# The Views and Preferences of Residents Regarding Post-Secondary Programming in Four Remote Alberta Communities

# **Interim Report 2**

Patrick J. Fahy

patf@athabascau.ca

Nancy Steel

nancys@athabascau.ca

Patricia Martin

pcmjmartin@shaw.ca

Learning Communities Project
Athabasca University

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#### **Executive Summary**

The western Canadian province of Alberta possesses extraordinary resources in agriculture, forestry, oil and gas, and tourism. Because of its geography (its area is over 255,000 square miles, 661,000 square kilometers), it also confronts daunting challenges in educating and training its diverse residents, especially its aboriginal population. The 2006 federal census recorded that 6% of Alberta 3.3 million inhabitants self-reported themselves as "aboriginal" (including Metis). Many of these live in remote northern regions.

The literature shows that in Canada, aboriginals are underrepresented in university enrolments, but not in college or other institutions, suggesting that large gains have been made in educational and training participation by this group. When aboriginals (especially males) complete advanced training, the Statistics Canada reports they are highly successful in employment and in relation to income. Education and training, then, are clearly of economic value to aboriginal people. However, this report also contains evidence from aboriginal recruitment officials at a wide range of Canadian universities that recruitment must be a process, not an event, to be successful (Laucius, 2008).

Locally available training and education also address a persistent and serious social issue for aboriginals: the dislocating effects of leaving the local community to attend training programs elsewhere. Distance education programs capable of delivering learning opportunities flexibly and locally are regarded officially in Alberta as desirable policy objectives.

The Alberta government has articulated a policy (*Campus Alberta*) which states that Albertans are entitled to register in courses and programs from any Alberta institution, regardless of their place of residence. The policy also identifies that flexible distance education delivery methods will be adopted wherever feasible, to support the broader objective of access. Supporting the Campus Alberta policy are specific vehicles

to promote distance access, including eCampusAlberta, SuperNet, Alberta North, the ALIS on-line information system, and Athabasca University, who by its trademark is "Canada's Open University."

The study reported here was conducted by Athabasca University's Learning Communities Project, and intended to provide information about the views of northern residents concerning the present post-secondary training and education offerings locally available. The study was regarded as needed: little information was available addressing the actual preferences and interests of northern residents, especially aboriginals, a fact that had embarrassed Canada in comparison with its OECD partners.

The study involved interviews, observations, written surveys, meetings, and other consultations with northern residents in their home communities, conducted in 2007 and 2008. The researchers who conducted the inquiries found the local residents, whether they were potential or actual learners themselves or not, to be open and willing to provide the requested information. Findings of the study included the following:

- Enrollments in public colleges in northern Alberta were affected by the economy – the opportunity for employment made studying an uneconomic option for some students, if they were forced to choose one over the other.
  - a. The public colleges were the most affected: enrolments at Alberta's two institutes of technology and its universities rose 16% and 14%, respectively, over the same period.
  - b. Distance education grew during this period: Athabasca University experienced growth of nearly 30% in this time frame.
- 2. Four northern Alberta communities were studied here: Wabasca, Fox Lake, Ft. McKay, and Ft. Chipewyan. These totaled just over 6,000 residents, ranging from 521 (Ft. McKay) to 2,847 (Wabasca).
- 3. Respondents to the study's surveys and interviews willingly provided information; participants cautioned, however, the researchers should not confine their inquiries to the larger settlements only, ignoring the "back"

- regions; there, the population is smaller, residents are in even more need of education and training resources and opportunities.
- 4. Respondents to the study were a mixed and varied lot. It was clear from their descriptions of their lives that programming, to be realistic, needed to be flexible. The respondents were not particularly concerned whether instruction was group-based or one-to-one tutorial, so long as flexibility existed.
- 5. Several sources commented on the emotional and economic burden that having to leave the community brought on families and individuals. There were emphatic requests for a delivery model that did not impose the requirement of relocation of students.
- 6. Distance education was seen by many as addressing the roles of employee, parent, and community member better than group instruction, and markedly better than training that required learners to relocate to another community.
- 7. Respondents suggested that learning motivated by both social and personal purposes, as well as pre-employment training, should be made available.
- 8. Some communities were more successful than others in providing for the living expenses of learners. The cost and expenses associated with fulltime study were mentioned several times as barriers to learning.
- 9. Respondents who were parents frequently asked questions of the researchers about innovative education and training opportunities for their children.
  There were requests to reconsider the public education model in some of the communities, to increase the success rate of children and adolescents.
- 10. Technology did not appear to be a problem to most respondents: they were familiar with online technologies, had convenient access to them, and most had access to broadband. Attitudes of respondents were also positive toward the option of online learning.

11. Overall, attitudes of respondents toward distance education ranged from neutral to positive. There was little direct experience with distance education or online learning; however, even lacking detailed information and direct experience, respondents were prepared to consider distance methods, on the assumption they might provide greater access and flexibility.

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#### Introduction

The province of Alberta has benefitted greatly from the commodity and resources booms of the last thirty years (Alberta Finance, and Enterprise, 2008a). Possessing energy (in conventional oil and oil sands), diverse agricultural activity, and forestry (pulp and paper, and lumber), Alberta has generated the highest provincial growth rate in Canada, the lowest unemployment rate, and a accumulated surplus (as of early 2008) of approximately \$16 billion (Alberta Finance and Enterprise, 2007d, 2007e, 2008b, 2008c, 2008d, 2008e).

Alberta is also socially distinct in Canada. It has the lowest average age (median in 2006 was 36.0 years; for Canada, it was 39.5 years), and its senior population (65 years and over) is the lowest in Canada, at 10.6% (Canada: 13.7%). The median age of the aboriginal population in Alberta was 25 in 2006 (for non-aboriginals, it was 36) (Alberta Finance, and Enterprise, 2007b, 2007c, 2007f).

In Canada, 1,172,790 self-identified themselves as aboriginal in the 2006 census (Alberta Finance, and Enterprise, 2007c). The aboriginal population (defined as "people [who] reported aboriginal identity (First Nation, Metis or Inuit)" grew 45% from 1996 to 2006, as compared to a non-aboriginal population growth rate of 8% ("Canada's aboriginal population," 2008). Over 196,000 Albertans (about 6% of the total population of about 3.3 million) identified themselves as aboriginal in the 2006 census (Alberta Finance, and Enterprise, 2007a, 2007c; Census of Canada, 2008).

#### **Background**

In keeping with its prosperity and its demographics, Alberta provides a range of training and education opportunities for its residents. Distance education is supported in several ways: the intent and policy of Campus Alberta (Alberta Advanced Education and Technology, 2002), and the more recent Roles and Mandates Policy Framework (Alberta Advanced Education and Technology, 2007), assure that any course available in any Alberta institution will be open to any Albertan; the broadband *SuperNet* network permits even rural and remote residents to access high-speed Internet (Service Alberta, 2006); eCampus Alberta specifically promotes the distance learning offerings of Alberta post-secondary institutions (eCampus Alberta, 2009); the *Alberta Learning Information Service* (ALIS) provides online access to up-to-date career and training information, including delivery format, for any program in Alberta (Alberta Learning Information Service, 2008); and Athabasca University (AU) is devoted to distance delivery of university undergraduate and graduate training throughout Alberta, and, as "Canada's Open University<sup>TM</sup>," across Canada (Athabasca University, 2008).

Given the evident plethora of opportunities, this study was intended to assess how well the apparently rich offerings of Alberta's post-secondary institutions meet the needs and expectations of one of its primary foci, its aboriginal citizens. The study compares the apparent flexibility of programming with enrolment patterns, and with the

stated views and preferences of residents of four predominantly aboriginal communities, Fort Chipewayan, Fort MacKay, Fox Lake, and Wabasca. The study is based on quantitative data from federal and provincial sources, and on-site and telephone interviews, and responses to surveys, from citizens of the selected communities conducted by staff of Athabasca University's Learning Communities Project (LCP).

#### **Related Literature**

The literature reviewed here will briefly describe projects in Canada and Alberta that had the objective of bringing training to distributed populations, including residents of rural, remote, and aboriginal communities.

#### Programming in rural and remote areas of Canada

Due to its size, climate, and population distribution patterns, Canada has experimented with various approaches to education and training for distributed populations, often (especially in the case of aboriginal populations) with indifferent success.

From 1987 to 1989, the Keewatin Region of the then-NWT offered computer-assisted learning, through PLATO, in seven adult learning centres throughout the region (Fahy, 1989). While the project reported successes in acquisition of basic literacy and life skills, participation was limited by the requirement for on-site attendance at a community learning centre. The cultural appropriateness of the instructional material was also an issue (although the project included, in its later phases, development of an Inuktitut grammar).

Mixed signals are sent by some authorities with ties to Canada's colleges. The umbrella Association of Canadian Community Colleges (ACCC), in response to a federal government call for more innovation, responded in 2002 that colleges were already "widely accessible and well placed to support community economic, social, and

cultural development" (Association of Canadian Community Colleges, 2002, slide 2). Perhaps proving the government's point, the Association made only one mention of possible distance modes of delivery. In relation to "Accessibility," they wrote that "[access might be enhanced] by expanding capacity and access to distance learning with the goal of eliminating the gap between the have and have-nots; especially those individuals living in remote or isolated communities." It is impossible to miss the tension, and the inherent contradiction, between the assertion that colleges are "widely accessible," and recognition that there is a need to improve access for "individuals living in remote or isolated communities." In 2005, the ACCC released a report describing the barriers faced by aboriginal learners, and programs to address them including distance education (Association of Canadian Community Colleges, 2005).

This problem is not unique to Canada. In a 2001 paper, discussing the evolution of adult education in Australia from 1980 to 2000, Tennant and Morris (2001) did not mention the term "distance" or "distance education" at all, though the paper includes discussion of demographic and workplace changes, the role of the state in the provision of adult education, the emerging global knowledge economy, and vocational and non-vocational issues in adult and community education, including the issue of access (p. 2).

On the other hand, Tapsall (2001), also writing from the Australian viewpoint, vividly described the global "bandwagon" for "cyberspace solutions," which too often "marginalise[s] the traditional emphasis within distance education on geographical reach and the provision of opportunities for the socially disadvantaged" (p. 35). Tapsall's challenge to distance education providers was to decide whether they "are servicing distance needs, disadvantaged students, or 'instant' education and training" (p. 35). He feared the last, with attendant neglect of the more traditional distance concerns, leaving the continuing needs of the disadvantaged more difficult to meet.

In 2003, Osborne, writing from a Scottish perspective, shed some conceptual light on the problem of access. He described three kinds of training initiatives colleges could use to increase access: *in-reach* (targeting specific students for recruitment to campus-

based programs), *out-reach* (widening participation and increasing partnerships, especially with off-campus employers), and *flexibility* (systematic development of structural arrangements such as prior learning assessment, open and distance learning, and use of information and communications technologies (p. 43). Osborne recognized Canada's leadership in prior learning assessment, and transfer credit arrangements between colleges and universities, forms of flexibility enhancements. However, despite its promising title the paper says virtually nothing about how Canada's treatment of remote or isolated populations compares globally.

Some studies in this area focus specifically on the needs of aboriginals. McMullen and Rohrback (2003) argue that, while distance education has the capability to provide educational opportunities for aboriginal students, "To date, distance education has failed to meet this ability" (p. 6). The reasons include failures related to considering the needs of the student or environment, identifying and addressing barriers prior to course commencement, adapting to learning styles and expectations, accommodating local political expectations, and adopting reliable technologies (pp. 6 – 7). Overall, the writers charge, few educational Canadian institutions or directors of education know about, or emulate, the successful programs and models and that have achieved "dramatic successes" (p. 9).

