?**

**What are some possible future scenarios for the Sunchild FN E-Learning Community in terms of development of online learning?**

**What are viewed as major barriers to further online learning development at the Sunchild FN E-Learning Community?**

# APPENDIX D

## Student Questionnaire



Dear student,

The Conference Board of Canada is conducting an on-line survey of student opinions about the Sunchild E-Learning School. We thank you for participating.

The survey will take you about **10** minutes to complete. There are 10 questions. Please answer as many of them as you can. Your answers will be kept private, and will not be shared with your teacher or principal.

**About You**

Name:

(1) What grade are you in? Please click on the box and choose one of the following

Grade 9

(2) Which of the following on-line\* courses are you currently taking? Please check all boxes that are next to courses that you are currently taking.

\*On-line courses are delivered over the Internet by a teacher that is not in the room

- |                          |              |                          |                |                          |                 |
|--------------------------|--------------|--------------------------|----------------|--------------------------|-----------------|
| <input type="checkbox"/> | Social 10    | <input type="checkbox"/> | English 10.1   | <input type="checkbox"/> | Math 14         |
| <input type="checkbox"/> | Social 13    | <input type="checkbox"/> | English 10.2   | <input type="checkbox"/> | Math 24         |
| <input type="checkbox"/> | Social 20    | <input type="checkbox"/> | English 20.1   | <input type="checkbox"/> | Math 10 Prep    |
| <input type="checkbox"/> | Social 23    | <input type="checkbox"/> | English 20.2   | <input type="checkbox"/> | Math 10 Applied |
| <input type="checkbox"/> | Social 30    | <input type="checkbox"/> | English 30.1   | <input type="checkbox"/> | Math 10 Pure    |
| <input type="checkbox"/> | Social 33    | <input type="checkbox"/> | English 30.2   | <input type="checkbox"/> | Math 20 Applied |
| <input type="checkbox"/> | Science 10   | <input type="checkbox"/> | Apprenticeship | <input type="checkbox"/> | Math 20 Pure    |
| <input type="checkbox"/> | Science 14   | <input type="checkbox"/> | CTR 1010       | <input type="checkbox"/> | Math 30 Applied |
| <input type="checkbox"/> | Science 24   | <input type="checkbox"/> | ENM1010        | <input type="checkbox"/> | Math 30 Pure    |
| <input type="checkbox"/> | Biology 20   | <input type="checkbox"/> | ENM1020        | <input type="checkbox"/> | Math 31         |
| <input type="checkbox"/> | Biology 30   | <input type="checkbox"/> | ENM1050        | <input type="checkbox"/> | Grade 9 Math    |
| <input type="checkbox"/> | Chemistry 20 | <input type="checkbox"/> | FOR1010        | <input type="checkbox"/> | Grade 9 Science |
| <input type="checkbox"/> | Physics 20   | <input type="checkbox"/> | FOR1020        | <input type="checkbox"/> | Grade 9 English |
| <input type="checkbox"/> | Physics 30   | <input type="checkbox"/> | FOR1090        | <input type="checkbox"/> | Grade 9 Social  |
| <input type="checkbox"/> | Science 20   | <input type="checkbox"/> | TOU1010        | <input type="checkbox"/> | CTR1010         |
| <input type="checkbox"/> | Science 30   | <input type="checkbox"/> | TOU1020        | <input type="checkbox"/> | Psychology 20   |
| <input type="checkbox"/> | CISCO ITE1   | <input type="checkbox"/> | TOU1060        | <input type="checkbox"/> | Calm 20         |

**Your On-line Learning Experience**

(3) Compared to being in a regular classroom, how do you like your on-line courses?  
Please click the box that you agree with the most.