A Canadian project regarded by its evaluators as successful is described by Gruber and Coldevin (1994). Intended to provide accelerated management training to native administrators, in anticipation of the creation of the northern territory of Nunavut in 1999, the project recognized the same point made by McMullen and Rohrbach, about the relatively low impact of distance education to date: "distance education has made relatively few inroads into Inuit settlements across the Canadian North" (Background and project rationale," ¶ 3).

In the above study, a total of 76 participants completed the training using "Anik-B satellite transmissions, telephone/fax interaction, community learning groups with group exercises, local facilitators, and specifically designed study materials" in

workshops delivered to six communities in three Arctic regions (Workshop design, ¶1). The results included "as much or more" learning than expected (Overall impact, ¶2), employer perceptions of greater self-confidence among trainees (¶3), and agreement by 90% of participants that the program should be offered again (¶4),

Knight and Tobin (2002) describe an audiographic teleconferencing project in Northwestern Ontario, intended to enhance literacy and numeracy. The participants (primarily native, a majority female and under forty years of age, and described as "severely [economically] limited" by their need for upgrading) had a "positive experience" in the six to eight week program. Audiographics (audio plus video) was especially useful, providing the immediacy of visual contact, and achieving "increased rapport" between participants and instructors (p. 1).

In 2001, the Conference Board of Canada conducted case study analyses of the use of digital learning technologies in 10 aboriginal communities across Canada (Greenall & Loizides, 2001). The case studies revealed barriers that learners faced using learning technologies, including problems with high-speed internet access, computer and Internet expertise, skilled technology instructors, and reliable facility infrastructure. Nevertheless, the report is optimistic, stating that "Access to computers and technology has given Aboriginal people opportunities to enhance their skills and improve employment prospects," and that "aboriginal communities are embracing the potential of technologies for learning so members can both develop and be in a position to take advantage of economic opportunities. Aboriginal educators and economic development practitioners are developing and implementing creative and innovative initiatives to promote the achievement of Aboriginal "digital opportunities" (i).

While post-secondary education is clearly advantageous to aboriginals, enrollments lag behind those of non-aboriginal populations. Walters, White, and Maxim (2004) report that both male and female aboriginals earned significantly more than other minorities if they possess post-secondary credentials; that male aboriginals are at the top of the earnings hierarchy, compared with all post-secondary graduates; and that

aboriginals, both males and females, have better employment prospects if they have graduated from a trades or college program than from a university program, *if* they do not return to reserves where there are many fewer employment opportunities (p. 296). Statistics Canada (2008) reports that the participation rate of aboriginals in university-level programs was "significantly lower" than for non-aboriginals. They added, however, "Conversely, differences between the Aboriginal and non-Aboriginal population participation rates were non significant for college and for other types of institution" ("Table3," ¶1), confirming that, as noted by others (Malest and Associates, 2004), "Aboriginal student [post-secondary] enrolment rates are growing substantially faster than those of other demographic groups, albeit from a very low base" (p. 5).

In recent years, post-secondary institutions have begun to focus on improved approaches to attract, recruit, and retain aboriginal students. In 2005, ACCC identified several such strategies, including having dedicated staff for this function, early efforts at the high school level to promote post-secondary education, elder involvement with the institution, and offering more distance education programs for aboriginals in remote communities.

More recently, Laurentian University conducted a survey of aboriginal student recruitment officers, advisors, and counselors at 24 universities across Canada, to determine their practices and approaches regarding aboriginal student recruitment, and to gather information about promising practices (Lacroix, 2008). One notable recommendation was for permanency and persistence in the admission process: "Recruitment cannot simply become an 'in-and-out' process within native communities. University administrators must support community building recruitment strategies and initiatives."

In summary, post-secondary training appears to be a promising route for both economic and personal development for aboriginals, and remotely located aboriginal communities seem to be oriented to technology as a way to access such opportunities. A

study of the degree to which present online offerings and supports are meeting the needs of these communities appears appropriate and timely.

#### Alberta post-secondary programming

Campus Alberta. Under Campus Alberta, Alberta citizens, regardless of where they live, are entitled to access the offerings of any Alberta post-secondary institution, via distance technologies, if available ("Albertans will have access to the collective learning opportunities and resources of the entire learning system"; Alberta Advanced Education and Technology, 2002). Through Campus Alberta, the province promotes "more flexible learning opportunities" for its citizens. Distance learning is an express purpose of Campus Alberta: "Learning opportunities will be flexible in design, structure and delivery (e.g., classroom learning, online learning, workplace learning, experiential learning) to remove barriers to participation in learning resulting from geographic location of learners, their other life commitments, and learning styles and abilities" ("Campus Alberta Goals," Alberta Advanced Education and Technology, 2002).

Roles and Mandates Policy Framework. This policy framework defines the roles and mandates of Alberta's public and private post-secondary institutions, to create a foundation that guides the adult education system and ensures the best program and institutional mix to serve learners, the economy, and society. Important to this policy is that "Differentiated [institutional] roles combined with a high degree of system collaboration are necessary to achieve excellence," and that "Collaboration among system partners on initiatives such as sharing of administrative services, learner services, curriculum, or delivery opportunities, will be enhanced through the leveraging of technologies."

<u>SuperNet.</u> To support the goal of delivering flexible distance learning opportunities, Alberta has installed a province-wide broadband network, *SuperNet*, linking over 4,000 government, health, library, and education facilities in 429

communities. At its launch in 2005, SuperNet was estimated at its launch to provide high-speed Internet access to 86% of Alberta' total population (<a href="http://www.advancededucation.gov.ab.ca/news/2005/December/nr-NAITSuperNet.asp">http://www.advancededucation.gov.ab.ca/news/2005/December/nr-NAITSuperNet.asp</a>).

eCampus Alberta. eCampusAlberta promotes online courses, available from Alberta institutions and other distance sources such as the Canadian Virtual University, over the SuperNet, to adults throughout the province. eCampusAlberta's website offers connections to "more than 400 online courses and 30 programs offer by 15 Alberta colleges and technical institutes, including provincially accredited certificates, diplomas, and applied degrees" (http://www.ecampusalberta.ca/). Students access the offering institution directly for information about courses and programs, and complete their registration with the offering institution, using the eCampusAlberta site (https://register.ecampusalberta.ca/course\_search.php). eCampusAlberta was established in 2007 (http://ecampusalberta.ca/index.php?q=node/66).

Alberta North. Alberta North also promotes online courses available from a consortium of seven colleges serving northern Alberta and the Northwest Territories. The Alberta North website offers connections to the partner colleges, "provid[ing] facilities, learning technologies and support services to over 80 online learning sites called Community Access Points (CAP sites). At these sites, students can receive courses and programs offered by many different post-secondary institutions" (<a href="http://www.abnorth.ab.ca/">http://www.abnorth.ab.ca/</a>). Alberta North also hosts an annual symposium that provides professional development for CAP site co-coordinators and others, and fosters discussion about innovative distance education practices.

Alberta Learning Information Service (ALIS). Information about the offerings of Alberta institutions is available through an online information database called ALIS (<a href="http://www.alis.gov.ab.ca/main.asp">http://www.alis.gov.ab.ca/main.asp</a>). ALIS provides a source of information on courses and programs, including prerequisites and delivery formats. Access to ALIS is by e-Newsletter, and the site contains numerous references to online programs and courses,

within and outside the province

(http://www.alis.gov.ab.ca/edinfo/Content/RequestAction.asp?format=html&aspAction=GetHomePage&Page=Home). Users may request information, including job listings, wage information, and access to counseling. Through ALIS, combined with the offerings available through Campus Alberta, potential students are able to identify and access courses and programs, originating from any post-secondary institution in the province, in their home communities.

Alberta Advanced Education and Technology (AAET). AAET has recognized the special needs of aboriginal learners. In its business plan for 2006 to 2009 (Alberta Advanced Education, 2006), the department states:

It is particularly important to ensure that under-represented groups have access to advanced education opportunities. Collaborating with stakeholders to improve First Nations, Métis and Inuit learner success is a priority for Advanced Education. (p. 73)

The plan then discusses the necessity for "... expanded regional and community access through the strategic application of technology," to furnish "the tools necessary to allow learners to succeed" (p. 73).

#### This study

#### <u>Rationale</u>

As noted above, Alberta aspires to provide a flexible and accessible range of learning options to its citizens, particularly aboriginals. This study was designed to address how well Alberta's current offerings meet that objective, by determining 1) the current patterns of enrolment for selected aboriginal communities; and, 2) by surveying residents of aboriginal communities about their post-secondary training experiences and

programming preferences, and the views of remote residents about both present program content and available delivery formats.

There is an emphatic need for this kind of study, because of growing concern in Canada about these and related questions. In the fall 2007 annual *Education at a Glance* report of the Organization for Economic Cooperation and Development (OECD), Canada was unable to provide responses for 57 of the 96 indicators on which information was requested (almost 60%), the worst performance of any member country. As a result, in early 2008 the director general of the Council of Ministers of Education Canada began consultations with Statistics Canada to develop a strategy for better collection and reporting of data for all Canadian education sectors; universities, for their part, began work on a common set of data and reporting criteria, measuring such basics as student enrollment, faculty numbers, class sizes, and graduation rates (Charbonneau, 2008).

The OECD disappointment followed other embarrassments. Canada's premiers created a "Council of the Federation" in 2003 to, among other things, show leadership in areas important to Canadians (Council of the Federation, 2006). The education focus of this Council was in response to several problems Canada faced in comparison with its trading partners, including comparatively low levels of post-secondary training (especially at the graduate level), lack of employer contributions to worker training, and flagging investment in research. Results have not been immediately apparent, however: in 2007 a report called Canada a "land of mediocrity," this time for low worker literacy, failure to take advantage of the potentials of training technologies, and falling levels of professional creativity (Scoffield, 2007).

#### Focus communities for this study

The four communities chosen for this study, Fox Lake, Fort Chipewyan, Fort MacKay, and Wabasca (see map, Attachment 1) are remote and primarily aboriginal. It

is in these areas where technologies such as SuperNet, and administrative and policy initiatives such as Campus Alberta and eCampusAlberta, would presumably be valuable and more highly appreciated by students looking for alternatives to campus-based education. These are also the prime audiences for Athabasca University's "Open University" offerings. As declared on Athabasca University's website [http://www.athabascau.ca/aboutAU/openuniversity.php], [the University's ] "admissions policy allows admission to the University and registration in a course (except where a pre-requisite is needed) that is not based on prior academic achievement." In effect, anyone eighteen years of age or older may register in an undergraduate course at AU if they feel they can meet the course's demands.

#### Study purpose

The purpose of the research is to determine the degree to which the provisions for post-secondary education and training are meeting needs and interests in remote, primarily aboriginal communities in Alberta. It examines course and program registration rates, and interviews students, potential students, and community members (including employers and social services representatives) about what might be needed or preferred, in terms of content and delivery methods, in four selected northern Alberta communities. The study was conducted using quantitative data on variables such as registrations and learner demographics, and qualitative information from interviews, focus groups, and surveys conducted with members of the target communities. Quantitative data came from the institutions offering post-secondary courses and programs in some of the selected communities, and from the Department of Advanced Education and Technology *COGNOS* student and institutional database (Alberta Advanced Education and Technology, 2008).

#### <u>Methodology</u>

Four remote aboriginal Alberta communities were selected for the study, based on the availability of data (the researchers were present in these communities because other research activities were being conducted there). As well, these communities were regarded as representative of settlements in northern Alberta, indeed northern Canada. Existing data were gathered from census sources (federal and provincial); in addition, surveys (face-to-face and by media such as telephone) were conducted. Figure 1 (Attachments) shows the geographic location of the communities.

In each of these communities, the process of gathering data and recruiting participants for interviews was as follows:

- Representatives of Alberta North, eCampusAlberta, and any Alberta postsecondary institutions active in the town or region were contacted and asked to provide quantitative data on course registrations, and to nominate persons who might speak to local needs and interests for education and training.
- 2. Department of Advanced Education and Technology representatives were asked to provide data on registrations.
- 3. Statistics Canada and Alberta census information was studied.
- 4. Individuals were contacted and interviewed by telephone or face-to-face, at their choice and convenience. Interviews were loosely structured, addressing the topics shown in Attachment 2.
- 5. Interviewees were asked to identify others who might be able to provide information on learning needs and interests in the community, and these were then asked to participate. They were also asked about what they considered to be the most suitable and effective ways to conduct learning interests surveys.
- 6. In addition to providing interviews, community members completed a learning preference survey that was piloted and field tested in one of the

communities. All interview and survey data in this report were gathered in the latter half of 2008, unless otherwise noted.

The informal, one-to-one approach to conducting interviews and distributing surveys was important to the success of the information-gathering, and was recommended by most people in the communities. A formal focus group, or town hall meeting approach would not, it was advised, attract much interest or involvement by the community, and might over-represent the views of certain groups at the expense of others.

It was also important that two Learning Communities staff members visited each community, together. This allowed the opportunity to compare research notes to validate interview and survey findings.

#### **Findings**

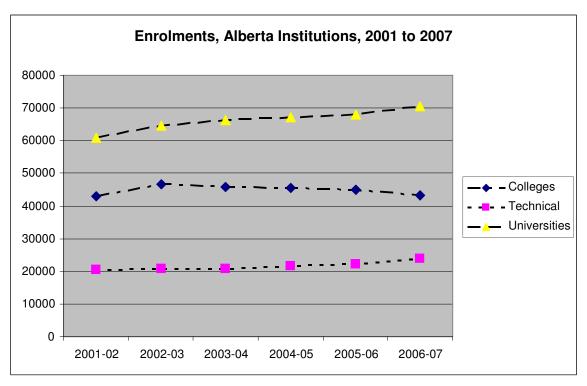
#### *Provincial post-secondary enrolment patterns*

To provide context for the findings reported on the study communities, Figure 1 shows the pattern of enrolment in Alberta's public post-secondary institutions from 2001 to 2007 academic years. According to the COGNOS database, during this period total public post-secondary enrolments rose 10.6% in Alberta, from 124,432 to 137,676 FLEs (full-load equivalent). The increase was not evenly distributed over the whole post-secondary system, however:

- Enrollments at the five northern colleges (Keyano, Grande Prairie, Lakeland, Portage, and Northern Lakes) fell an average of over 11% during this period (in one northern institution, the decline was almost 27%);
- Overall, colleges in Alberta increased their enrollments 0.6% during the period 2002 to 2007.

- Over the same period, universities increased by 13.9%, and institutes of technology increased 15.7%.
- Athabasca University increased its enrollment 38.7% over this period.

Figure 1: Fulltime-equivalent enrolments (FLEs), all Alberta post-secondary institutions, 2001–2007



While public college enrolments (except, as noted above, for the northern institutions) remained steady, the technical institutions (3,490; 15.7%) and the universities (9,475; 13.9%) gained FLEs steadily. Overall, the system gained 13,241 FLEs from 2001 to 2007.

#### Demographic, educational, and economic characteristics of the study communities

The four study communities compared as shown in the following table, on basic demographic, educational, and economic descriptors:

Table 1: Demographic, educational, and economic descriptors, target communities

Descriptors	Fox Lake	Ft. Chip*	Ft. MacKay (2006)	Wabasca	Alberta
Population (2006)	1,753	915	521	2,847	3,290,350
Education (15+ years of age)					
- No certificate or diploma	89%		66.3%	63.0%	23%
- Apprenticeship or trade	1%		6.3%	7.4%	11%
- High school diploma	6%		17.5%	14.9%	26%
- Unemployment rate	19.7%		18.0%	15.1	4.3%
- Participation rate	34.7%		61.7%	61.3	74.0%
Income (2005)					
- Median, census families	\$22,592		\$52,736	\$42,926	\$73,823
- Median, fulltime employed	\$23,584		\$44,384	\$36,093	\$43,964
- Median, married couples	\$41,600		\$72,192	\$55,917	\$83,046
- Median, common law	\$19,520		\$64,000	\$45,748	\$67,184
- Median, lone parent	\$11,744		\$35,968	\$25,785	\$40,397

Source: http://www12.statcan.ca/english/census06/data/profiles/community/Index.cfm?Lang=E

Other results concern enrolment data from Alberta institutions and government agencies, as well as interview data about the views of students and potential students on available offerings, and their preferences in learning content, delivery, and access methods. The characteristics, and other information on the study communities, are reported below.

#### Fox Lake communities

Little Red River Cree Nation (LRRCN) is composed of the communities of Fox Lake, John D'or Prairie, Garden River, High Level, and Fort Vermilion (Martin & Shaw, 2008) (see map, Attachment 1).

<sup>\*</sup>Information for Fort Chipewyan was not separate from the general census data for the Wood Buffalo region, including Fort McMurray, an area of over 51,000 people. Since only 10% of the combined residents were classified as "aboriginal," these data were not used.

<u>Fox Lake</u>. Located approximately 110 miles (175 km) east of the town of High Level, Fox Lake is where the majority of the population of this region resides. The population of 1,753 has increased 38.2% since 2001. The median age is 15.0 years, as compared to the Alberta median age of 36.0 years. Nearly half of the household income of Fox Lake residents is derived from government financial transfers.

Education available to Fox Lake residents includes the Head Start program (preschool), the Primary Readiness program, grades K-12, the Academic Recovery Program for school-aged students who left school and decided later to return, and the Adult Education programming offered by Kayas Cultural College. Jean Baptiste Sewepagham (JBS) School provides K-12 programming.

In 2007, the K-12 population of approximately 500 students consisted of more elementary than secondary students. Of the total population over 15 years of age (about 875 persons), 775 do not hold any certification, diplomas, or degrees, 50 have high school or equivalent, 10 hold apprenticeship or trades certification, 15 have college diplomas, and 35 hold university degrees. The community has Supernet connectivity.

Kayas Cultural College has a campus at Fox Lake (as well as Garden River and John D'or Prairie). The College's philosophical base is the fostering and growth of understanding and practice of the Little Red River Cree Nation's culture, and ensuring that youth are exposed to the ways of the native people. Kayas offers upgrading, personal development, and cultural studies and preservation. There is a CAP (Community Access Point) site, where distance learning occurs and students may take programs such as business administration from various post-secondary providers. Personal Development courses are offered through Kayas by the Alberta Career Institute, as are programs like "Home to Work" for people in transition. Much of the programming developed at each of the College's sites is broadcast through teleconference to the others. The teacher of the First Nations Arts and Culture program works with the local K-12 school, providing cultural talks and materials for the younger

students. Mr. Doug McMaster, principal of the school, sees a need for more adult programming.

Other requests for information about programming from residents of this community included massage therapy, diploma programs of various kinds, and recreational programs for youth.

<u>John D'or Prairie</u>. This community is located approximately 75 miles (120 km) east of High Level, and is the location of the administrative offices of the LRRCN. In 2006, the population was 1,025, an increase of 20.4% since 2001. The median age was 15.8 years; the median income of all census families was \$31,232.

Education for residents is available from the K-12 John D'Or Prairie School, with an enrolment in 2007 of 350 students, the majority elementary. Of the total community population over 15 years old (535), 420 do not hold any certification, diplomas, or degrees, 45 have high school or equivalent, 10 hold apprenticeships or trades certification, 35 have college diplomas, and 30 hold university degrees. The community has SuperNet access.

Ms. Gloria Cardinal, Director of Education for the Little Red River Cree Nation, was very interested in "growing" workers in the community for the trades, health care, oil and gas, and social work, and is working with the University of Alberta on teacher training. Presently, this initiative has six participants, in Garden River, Fox Lake, and John D'Or, using videoconferencing. Ms. Cardinal has requested pre-trades training, particularly using distance delivery techniques. She has also suggested that Kayas College campuses might host community learning centres, where much expanded programming could be offered, especially programs that provide preparatory upgrading for a specific occupation, and that allow learners to do some of the actual occupational training while they are upgrading. She also reinforced the fact that bands cannot pay for upgrading off the reserve.

Mr. Bryant Johns, Coordinator of Kayas College campuses (3 sites) in John D'Or, expanded on funding issues. He reported he was amenable to working more closely

with Northern Lakes College and other post-secondary providers for expanded programming. He stressed the importance of Kayas's role in providing cultural programming and upgrading. The mission of Kayas is "fulfillment through self reliance," or a "transition from dependency." Kayas is currently developing curricula and instructional designs for Cree language and culture programs, which they offer at the schools in Garden River, Fox Lake, and John D'Or. Because Kayas is federally funded, they are not funded provincially by FLEs as the other Alberta colleges are, and they do provide employment training.

Because funding for employment programs in rural communities often depends upon partnerships with employers, and there are none close by, this is a difficulty for the community. Employers do provide venues and support for safety training, however, and can offer programs funded by the Department of Social Development.

An interview was conducted with a faculty member, who left the reserve to obtain a B.Ed. from the University of Alberta and then returned to teach at Kayas College. This person suggested that there should be more variety in adult programming, and that the first year of some degrees such as the B.Ed. should be offered on the reserve. This would help learners adapt to the difference between high school and university study, without their having to deal with physical and psychological dislocation at the same time. The "going out" would then be easier.

Garden River. Garden River is located within Wood Buffalo National Park. There is no 2006 Census data on this community, as, like Fort Chipewyan, it is included within the Regional Municipality of Wood Buffalo. The population of Garden River was about 600 at the time of the study (fall 2008). K – 12 education is available to Garden River residents at the Sister Gloria School. The fall 2008 student population (as reported by principal Daniel Delorme) was approximately 160. Two-thirds of the school population is elementary students.

Kayas College has a one-person campus very near the school and provides adult programming. Mr. Delorme has 13 staff, most of whom are very new to the settlement.

He reported that there is a very rapid and regular turn over of staff, as many come for their first teaching experience, or come with a plan of staying for a fixed time. For these reasons, Mr. Delorme sees a great need for teacher training, professional development for teachers, and offerings from Kayas College beyond upgrading. Another concern Mr. Delorme raised was about funding for program participation.

<u>High Level</u>. This town is presently served by Northern Lakes College. Most residents who commented saw the opportunity to work more extensively with Northern Lakes as a bonus, since Northern Lakes has a strong reputation and has been active in northern Alberta communities for decades. Respondents agreed that the community would prefer to have the first two years of post-secondary training in the community, including apprenticeships, using distance delivery methods.