Really Like It	Like It	No Difference	Don't Like It	Really Don't Like It
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(4) What do you like about your on-line courses? Please select all of the following choices that you agree with

<input type="checkbox"/>	I can take my courses without having to go to another school
<input type="checkbox"/>	If I miss a day, I can use the archived lessons to catch up
<input type="checkbox"/>	I like the fact that a teacher is teaching me live
<input type="checkbox"/>	I like the fact that there is a student mentor to help me with my course work and to answer questions
<input type="checkbox"/>	I find the software easy to use
<input type="checkbox"/>	I find the course content to be relevant to me as a First Nations student
<input type="checkbox"/>	I am better able to work in teams with other students

(5) Are there any other things you like about your on-line courses? Please let us know:

(6) What things do you not like about your on-line courses? Please let us know.

(7) Do you find the archived classes to be helpful to you? Please select the answer that you agree with

- Yes  
 No

If you answered yes, in what ways do you find the archived classes to be helpful?

(8) Have you ever had any problems using WebCT or VClass? Please select the answer that you agree with

- Yes  
 No



How were those problems solved?

(9) In what ways do you think the Student mentor is helpful? Please select all of the answers that you agree with

- Helps me to manage my time and coursework
- Helps me to understand what I am supposed to do in order to succeed in the class
- Other ways – please explain:

(12) What kind of a job do you think your teachers do at teaching and interacting with you over the Internet? Please click the box that you agree with the most.

<b>Really Good</b>	<b>Good</b>	<b>No Opinion</b>	<b>Poor</b>	<b>Really Poor</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Why do you feel this way?:

**THANK YOU FOR PARTICIPATING!!**

# APPENDIX E

## Teacher Questionnaire



Dear Teacher,

The Conference Board of Canada is conducting an independent study of the Sunchild E-Learning Community. As part of this study, we would like to obtain your responses to the questions listed below. We are seeking to understand, from your perspective, the current strengths of the Sunchild E-Learning Community. We would also like to know if you feel there are areas for improvement.

Please note that, in undertaking this review, the Conference Board seeks to support the Sunchild E-Learning Community's efforts to ensure its quality and efficacy. The end goal is to ensure that learner needs are met in the best way possible.

Please answer to the best of your ability the questions below, using the check and comment boxes. Where relevant, please relate your comments to your experience teaching in a traditional classroom setting, or in other on-line teaching environments.

Thank you for taking the time and effort to respond to this questionnaire.

### **PRIVACY AND CONFIDENTIALITY**

By completing this questionnaire, you are providing The Conference Board of Canada with consent to use the information provided below for the purpose of compiling a research report. The information you provide is for research purposes only and will be administered in accordance with the Privacy Act and applicable privacy laws. The responses you provide will not be provided to Sunchild E-Learning administrators. Rather, your individual feedback will be combined with the responses from other survey participants, and the results will be reported only in aggregate – no results will be attributed to one individual.

Name: \_\_\_\_\_

Which of the following courses do you currently teach? Please check all boxes that are next to courses that you are currently teaching.

- |                          |              |                          |                |                          |                 |
|--------------------------|--------------|--------------------------|----------------|--------------------------|-----------------|
| <input type="checkbox"/> | Social 10    | <input type="checkbox"/> | English 10.1   | <input type="checkbox"/> | Math 14         |
| <input type="checkbox"/> | Social 13    | <input type="checkbox"/> | English 10.2   | <input type="checkbox"/> | Math 24         |
| <input type="checkbox"/> | Social 20    | <input type="checkbox"/> | English 20.1   | <input type="checkbox"/> | Math 10 Prep    |
| <input type="checkbox"/> | Social 23    | <input type="checkbox"/> | English 20.2   | <input type="checkbox"/> | Math 10 Applied |
| <input type="checkbox"/> | Social 30    | <input type="checkbox"/> | English 30.1   | <input type="checkbox"/> | Math 10 Pure    |
| <input type="checkbox"/> | Social 33    | <input type="checkbox"/> | English 30.2   | <input type="checkbox"/> | Math 20 Applied |
| <input type="checkbox"/> | Science 10   | <input type="checkbox"/> | Apprenticeship | <input type="checkbox"/> | Math 20 Pure    |
| <input type="checkbox"/> | Science 14   | <input type="checkbox"/> | CTR 1010       | <input type="checkbox"/> | Math 30 Applied |
| <input type="checkbox"/> | Science 24   | <input type="checkbox"/> | ENM1010        | <input type="checkbox"/> | Math 30 Pure    |
| <input type="checkbox"/> | Biology 20   | <input type="checkbox"/> | ENM1020        | <input type="checkbox"/> | Math 31         |
| <input type="checkbox"/> | Biology 30   | <input type="checkbox"/> | ENM1050        | <input type="checkbox"/> | Grade 9 Math    |
| <input type="checkbox"/> | Chemistry 20 | <input type="checkbox"/> | FOR1010        | <input type="checkbox"/> | Grade 9 Science |
| <input type="checkbox"/> | Physics 20   | <input type="checkbox"/> | FOR1020        | <input type="checkbox"/> | Grade 9 English |
| <input type="checkbox"/> | Physics 30   | <input type="checkbox"/> | FOR1090        | <input type="checkbox"/> | Grade 9 Social  |
| <input type="checkbox"/> | Science 20   | <input type="checkbox"/> | TOU1010        | <input type="checkbox"/> | CTR1010         |
| <input type="checkbox"/> | Science 30   | <input type="checkbox"/> | TOU1020        | <input type="checkbox"/> | Psychology 20   |
| <input type="checkbox"/> | CISCO ITE1   | <input type="checkbox"/> | TOU1060        | <input type="checkbox"/> | Calm 20         |