While the local pulp mill has shut down, there is oil and gas work, which is expected to expand in the future. (Work is available in and around High Level, and at the Zama and Rainbow Lake oil fields; Apache industries reportedly had 70 rigs in the area in fall 2008.) More safety-related programs for all local industries would be appreciated, either through Enform or SAIT, online. Other programs requested by students and teachers at the school include: pharmacy technician, x-ray technician, medical records clerk, dental hygienist, dental assistant, and teacher assistant. There are video suites available with up-to-date videoconferencing technology.

Public administration training is done through the University of Alberta. Twoyear diploma programs appear to be ideal for many students leaving high school, and the community education task force has been meeting with NAIT and the Advanced Education and Technology to try to increase access in the community through various delivery media.

Representatives of the Chinchaga Learning Council described their work in the Literacy and ESL areas, as well as family literacy, basic computer introduction (Northern Lakes does more advanced version of this), and other community support programs. A welcome addition to the community is the "Learning Store," a storefront learning centre

that will provide childcare and learning for young and single mothers. This initiative is an outgrowth of the local high school and, while not it is under the Chinchaga Learning Council purview, the Council will be making referrals.

Some of the areas where the Chinchaga Learning Council sees a need for additional programs include: GED (some learners desire only the opportunity to take the tests, after self-study, while others feel they need GED preparation), more ESL to meet the needs of several hundred Philipinos, and many Band elders whose first language is Cree, for conversational English. Instructors use the Canadian Language Benchmark indicators and materials.

Overall, Chinchaga Learning Council representatives suggested that all members of the community could use more programming, particularly (for seniors) related to computers. At a town "Get to Know You" night for entrepreneurs and home-based businesses, a survey was conducted of learning interests. Some of the requests received were: sign language, Spanish, French, line-dancing, ballroom dancing, life skills, and computer training.

<u>Little Red River Cree Nation Tribal Council</u>. The Little Red River Cree Nation's (LRRCN) tribal council is affiliated with the North Peace Tribal Council (NPTC), which was incorporated in 1987 by the LRRCN, Dene Tha', Tallcree, and Beaver bands. In 1995, the Lubicon Lake band was also accepted into membership. NPTC, situated in High Level, has coordinated a project to connect reserve schools to the Internet, and provides a video-conferencing bridge connecting several of the communities. NPTC's three-fold mission is to:

- Provide a political forum to influence policy and decision-making affecting member bands;
- 2. Combine efforts to address issues, resolve problems, and find economies by working together; and,

3. Provide resources and support to enable the provision of professional advisory services to member bands (<a href="http://www.nptc.ab.ca/mainframe.htm">http://www.nptc.ab.ca/mainframe.htm</a>).

LRRCN is also in partnership with the Sustainable Forest Management Network (SFMN) in four ongoing research projects:

- 1. Carbon credit trading: the law, firm behaviour, economics, and landscape impacts, initiated in 2004;
- 2. Barriers to the management of cumulative effects of development in the Treaty 8 region of Canada, initiated in 2006;
- 3. Market and institutional structures, economic welfare, and global competitiveness of the Canadian forest industry, initiated in 2006;
- 4. Incentive policies for sustainable forest management, initiated in 2005.

The SFMN is one of the Networks of Centres of Excellence, a federal initiative bringing researchers and partners from the academic, private, public, and non-profit sectors together.

Fort Vermilion. A telephone interview was conducted with a member of the Fort Vermillion Adult Learning Council (ALC), and a meeting was held with the Northern Lakes College staff at the facility where both the ALC and the College are co-located in this community. Discussions focused on the need to combine pursuit of learning with employment.

<u>Course delivery, Fox Lake region</u>. The following table shows the results of the survey of previous post-secondary program experience and methods of access in the Fox Lake area.

Survey question	Yes	No	Total
Have you taken a college course?	27	10	37
Can you use a computer?	40	2	42
Do you have a computer in your home?	38	6	44
Do you have access to a computer?	39	0	39
Is computer access convenient?	38	1	39
Have you ever taken a course on a computer?	14	20	34
Is prior learning assessment and recognition of interest?	32	11	43
Would you like more information about PLAR?	31	11	42

Figure 2: Educational experience, interests, relevant related skills, Fox Lake region (n=47)

The courses previously taken included the following: safety; academic upgrading; work-related; crafts; computer; sport; transportation, driving, machine operation; parenting; pre-natal.

Areas of learning interest included: GED; parenting skills; business management; life skills; safety; math; medicine wheel; upgrading; stress release; wellness; high school diploma, English; music 2; social work; B. Comm; advanced software languages; university courses; Cree; biology; chemistry.

Reasons for wanting additional learning opportunities were: courses as prerequisites to Business administration; stress; courses I need for teaching; courses to improve life for me and my family and to understand; pick up failed university courses; need to manage when the boss is away; need to get a job; for job; need certificate or diploma to work in child development or daycare.

<u>Programming preferences, Fox Lake region</u>. The following shows information about courses previously taken, the delivery format, and present interests in the community of Fox Lake.

Table 2: Previous education, present training interests, Fox Lake region (n=47)

Education element	#
Courses, programs most wanted	
- Business management, administration	14
- Computer skills, training	1
- Crafts	2
- Health, nursing-related	4
- Life skills	1
- Parenting	2
- Safety, First aid, H2S, WHMIS	12
- Sports	4
- Technical / work-related	9
- Transportation, machine operation	3
- Upgrading, GED	12
- College, university-level	3
Delivery model of training previously taken	
- Teacher-conducted	30
- Computer-based	14
Student-perceived barriers to learning	
- Job	25
- Family	14
- Timing	24
- Location (student's own, or training site)	9
Reasons for not taking or not completing previous training	
- Not offered at a convenient time, place	6
- Desired course not offered	4
- Needed technology (computer, broadband) not available	1
Preferred method of learning	
- Teacher	21
- Computer, Internet	16
- Video	6
- TV	4

Other programs that were mentioned included: women's wellness; stress management; cultural, including teepee making, moccasins, and blankets; traditional

teachings; legal aid; dental hygienist; pharmacy assistant; yoga; teaching certificate; social development certificates and diplomas; trades; native studies; safety; massage.

<u>Student interview results, Fox Lake</u>. In the surveys and interviews, the following additional information was obtained.

- Fifty percent of respondents reported feeling that they were at the *intermediate* level in their computer skills, 25% reported their skills as *advanced*, and 25% thought they were at the *introductory* level.
- Roughly 50% preferred learning in a class, and 50% preferred learning on computer.
- Ninety-two percent preferred no set class time, but to study and submit work at their convenience.
- PLAR would be of interest mainly to residents with some university-level experience.

Summary, Fox Lake region. The following are based on the above observations.

- 1. Develop a plan for collaboration among the communities and post-secondary providers, including distance delivery of programming.
- Report back to the communities on results of the interest surveys (including those from the web page), with interpretation of the results, the plan for how the information is now to be used, and intentions for future updating or expanding of the findings.
- 3. Assure that offering institutions share survey and programming information.
- 4. Use local events (such as the *Get to Know You* program in High Level) to attract specific segments of a community.
- 5. Explore with employers and trainers such as Enform what is possible in the way of programs for rural and remote communities.

6. Respond by e-mail to survey participants, providing the information they requested, or linking them to others who might answer their questions.

#### Fort Chipewyan and area

<u>Background information</u>. Fort Chipewyan has a population of approximately 900, almost 90% of whom are aboriginal. A community society houses a Youth Centre and a Seniors Centre, and provides after school and evening programs for youth. A new recreation complex will provide expanded recreation and fitness facilities.

The number of participants in the surveys, 49, made Fort Chip the largest single contributor to this study.

Keyano College has been the major education provider in Fort Chipewyan since 1976, offering courses primarily in *Academic Foundations* and *College Preparation*. The *Academic Foundations* program offers adults the opportunity to upgrade to the grade nine equivalency level. *College Preparation* is tailored to meet the needs of adults who wish to upgrade their academic education to allow entrance to apprenticeship, technical, career, or university programs, or employment. The program consists of selected subjects and skill development at the Grade 10, 11, and 12 equivalency levels. The following table shows offerings in the two areas of programming focus, in 2007.

Academic Foundations	College Preparation
Entry Level Math and Language Arts	Biology 25, 30 (Bio 30 CAP)
Intermediate and Advanced Math	English 10, 13, 20, 23, 30, 33
Intermediate and Advanced Lang. Arts	Math 13, 23, 33
Computers	Physics 25A (CAP)
Academic Survival Skills	Native Studies 20
Communication Skills	Social Studies 10,
	Computers 10

Figure 3: Adult basic education offerings, Fall, 2007, Fort Chipewyan

Both *Academic Foundations* and *College Preparation* classes often include two levels of students, for example *English 30* and *English 33*. Combining levels in classes is necessary because there are traditionally too few students in a single course to warrant offering it in classroom format. There are typically 50 students registered per semester in all levels of programming at this campus. Individual classes may have enrolments of 5 to 10 students.

In addition to *Academic Foundations* and *College Preparation*, each semester Keyano offers courses in *Business Administration* and *Early Learning and Childcare*. In Fall 2007, the *Business Administration* course offered was *Business Communications* 100, and the *Early Learning and Childcare* course offered was *Program Integration*. In addition, one student took *Physics* 25, and another took *Chemistry* 25, through eCampus Alberta.

Keyano College also occasionally offers a 10-month pre-employment program, preparing students for post-secondary opportunities or for employment. It is designed for people who have experienced barriers to learning, including developmental delays and learning problems. The program's goal is to address students' organizational, educational, and career goals, so they are closer to securing employment or considering realistic forms of further education.

The College responds to community learning requests when they are received; recently, *Office Administration* was requested by the Mikisew Cree and Athabasca Chipewyan Bands. Repeated requests for pre-trades training, however, may not be accommodated due to lack of resources.

Representatives of the Kewatinok Community Society listed the following training interests of their clients: cooking; hairdressing; heavy equipment operations; esthetician; massage therapy. They added that community members generally do not want to go "out" of training, as there is no inexpensive accommodation in Fort McMurray.

The table below shows information about previous educational experiences in the community, comments on delivery models, the preferred methods of accessing courses and programs, and some of the barriers to formal learning reported in the surveys.

Table 3: Previous education, present training interests, Fort Chipewyan (n=49)

Education element	#
Courses, programs most wanted	
- Accounting	1
- Business management, admin	14
- Computer skills, training	21
- Crafts, culture	9
- Environment	1
- Health, nursing-related	1
- Life skills	6
- Parenting	9
- Safety, First aid, H2S, WHMIS	14
- Technical / work-related	6
- Transportation, machine operation	1
- Upgrading, GED	17
- College, university-level	2
Delivery model of training previously taken	
- Teacher-conducted	30
- Computer-based	24
Student-perceived barriers to learning	0.1
- Job	31
- Family	20
- Timing	24
- Location (student's own, or training site)	12
Reasons for not taking or not completing previous training	
- Not offered at a convenient time, place	12
- Desired course not offered	14
- Needed technology (computer, broadband) not available	3
Preferred method of learning	
- Teacher	35
- Computer, Internet	23
- Video	12
- TV	10

In addition to the courses listed as "most wanted," above, the following were also mentioned: babysitting, life skills, food handling, business administration, correspondence, early childhood development, health, business, clerical and administration, certificate in counseling women (through Athabasca University), drilling program, and first aid.

<u>Course Delivery, Fort Chipewyan.</u> Course delivery methods vary. The *Academic Foundations* and *College Preparation* courses are delivered in a classroom (group) setting, with the exception of *Entry Level Math* and *Entry Level Language Arts*, which are delivered via one-to-one tutorial. *Biology 30* and *Physics 25* are delivered via video conferencing, from Keyano College's main campus in Fort McMurray.

Figure 4: Educational experience, interests, relevant related skills, Fort Chipewyan (n=49)

Survey question	Yes	No	Total
Have you taken a college course?	30	10	40
Can you use a computer?	47	0	47
Do you have a computer in your home?	41	5	46
Do you have access to a computer?	43	1	44
Is computer access convenient?	36	4	40
Have you ever taken a course on a computer?	24	17	41
Is prior learning assessment and recognition of interest?	31	10	41
Would you like more information about PLAR?	37	8	45

<u>Programming preferences, Fort Chipewyan.</u> Two ideas were put forward for consideration. Community residents believe that Keyano College should invest in a mobile trades training lab, much like *NAIT in Motion* 

(http://www.nait.ca/portal/server.pt/gateway/PTARGS 0 0 241 0 0 43/http://www/pthosted/cit/nait\_inmotion.htm). The lab would move among the various communities in

Keyano College's catchment area to offer trades and apprenticeship training. The facility would broaden available program offerings, but would require a substantial investment. (An Alberta North official commented that many Northern Alberta communities have made the same request, and that there are not nearly enough mobile labs to meet the needs of all the communities who want them. According to this source, Fort Chipewyan is considered a medium-size community, and larger communities are given priority for these resources.)

The Fort Chipewyan community would also like to expansion of the present college facility, and a daycare centre for students' children. It has been suggested that the College's *Environmental Monitoring* course could be offered in Fort Chipewyan, and that those students could renovate a local house, presently vacant, so that it is environmentally and energy friendly. A proposal has been submitted, but has not yet been approved.

When asked on the survey what subject or topics they needed to learn, the following was received from respondents: writing course; spelling; sign language; computer; environment; supervisory; upgrading; negotiation; Business 4; driving course; French; safety; something to use at work; life skills; business math; non-credit arts and crafts; proposal writing 1; English; public speaking; Excel spreadsheets; massage therapy; confined spaces, H2S, WHMIS, OHS [occupational Health and safety]; accounting; and Word 2007.

The reasons for wanting to learn specific subjects included the following: advance in job and community; have children; prerequisites for LPN, entrance competencies; quality of work; my goals 1; more options for my teaching career; recall what I was taught years ago - I have 30 level in most subjects; to advance career; safety first always; efficiency; to finish grade 12 and improve other skills; re-do math; interpret sign language (I have hearing impaired children); completing masters in Adult Ed and Community development; something new to do in a social setting; environment and health foremost topics in this region.

In response to a question about what they might know already, based on life experience, one respondent wrote: "I am 60 years old and have a lifetime of learning in many areas, dealing with difficult people, coping strategies, media, public address."

Student interview results, Fort Chipewyan (conducted November 2007). Project researchers conducted focus group discussions with students, and interviews with instructors and the Skills Centre aide, and with the Campus Director. Student focus group interviews included four questions, and produced the following results:

- 1. What motivated you to take this program/course?
  - a. Primary was achievement of a credential, usually as a step toward stable employment.
- 2. How would you describe your progress toward achieving your goal?
  - a. Several helpful resources and supports: more tutorial support; a campus daycare; creating a separate facility for the campus.
  - b. All students expressed confidence about their progress, though some commented that success was "up and down." (All seemed convinced that variable results were typical of adult learning.)
- 3. Is there anything that you need, any resources or supports, to assist you in achieving your goal?
  - a. Tutorial support through the College Skill Centre, staffed by an Aide and one volunteer instructor (twice a week), is popular; however, because there is high demand students must often wait for help.
  - b. Math at all levels is the greatest challenge for students, followed by language arts, particularly *Advanced English*.
  - c. Some students have learning disabilities, but these are not presently systematically assessed.
  - d. On-campus daycare is needed. The new childcare centre in Fort Chipewyan is over-subscribed. On-campus daycare was seen as a

- powerful student recruitment tool, and an encouragement for both enrollment and persistence (the most frequent reason for missed classes was family care demands).
- e. Presently, the College is located in a multiplex building that houses other agencies, a distracting environment because of constant public traffic to other agencies. There is a project currently underway (2009) to establish a new, separate campus building.
- 4. Have you any other comment to make about your learning at that Fort Chipewyan campus?
  - a. Suggest additional technical, trades, and business administration courses.

<u>Instructor interview results, Fort Chipewyan (conducted in 2007).</u> Keyano College instructors in Fort Chipewyan teach a variety of subjects. In semi-structured interviews, they were asked seven questions, with responses as summarized below:

- 1. What are the critical instructional objectives of your course or program?
  - a. Knowledge and learning transfer; critical thinking, reasoning, and problem-solving skills; specific math, reading, writing, and daily living skills (functional literacy); appreciation of learning and the inquiry process; find a personal voice and communication style in writing and speaking; share ideas, reflections, and thoughts with peers; develop and explore a personal, community, and cultural identity as found in the readings and writing that they do; look at the world with a critical eye.
- 2. How do you assess the achievement of your objectives?
  - a. Academic progress, both standardized and informal; course presentations; observations of "how students are doing"; ability and

- willingness to solve correct; level of engagement in the class; methods outside of paper and pencil assessment.
- 3. What types of learning materials are used in the delivery of your courses?
  - a. Course textbooks; instructor-generated materials; student-selected and –generated materials; community and aboriginal newspapers; computer-based materials (Internet searches); guest speakers (including use of the CAP site); tours and field trips.
- 4. What aspects of learning do you see students find the most challenging?
  - a. Finances; becoming a student again; cultural values clashes; insecurity and lack of confidence; outside expectations; volume of work.
- 5. What supports are available for students who encounter difficulties with the course or program?
  - a. The college provides academic, interpersonal/personal, and peer support. Of these, formal visits by a counselor from the main campus of the College are judged too irregular to be effective.
  - b. Health problems are handled by the local health authority.
  - c. Peer support might be more effective if there were a student lounge.
  - d. Cultural supports (access to an elder) might also be useful.
- 6. Are there any types of programming that you think students at the Fort Chipewyan campus need or want, in addition to what is available?
  - a. Suggested facilities, resources: on-campus daycare (to address the primary reason students miss classes); a student lounge, to encourage peer support; recreational facilities; improved counseling services; enhanced support for students taking CAP-site learning; an art club; expanded campus facilities; expanded library.
  - Suggested programs and courses: courses connected to oil sandsrelated trades; courses on aboriginal culture; life skills orientation, prior to beginning a program, to prepare students to manage their

time and career objectives; a transition program for students who are leaving *Academic Foundations* to enter the workplace, to prepare them for workplace culture and expectations; pre-trades entry program; hospitality program; health science program; increased number of IT courses (e.g., web design); apprenticeship programming; a full Business and Office certificate program, perhaps delivered online; Tourism (perhaps provided by local experts, and linked to meaningful employment).

- 7. What other comments might you have in relation to adult education programming at this campus?
  - a. Programming and College activities should be more inclusive, invite community involvement, so that Keyano is not perceived as a separate "bubble," but rather part of the community; this campus could be more if it had its own space; the Keyano advantage is that students needn't leave the community; the student population is becoming younger, presenting new challenges.

<u>Summary, Fort Chipewyan</u>. The following observations are based on the researcher's interactions with the community.

1. Online learning. Aside from the comment that business- and office-related courses might be offered online, there were no other references to distance learning by those surveyed. One instructor felt that one source of distance connection, the CAP site, was under-promoted in the community, and not well known by students. Exactly which distance education methods have been used in the community, and how DE has been promoted or portrayed to potential users, will be assessed further as this evaluation proceeds.

The lack of understanding of distance education is not unusual in a small community; however, it limits the prospects of the project: if community

residents and local persons of influence are not aware of the potential of distance education to provide learning and training opportunities locally, or if they have negative views of DE based on limited experience (or hear-say), they are not likely to be attracted to project's offerings. It may be necessary to consider how this lack of familiarity might be systematically addressed, through information sessions, controlled projects, technology demonstrations, etc.

2. Student learning pace. Student classroom learning is already somewhat self-paced in the basic courses offered in this community. Classes typically have few students, so that while a general lesson is presented to the group individuals who are able to do so work at their own pace, and receive individualized instructor support as needed. Flexibility is required of all involved because, as noted above, there are often two (or more) levels combined in a group, forcing students to be patient, and instructors to accommodate varying learning levels, paces, and preferences. The only course that is officially self-paced is the Entry Level *Academic Foundations*, which addresses functional literacy skills in math, writing, reading, and computers to a grade 5.5 equivalency. Each student has a personal education plan, reflecting their individual goals.

Distance education techniques, such as careful instructional design of materials (including real-world relevance), accommodation of self-paced/self-directed learning, tutor and peer-to-peer interaction (face-to-face, and via appropriate technologies), emphasis on motivation, and relevant and timely assessment, might help address issues the campus has encountered: variations in content and pacing in the same classroom, varying prerequisite skills in the same group, different (and serious) personal and academic support needs, and conflicting family priorities affecting regular student attendance.

3. <u>In-community adult education.</u> While some Fort Chipewyan students aspire to further education or employment in other parts of the province, many value the ability to access basic education or entry-level career training without leaving their home community. Moving to Fort McMurray to work or to attend college at the main campus is often viewed as not practical or realistic, for various reasons.

Distance education, adapted to local needs and expectations, might be offered as an alternative to moving out of the community for further training, especially for those with little previous work history, or experience living outside of Fort Chipewyan. Distance methods might permit individuals to access information about jobs, and to obtain insights into their own capabilities and interests, before moving away from their homes. Selected demonstrations of these capabilities of distance programming might be a timely component of the project.

- 4. Learner levels and program focus. It is clear that most students in present courses in the community are working at an adult basic education (ABE) level, and many are candidates for life skills, as well as basic academic skills. At the same time, recurrent requests for trades and apprenticeship training in Fort Chip have gone unaddressed. LCP might consider whether and how trades-entry or pre-trades training programming for individuals at the ABE level, some with limited life skills (including work experience), might be tested and demonstrated.
- 5. The social reasons for participation in training, noted above, are consistent with one of the primary reasons for adult learning projects, reported decades ago by Houle (1961).

## Fort McKay

<u>Background</u>. With a population of about 600, this community consists of single family dwellings, and a central Band and Metis office which houses a learning centre, businesses run by the Band (The Fort McKay Group of Companies), and a wellness centre. For reasons given below, the Fort McKay Band is considered particularly progressive and financially stable.

The Fort McKay First Nation (FMFN) has considerable financial depth due to the success of their groups of companies and venture partnerships. These include transportation, heavy equipment operations, labour, fuel and lube delivery, mailroom and parcel delivery operations, and environmental services. The revenue from these companies is reported at over one hundred million dollars each year, which funds many projects designed to improve and advance the community. The companies, begun in 1986, have approximately 400 employees. Revenue from the companies has allowed the Band to construct 25 new homes per year over the last few years.

Community preferences, plans, and needs. The FMFN companies' CEO indicated to researchers a need for training in leadership and trades for their employees. The FMFN manages their land in four parcels: habitation, oil sands, a traditional site for artifacts and history, and the Moose Lake settlement that operates and demonstrates the FMFN traditional life-style. Governance is by consensus; no councilor has a specific portfolio. The community covers approximately 5 square miles (12 square kilometers) with Dene, Cree, and Metis comprising the population.