(1) To what extent do you feel that Sunchild E-Learning provides an effective learning environment for students? Please check only one box

Highly Effective	Somewhat Effective	Neither Effective or Ineffective	Somewhat Ineffective	Highly Ineffective
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain your answer. In doing so, please differentiate (if relevant) between youth and adult learners:

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(2) Please describe your instructional philosophy. In doing so, please explain how it is appropriate for (1) teaching in an on-line learning environment and (2) meeting the needs of First Nations learners

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(3) Please describe the instructional strategies that you use when teaching Sunchild E-Learning courses. In particular, please indicate why you think your instruction is appropriate for First Nations learners.

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(4) With respect to First Nations learner needs, do you think that Sunchild E-Learning offers instructional advantages over traditional classroom-based teaching?

- Yes  
 No

Please explain your answer:

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(5) How satisfied are you with Elluminate Live as a teaching tool?

Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain your answer:

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(6) Do you think that Sunchild E-Learning students learn better with live instruction or without it?

- With live instruction  
 Without live instruction

Please explain your answer:

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(7) Does Sunchild E-Learning assess and evaluate courses in order to ensure learner needs are being met?

- Yes  
 No

If yes, what follow-on steps are you aware of that have been taken to modify or improve courses?

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(8) How important do you feel the role of Student mentor is to the success of Sunchild E-Learning Community students?

Highly Important	Important	Neither Important or Unimportant	Not Important
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain your answer:

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(9) Does Sunchild E-Learning assess your professional development needs in order to support the attainment of program objectives?

- Yes
- No

(10) How does Sunchild E-Learning ensure that your professional development needs being met?

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(11) What more could Sunchild E-Learning do to provide you with additional skills and knowledge that would help you to continue teaching effectively?

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(12) Compared to learning in a regular classroom, in general, how would you rate the Sunchild E-Learning Community's impact on students' abilities to develop the following essential skills:

Essential Skills	Significant Positive Impact	Positive Impact	No Difference compared to Classroom Learning	Negative Impact	Significant Negative Impact
Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creative thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Following instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working collaboratively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain any reasons you feel account for these differences:

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(13) In your experience teaching Sunchild E-Learning on-line courses, have you ever encountered technical problems?

- Yes  
 No

If yes, how have your technical problems been resolved?

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(14) What examples can you provide of Sunchild E-Learning contributing to student academic success?

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(15) What would you say are the key 'lessons learned' regarding the delivery of distance on-line education to Sunchild FN E-Learning Community students?

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Additional comments:

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**THANK YOU FOR YOUR PARTICIPATION!**

Please return completed questionnaires via email to  
[Greenall@conferenceboard.ca](mailto:Greenall@conferenceboard.ca)