Other facts about the FMFN and the community of Fort McKay include:

- An active Industrial Relations Department;
- Plans existed for a band-operated school (BOS) at the K-12 level, partly to reduce the risk of bussing students on the busy highway to Fort McMurray. (Currently, Northlands School District manages a K-9 school in the community);

- Presence of a Keyano College campus, including management of funding for tuition, books, and living allowances;
- Creation of FMFN curriculum and delivery system for the new BOS;
- Construction of a state-of-the-art Learning Centre accommodating learners at junior high and high school levels, using Sunchild e-learning proprietary software. This Centre provides accredited, individualized programs for each student, with many culturally related options as special projects.

Band, HRSDC, early childhood, and Learning Centre staff provided further information about community needs, interests, and ventures:

- 1. "A Day in McKay," a cross-cultural course provided by a local person, is promoted, with industry, to improve industrial relations;
- Early childhood training is preferred in the community, because evening courses in Fort McMurray require too much travel time and risk on the highway;
- 3. Distance Education is very difficult because Internet access is currently mainly dial-up. There was a study conducted in the community by a contractor that utilized summer students to ask questions about technology use and Internet access. The results are expected to assist the FMFN in deciding how to address Internet access issues for its citizens.
- 4. FMFN would like to have videoconferencing capability, and are researching the purchase of up-to-date equipment. The CAP site to be located at the Dorothy MacDonald Centre (where all the FMFN amenities are located) will require assistance from Alberta North to be properly installed, and the Band must hire a coordinator. (High-speed internet in Fort McKay for homes costs about \$100 per month.)
- 5. The Sunchild e-learning facilitator indicated a need for articulated courses for mature learners, who presently do not qualify for many accredited courses

because they lack grade 12. Suggestions included a blended course that combines upgrading with occupational content, delivered in a customized system that matches the skills of the participants; or training in early childhood, combined with upgrading to prepare mature adults for working with children, while upgrading their academic skills and enhancing their parenting skills.

6. Keyano College's Fort McKay campus provides primarily upgrading. It is located in the original centre, a trailer, where it was located before the learners were financially supported by the FMFN; it has been suggested that it might be relocated.

<u>Survey results</u>. Seventeen surveys were the basis for the figures shown in the following Table. The table shows details of previous educational experiences and present interests in Fort McKay, as revealed by the surveys and interviews.

Table 4: Previous education, present training interests, Fort McKay (n=17)

Education element	#
Courses, programs most wanted	
- Accounting	2
- Business management, administration	3
- Computer skills, training	3
- Crafts, culture	4
- Life skills	5
- Parenting	1
- Safety	5
- Technical, work-related	1
- Upgrading, GED	7
Delivery model of training previously taken	
- Teacher-conducted	11
- Computer-based	8
-	
Student-perceived barriers to learning	
- Job	7
- Family	6
- Timing	8
- Location (student's own, or training site); transportation	8
Reasons for not taking or not completing previous training	
- Not offered at a convenient time, place	5
- Desired course not offered	5
- Needed technology (computer, broadband) not available	0
Preferred method of learning	
- Teacher	15
- Computer, Internet	13
- Video	5
- TV	0

Other courses respondents suggested should be offered in the community were: GED; parenting skills; business management; life skills; safety; math; HR; admin; advanced education; accounting; advanced computer skills; social development. Also mentioned were: ECD [Early Childhood Development], first aid, science, and aboriginal studies.

Reasons given for wanting courses included: want to be an accountant; good knowledge to have, for enhancement, current job and advance in the workplace and help others; to be able to teach in my community; like working with people and papers; be safe and take it easy; to be safe; to really memorize math. One respondent wrote: "Want to run company with my Dad." Another wrote: "To know how to deal with myself and be on my own."

Barriers and other issues related to formal learning are summarized in the following table.

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Figure 5: Educational 6	Vnerience	interests	relevant related	ekille	Fort Mickay (	n=171
riguic of Laucational (	Apelience	, millerests	, icic valit iciatca	JILLI	, I OIL IVICINAL (.	11-1 <i>/</i>

Survey question		No	Total
Have you taken a college course?		4	16
Can you use a computer?	16	1	17
Do you have a computer in your home?		2	17
Do you have access to a computer?		1	16
Is computer access convenient?		1	16
Would you like more information about PLAR?	11	2	13

Respondents added the following comments about their negative learning experiences: it [class, program] was long; class too slow sometimes; teacher on intercom phone – don't care for distance learning; needed more time; not knowing what to do; no one to bounce things off of.

<u>Summary, Ft. McKay</u>. The following summary is based upon the above observations:

- 1. The community of Ft. McKay is relatively advantaged, because of its progressive management of its resources through its community companies.
- 2. The companies managed by the community required trained employees in the areas of: business management, human resources, and industrial

- relations; the environment; trades and technologies; and education (including early childhood development).
- 3. Because connectivity in the community is primarily by dial-up, computer-delivered training is presently not recommended. The community's intention to implement videoconferencing will require liaison with Alberta North during installation, but the band intends to coordinate its use thereafter, comprising another potential training need.
- 4. Some adults in the community have previous educational experiences, but may lack credentials. Athabasca University's open admission policy at the undergraduate level, and its Prior Learning Assessment and Recognition program, may be helpful to these potential students.
- 5. Training interests revealed by the survey include upgrading, life skills, safety, and crafts and culture.
- 6. While 58% of the community would prefer teacher-directed (face-to-face) training, about 40% would consider computer-based training as an alternative.
- 7. Barriers to taking training include inconvenient locations of the training, job commitments, and family responsibilities.
- 8. This respondent group appeared exceptional in their experience with and orientation to post-secondary education: three-quarters had taken (though not necessarily completed) a previous college course; 95% considered that they were able to use a computer; and almost 9 in 10 had convenient access to a computer.

#### Wabasca

A general comment recorded by one of the researchers who visited this community was, "NLC [Northern Lakes College] is well respected and does diverse

programming. [However], they cannot spend as much time as will be required even to acquaint everyone with the possibilities now and in future."

The greater Wabasca area includes the communities of Sandy Lake, Trout Lake, Peerless Lake, and Chipewyan Lake. Residents of the region are not necessarily concentrated in Wabasca, but are located in, around, and at some distance (up to 2 hours drive) from the main community.

The researchers determined that there were four distinct groups to be consulted: resident and itinerant employees of industries; Bigstone Cree band members and Metis; Bigstone Cree administration and governance personnel; resident and itinerant employees of vital services such as the hospital, health centre, and police. Some of these, the researchers felt, might be served by simply sending them an online survey through e-mail with an introductory explanation of the study's intentions. However, it was also observed that, for many, negative experiences with previous poorly designed and conducted studies had resulted in residents' preferring one-to-one contacts with researchers. (Researchers were advised that, if surveys were distributed, to allow for respondent discomfort with any required reading or writing.)

In terms of programming, there was a clear view on the part of the residents that "outside" parties should get to know the community rather than arriving with an agenda and a *modus operandi* that may not resonate with the environment and community. Observers advised that outside programmers strive to establish a meaningful and productive connection with the local communities, taking into consideration the local environment and localized conditions.

Enrolments and registrations, Wabasca. The following shows that, since 2001, registrations had declined from 184 to 53, while applications declined from a high (2003-2004) of 629, to 256 (2006-2007).

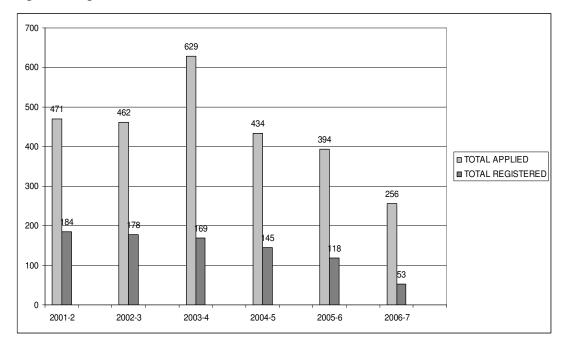


Figure 6: Registrations, 2001-2002 to 2006-2007, Wabasca

The change in enrolment patterns is interpreted by local officials as resulting from changes to funding arrangements, which discourage adults from participating in basic education and other upgrading training, and to the intense industrial activity in the area, driving enrolments in pre-employment programs. These trends are also reflected in Table 2.

<u>Programming history, Wabasca.</u> HRSDC offers several low-skill employment-related programs in Wabasca, through the Northern Lakes College Stony Point campus, or Bigstone Cree band office. Examples include WHMIS, flag person training, power-saw use, and brush clearing. There were several survey participants who were currently completing online programs from AU or are beginning programs in the near future.

<u>Educational experiences, Wabasca.</u> The following table shows the results of some of the key questions asked in the survey distributed to local residents.

Figure 7: Educational experience, interests, relevant related skills, Wabasca (n=52)

Survey question	Yes	No	Total
Have you taken a college course?	33	7	40
Can you use a computer?	49	1	50
Do you have a computer in your home?	47	5	52
Do you have access to a computer?	48	0	48
Is computer access convenient?	44	2	46
Is a computer available to you somewhere?	48	0	48
Do you need courses to be offered at flexible times?	41	7	48
Is prior learning assessment and recognition of interest?	32	9	41
Would you like more information about PLAR?	30	7	37

Respondents were asked about the details of their previous educational and training experiences, and their perceptions of their learning needs and barriers. The following table shows the results.

Table 5: Previous education, present training interests, Wabasca (n=52)

Courses, programs most wanted  - Accounting  - Business management, administration  - Computer skills, computer training  - Crafts, culture  - Health, nursing-related  - Life skills  - Parenting  - Safety, First aid, H2S, CPR, WHMIS  - Sports  - Trades  - Upgrading, high school  - College, university-level  - Safety  - Computers  - Upgrading  - Machine operating, transportation  - Teacher-conducted  - Computer-based  - Computer-based  - Student-perceived barriers to learning  - Job  - Family  - Location (student's own, or training site)  - Reasons for not taking or not completing previous training  - Not offered at a convenient time, place  - Desired course not offered  - Needed technology (computer, broadband) not available  - Teacher  - Teacher  - Teacher  - Teacher  - Desired method of learning  - Teacher  - Teacher  - Teacher  - Teacher  - Teacher  - Teacher  - Desired method of learning  - Teacher  - Teacher	<b>Education element</b>	#
- Business management, administration         19           - Computer skills, computer training         5           - Crafts, culture         2           - Health, nursing-related         1           - Life skills         3           - Parenting         4           - Safety, First aid, H2S, CPR, WHMIS         14           - Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           - Previous courses, programs attempted         2           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           - Delivery model of training previously taken         1           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning         2           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training         Not offered at a convenient time, place         20 <th>Courses, programs most wanted</th> <th></th>	Courses, programs most wanted	
- Computer skills, computer training         5           - Crafts, culture         2           - Health, nursing-related         1           - Life skills         3           - Parenting         4           - Safety, First aid, H2S, CPR, WHMIS         14           - Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           - Previous courses, programs attempted         2           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           Delivery model of training previously taken         -           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning         -           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training         -           - Not offered at a convenient time, place         20           - Desired course not o	- Accounting	7
- Crafts, culture         2           - Health, nursing-related         1           - Life skills         3           - Parenting         4           - Safety, First aid, H2S, CPR, WHMIS         14           - Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           Previous courses, programs attempted         2           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           Delivery model of training previously taken         1           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning         2           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training         - Not offered at a convenient time, place         20           - Desired course not offered         10         - Needed technology (computer, broadband) not available         4 <td>- Business management, administration</td> <td>19</td>	- Business management, administration	19
- Health, nursing-related       1         - Life skills       3         - Parenting       4         - Safety, First aid, H2S, CPR, WHMIS       14         - Sports       1         - Trades       4         - Upgrading, high school       21         - College, university-level       1         Previous courses, programs attempted         - Safety       24         - Computers       18         - Upgrading       15         - Machine operating, transportation       11         Delivery model of training previously taken         - Teacher-conducted       38         - Computer-based       23         Student-perceived barriers to learning         - Job       35         - Family       20         - Timing       24         - Location (student's own, or training site)       15         Reasons for not taking or not completing previous training         - Not offered at a convenient time, place       20         - Desired course not offered       10         - Needed technology (computer, broadband) not available       4         Preferred method of learning	- Computer skills, computer training	5
- Life skills 3 - Parenting 4 - Safety, First aid, H2S, CPR, WHMIS 14 - Sports 1 - Trades 4 - Upgrading, high school 21 - College, university-level 1  Previous courses, programs attempted - Safety 24 - Computers 18 - Upgrading 15 - Machine operating, transportation 11  Delivery model of training previously taken - Teacher-conducted 38 - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Crafts, culture	2
- Parenting         4           - Safety, First aid, H2S, CPR, WHMIS         14           - Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           Previous courses, programs attempted           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           Delivery model of training previously taken           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training           - Not offered at a convenient time, place         20           - Desired course not offered         10           - Needed technology (computer, broadband) not available         4           Preferred method of learning	- Health, nursing-related	1
- Safety, First aid, H2S, CPR, WHMIS  - Sports  - Trades  - Upgrading, high school  - College, university-level  - Safety  - Safety  - Safety  - Computers  - Upgrading  - Machine operating, transportation  - Teacher-conducted  - Computer-based  - Computer-based  - Student-perceived barriers to learning  - Job  - Family  - Job  - Timing  - Job  - Timing  - Location (student's own, or training site)  - Reasons for not taking or not completing previous training  - Not offered at a convenient time, place  - Desired course not offered  - Needed technology (computer, broadband) not available  - Preferred method of learning	- Life skills	3
- Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           Previous courses, programs attempted           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           Delivery model of training previously taken           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training           - Not offered at a convenient time, place         20           - Desired course not offered         10           - Needed technology (computer, broadband) not available         4           Preferred method of learning	- Parenting	4
- Sports         1           - Trades         4           - Upgrading, high school         21           - College, university-level         1           Previous courses, programs attempted           - Safety         24           - Computers         18           - Upgrading         15           - Machine operating, transportation         11           Delivery model of training previously taken           - Teacher-conducted         38           - Computer-based         23           Student-perceived barriers to learning           - Job         35           - Family         20           - Timing         24           - Location (student's own, or training site)         15           Reasons for not taking or not completing previous training           - Not offered at a convenient time, place         20           - Desired course not offered         10           - Needed technology (computer, broadband) not available         4           Preferred method of learning	- Safety, First aid, H2S, CPR, WHMIS	14
- Upgrading, high school - College, university-level  - College, university-level  - Safety - Safety - Computers - Upgrading - Machine operating, transportation  - Teacher-conducted - Computer-based  - Computer-based  - Student-perceived barriers to learning - Job - Family - Timing - Location (student's own, or training site)  - Reasons for not taking or not completing previous training - Not offered at a convenient time, place - Desired course not offered - Needed technology (computer, broadband) not available  - Preferred method of learning	•	1
- College, university-level 1  Previous courses, programs attempted - Safety 24 - Computers 18 - Upgrading 15 - Machine operating, transportation 11  Delivery model of training previously taken - Teacher-conducted 38 - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Trades	4
Previous courses, programs attempted - Safety 24 - Computers 18 - Upgrading 15 - Machine operating, transportation 11  Delivery model of training previously taken - Teacher-conducted 38 - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Upgrading, high school	21
- Safety - Computers - Upgrading - Machine operating, transportation - Machine operating, transportation - Teacher-conducted - Computer-based - Computer-based - Computer-based - Job - Family - Job - Timing - Location (student's own, or training site) - Not offered at a convenient time, place - Desired course not offered - Needed technology (computer, broadband) not available - Preferred method of learning	- College, university-level	1
- Safety - Computers - Upgrading - Machine operating, transportation - Machine operating, transportation - Teacher-conducted - Computer-based - Computer-based - Computer-based - Job - Family - Job - Timing - Location (student's own, or training site) - Not offered at a convenient time, place - Desired course not offered - Needed technology (computer, broadband) not available - Preferred method of learning		
- Computers 15 - Upgrading 15 - Machine operating, transportation 11  Delivery model of training previously taken - Teacher-conducted 38 - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	Previous courses, programs attempted	
- Upgrading 15 - Machine operating, transportation 11  Delivery model of training previously taken - Teacher-conducted 38 - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Safety	24
- Machine operating, transportation  Delivery model of training previously taken  - Teacher-conducted - Computer-based  Student-perceived barriers to learning - Job - Family - Timing - Location (student's own, or training site)  Reasons for not taking or not completing previous training - Not offered at a convenient time, place - Desired course not offered - Needed technology (computer, broadband) not available  Preferred method of learning	- Computers	18
Delivery model of training previously taken  - Teacher-conducted 38  - Computer-based 23  Student-perceived barriers to learning  - Job 35  - Family 20  - Timing 24  - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training  - Not offered at a convenient time, place 20  - Desired course not offered 10  - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Upgrading	15
- Teacher-conducted 23  - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	- Machine operating, transportation	11
- Teacher-conducted 23  - Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	Delimery model of training premiously taken	
- Computer-based 23  Student-perceived barriers to learning - Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	· · · · · · · · · · · · · · · · · · ·	38
Student-perceived barriers to learning  - Job 35  - Family 20  - Timing 24  - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training  - Not offered at a convenient time, place 20  - Desired course not offered 10  - Needed technology (computer, broadband) not available 4  Preferred method of learning		
- Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	computer bused	20
- Job 35 - Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	Student-perceived barriers to learning	
- Family 20 - Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	,	35
- Timing 24 - Location (student's own, or training site) 15  Reasons for not taking or not completing previous training - Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning		20
Reasons for not taking or not completing previous training  - Not offered at a convenient time, place  - Desired course not offered  10  - Needed technology (computer, broadband) not available  Preferred method of learning	j	24
Reasons for not taking or not completing previous training  - Not offered at a convenient time, place  - Desired course not offered  10  - Needed technology (computer, broadband) not available  Preferred method of learning	- Location (student's own, or training site)	15
- Not offered at a convenient time, place 20 - Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning		
- Desired course not offered 10 - Needed technology (computer, broadband) not available 4  Preferred method of learning	Reasons for not taking or not completing previous training	
- Needed technology (computer, broadband) not available 4  Preferred method of learning	- Not offered at a convenient time, place	20
Preferred method of learning	- Desired course not offered	10
, , , , , ,	- Needed technology (computer, broadband) not available	4
, , , , , ,	Preferred method of learning	
	- Teacher	26

- Computer, Internet	17
- Video	10
- TV	5

The preferences of area residents may partially be inferred from their registrations. The following table shows registrations in the Wood Buffalo region in general, of which Wabasca is a part. The registration clusters suggest that the greatest need is academic upgrading (high school completion), followed by pre-employment training, and professional-technical training.

Table 6: Registrations in local programs, Wabasca, 2006-07

Program	Registrations
Employment-related:	
03 – Natural Resources and Conservation	11
47 – Mechanic and Repair Technologies/Technicians	7
51 – Health Professions and Related Clinical Sciences	35
52 – Business, Management, Marketing, and Related Support	
Services	52
Total	105 (23.2%)
Professional – Technical:	
13 – Education	23
15 – Engineering Technologies/Technicians	18
24 – Liberal Arts and Sciences, General Studies and Humanities	58
44 – Public Administration and Social Service Professions	31
Total	130 (28.8%)
Preparatory:	
53 – High School/Secondary Diplomas and Certificate Programs	203
32 – Basic Skills	3
Total	206 (45.6%)
Total	441

In the surveys, 88% of the respondents reported that they found the courses they had taken useful.

Barriers to educational participation and completion, Wabasca. Four major barriers to educational attainment in the community of Wabasca were cited: job, timing, family responsibilities, and location (either of the respondent or of the training). The last barrier, location of training outside the community, was emphasized by many: leaving the familiarity of the community and the support of family imposes a heavy emotional and financial burden on many students and their families.

Learning preferences, suggestions, interests: interview results, Wabasca. In each of the study communities, individuals were asked to describe the types of education and training programs, and the delivery models, they would like to see locally available. Interviews were conducted by telephone and face-to-face, with anyone who was prepared to offer an opinion. The researchers strenuously attempted to engage citizens who are uninvolved with educational programming, as well as current learners, administrators, and others associated formally with education and training provision.

The following is a listing of the points made in the surveys conducted in October 2008 in Wabasca, relevant to the provision, uptake, and completion of post-secondary training.

- Literacy and upgrading are priorities. Most local employers require high school completion. HRSDC does not fund literacy programs, and Alberta Student Finance does not fund individuals who live on reserves.
- 2. There is reverence for learning, but opportunities often do not match needs. Some programmers provide courses and programs they feel are needed, without needs assessment, and consequently do not match the priorities or interests of the community. This point was made strenuously by councilors at Municipal District #17.
- 3. Some institutions seem to believe programming should be either costrecovery, or even profitable. Communities of this size will never generate

- registrations in sufficient numbers to produce profits. A commitment to offering educations services must be made by programming agencies.
- 4. If distance methods are to be used, potential users must be oriented to the use of technology for learning, learn how to learn without a teacher present, and have adequate tutorial support available to them.
- 5. Many potential learners do not live in the communities; some live hours away from the nearest community that offers post-secondary programs. The needs of these residents should not be forgotten.
- 6. Northern Lakes College is regarded as the best source of information about courses available to community residents.
- 7. The primary course areas in which respondents expressed interest were: technical (work-related), university, upgrading, college, safety-related, and crafts.
- 8. Additional courses in which respondents expressed interest included: prenatal, sports, transportation, parenting, legal assistant, pre-law, trades, life skills, medical administration, computers skills, bookkeeping, accounting, and general nursing.
- 9. Fifty-three percent preferred *learning in a class*, while 35% selected *learning on computer* as a preference.
- 10. Forty-one of 48 (85%) respondents to the question about whether they preferred a set class time indicated that they would prefer no set class time, but to study at their convenience.
- 11. The majority of respondents were highly interested in PLAR and wanted more information. The raw data and comments imply PLAR at university level, but there is also reference to PLAR for informal learning in the workplace and for life experience.

In summary, one of the interview respondents had this to say about her present situation:

"I moved to Calgary to get an undergrad degree as a pre-requisite to get into the [specific program]. Once completed I applied but was put on a waitlist-the only way to upgrade and improve my application would be to attend face-to-face 500 level linguistic clients. I can no longer afford to live in Calgary and go to school part time, but living up north I can no longer upgrade my application, so I am stuck in an assistant role until higher level courses are offered by distance."

<u>Summary, Wabasca</u>. The following summarizes the key findings related to Wabasca and region, based on interviews, discussions, and survey results.

- 1. Northern Lakes College is present and respected in the region, but there is a sense that there is need for more information and programming than the college is able to provide.
- 2. The region is large, and the communities in the region are widely distributed and separated.
- 3. Four distinct groups were identified as potential users of post-secondary training services: itinerant employees of local resource firms; Band members; Band administrators and employees of Band companies; and resident professionals such as nurses, teachers, police, etc.
- 4. Enrolment in 2006-2007 were 30% of the levels of 2001-2002, primarily due to increased local job opportunities.
- 5. In the most recent year for which information was available, 46% of adult enrollments in the Wabasca region were for upgrading, essential skills training, or high school level certificates and diplomas; 28% were for professional or technical training; and 23% was employment-related training.
- 6. The respondents were a select group: 83% had taken a college course; 98% could use a computer; 90% had a computer in their home (96% had access somewhere convenient); 85% reported they required flexible times if they were to take training; and about 80% felt that PLAR might apply to them.

- 7. Training needs and interests were upgrading; business management and administration, including accounting; and safety.
- 8. About one-third of the respondents preferred computer-based delivery of training, while 50% preferred teacher-based. (In another part of the survey, 44% had indicated they would consider computer-based access, while 84% said they wanted their training to be conducted by the teacher.)
- 9. Overall, there was a sense that the available training opportunities in the Wabasca region do not correspond fully with interests and needs. This is especially true if the outer or back regions are also included, as these have far fewer local opportunities.

# **Summary of findings**

The data for this study consist of various types of enrolment information, contents of interviews and discussions, and survey results. It was hoped that, by using a variety of methods, participation would be increased – no one would be excluded because of literacy or other issues related to ability to follow a form.

### Enrolment information

The enrolment patterns in these northern regions appear to have followed the downward trend for college attendance in Alberta as a whole, based on the data available. Often, the explanation for this trend was the healthy local economy, and the availability of relatively steady, well paying jobs.

Nevertheless, colleges were concerned about falling (in the north) or static enrolments. The data (discussed below) about the proportions of survey respondents who have computer skills and access, and who would consider taking computer-based

(i.e., distance) training, is suggestive, and presents a possible means for colleges to address their enrolment problems.

The issue of programming for youth who have left the school system arose in several discussions, despite the fact that this project, and the associated research, do not address the needs of that population. The problem of interesting youth in learning, whether academic or work-related, is significant in these communities, and a concern of parents, teachers, social agencies, and planners. If the project is able to offer advice or suggestions regarding this problem, the communities will be grateful.

### <u>Interview and discussion information</u>

The results of interviews and discussions showed the following common themes and concerns throughout these four communities:

- A repeated theme was the finding that most northern residents prefer to remain in their home communities while taking post-secondary training.
   McMullen (2004) reports that this preference, along with finances and the lack of a nearby delivery institution and role models, are three of the most serious barriers to post-secondary participation. Arguably, distance delivery methods may be able to address all three of these issues.
- Many respondents were concerned about financing their learning while
  working. Some local leaders and administrators argued that learners should
  be able to work half-days locally, and be paid for upgrading during the other
  half.
- 3. There is a feeling that there is insufficient literacy programming, particularly English conversation for speakers of native languages. This particularly affects the elderly, but there are also increasing numbers of non-native speakers of English in these communities, who would also benefit from language and literacy learning opportunities.

- 4. Local colleges were generally well respected, and were the first choices for information on available programming in the communities; the library and the Internet were other respected resources.
- 5. About half of the respondents in these communities had taken courses, and a majority reported they had found them useful.
- 6. Jobs, timing, family responsibilities, and location (either of courses or of the learners) were the primary barriers to enrolling in or completing programs.
- 7. University, college, work-related training, parenting, and safety were primary areas of interest; business management, life skills, math, English, music, languages, advanced software, and Bachelor of Commerce were others.
- 8. A great majority of respondents had access to a computer, and, in their own estimation, possessed basic computer skills. The question whether access speed might comprise a barrier is still to be addressed.
- 9. About a third were willing to consider distance delivery, while two-thirds preferred delivery through teacher.
- 10. There was considerable interest in PLAR, with about three-quarters of the students believing that prior learning assessment might apply to them.

#### Survey results

The surveys were conducted while researchers were in attendance in communities; as well, the researchers left copies of the survey instruments to be distributed and returned after the researchers had left. The following table shows the results of the survey in relation to educational experiences, interests, and relevant skills for the various communities.

Survey question	Fox Lake (n=47)	Fort Chip (n=49)	Fort McKay (n=17	Wabasca (n=52)	Total (n=165)
Have you taken a college course?	57%	61%	71%	64%	49%
Can you use a computer?	85	96	94	94	92%
Do you have a computer in your home?	81	84	88	90	86%
Do you have access to a computer?	83	88	88	92	88%
Is computer access convenient?	81	73	88	85	82%
Have you ever taken a course on a computer?	30	49	18	79	44%
Is prior learning assessment and recognition of interest?	68	63	0	62	58%
Would you like more information about PLAR?	66	76	65	58	66%

Table 7: Combined results, educational experiences, interests, skills

To the degree the above is typical, it indicates the following may be true in remote regions about students' educational histories, experiences, interests, and skills, including computer capabilities:

- 1. Very high numbers of learners and potential students know how to use a computer, have access to a computer, have a computer in their home, or have a computer that is conveniently accessible.
- 2. Almost half have taken a course of some kind on a computer.
- 3. Most have convenient access to a computer with (high-speed) Internet capability.
- 4. About half have previously taken a college course.
- 5. Two-thirds are interested in more information about prior learning assessment and recognition (PLAR).

The following table combines the data presented above, to show details of previous education and training in the four study communities.

Table 8: Combined results, previous education, present training interests (n = 165)

Education element	Fox	Fort	Fort	Wabasca	Total
	Lake	Chip	McKay	(n=52)	(n=165)
Courses, programs most wanted	(n=47)	(n=49)	(n=17)		% 
- Accounting		1	2	2	3%
- Business management, admin.	14	14	3	19	30
- Computer skills, computer training	1	4	1	4	6
- Crafts, culture	2	1	1	2	4
- Environment		1	1		1
- Health, nursing-related	2	1		1	2
- Life skills	1	6	5	3	9
- Parenting	1	4	2	4	6
- Safety, First aid, H2S, CPR, WHMIS	4	6	5	10	15
- Sports	4	0	3	10	13
- Technical, work-related		10	1	1	6
- Trades		10	1	4	2
- Transportation, machine operation		1		4	1
- Upgrading, GED	13	16	5	30	39
- College-, university-level courses	3	2	3	1	4
- Conege-, university-level courses	3	2		1	4
Delivery model of training previously					
taken					
- Teacher-conducted	30	30	11	38	66%
- Computer-based	14	24	8	23	42
- Training was useful	32	35	15	42	75
Student-perceived barriers to learning					
- Job	25	31	7	35	59%
- Family	14	20	6	20	36
- Timing	24	24	8	24	48
- Location (student's own, or training	9	12	8	15	27
site)					
D. C. C. L.					
Reasons for not taking or not					
completing previous training		10	-	20	260/
- Not offered at a convenient time,	6	12	5	20	26%
place	4	1.4	-	10	20
- Desired course not offered	4	14	5	10	20
- Cost		2	0	7	4
- Needed technology (computer,	1	3	0	4	5
broadband) not available					
Preferred method of learning					

- Teacher	21	35	15	26	59
- Computer, Internet	16	23	13	17	42
- Video	6	12	5	10	20
- TV	4	10	0	5	12

#### Overall, the above suggests:

- Upgrading (including GED and specific subjects, such as math and English)
  was the most commonly mentioned learning interest. The areas of next most
  interest were business management and administration; safety-related
  subjects followed.
- 2. Trades training was mentioned in every community by both employers and constituents, though it appears to have been regarded as "work-related" training and so was relatively rarely mentioned as a separate learning interest in the surveys.
- 3. While most respondents preferred a teacher-led learning experience, almost half (42%) were interested in and open to computer-based learning.
- 4. Three-quarters of the respondents were positive about their previous learning experiences.
- 5. Job was the most often mentioned barrier to further training, followed by the timing and location of the training, and family issues.
- Training not offered at a convenient time was the most often cited reason for non-participation. Lack of availability of desired courses was the next most often mentioned barrier.

## **Conclusions**

The figures on enrolment contain a message to institutions: in a buoyant economy, when forced to choose between training and employment, students have often recently opted for employment over training, especially if the available training

programs impose constraints in the form of place or time of access. The trend in the above data shows a steady reduction in the registrations of institutions that predominantly require students to attend on campus, impacting their employment, and forcing them to incur travel, babysitting, and other personal and family costs and inconveniences. It is impossible not to be struck by the fact that Athabasca University, the only distance institution in the study, experienced strong growth rates during this period of general decline for the college system, and only modest growth for the rest. During this time, Athabasca's rate of growth was from 2.6 to 57 times greater than that of other universities in Alberta.

It is also potentially suggestive that most respondents in the study indicated they had access to, and were comfortable with, computer technologies. Many had used computers to learn before, most had access to computers in their homes, and virtually all had convenient access somewhere to a computer. This, combined with the desire to stay in their home communities for training, suggests that media-based learning, in the form of distance education, might offer opportunities. This interpretation is bolstered by the finding that the reason most often given by respondents for failing to enroll in or complete a program was the inconvenience associated with the offering of that program. Anything that helps address the problem of inconvenience, or, more positively, that makes access easier, is likely to address at least some of the problems related to enrollment and persistence.

Information from the aboriginal communities indicates that their constituents find programming useful (89%), that they desire more programming (100%), and that they believe that collaboration among post-secondary institutions is useful (100%). They also feel they require more timely, accessible programming information (99%), and that key stakeholders from the community, post-secondary providers, and other programmers are willing to work together to fulfill community programming needs. The data gathered indicates that the broadest demographic sample currently available is in consensus on the necessity of needs assessment (applied research) that results in

suitable programming for their communities, suggesting that recent research activities of LCP, and this report, are timely.

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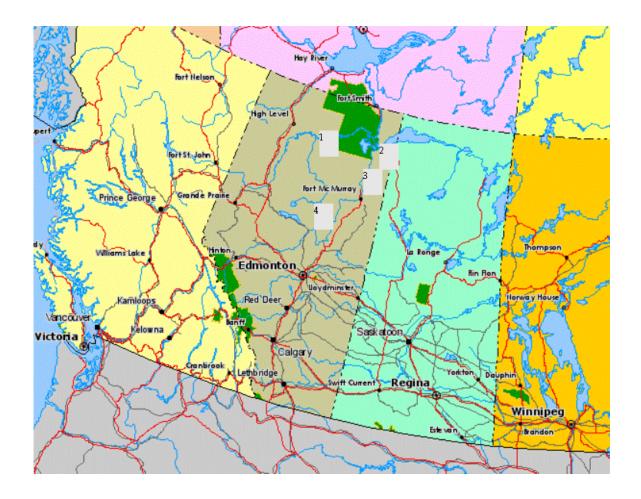
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## **ATTACHMENT 1**

Figure 8: Location of study communities, Province of Alberta, Canada



- 1: Fox Lake
- 2: Fort Chipewyan
- 3: Fort MacKay
- 4: Wabasca

## **ATTACHMENT 2**

Interview protocol: The following initial questions were used to structure the interviews conducted in the study communities:

- 1. What post-secondary course and program offerings are currently available in this community?
- 2. How well do these meet the needs of residents?
- 3. What offerings, delivery methods, of student supports are needed?
- 4. Other comments: