Types of Post-secondary Education and Training Current and Potential Adult Students Want

Final Report

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I. INTRODUCTION

The Advisory Committee of the Labour Market Information Clearinghouse surmised that if future students were asked to identify potential college programs of interest or need, colleges could be more confident that the programs identified to meet these needs would receive greater uptake by students. The Committee also identified the need to learn more about the modes of delivery that work best for current and prospective students including the types and levels of e-learning that are required. It is also expected that the results of the research undertaken will help guide working with Provincial and Northern partners in offering a broader range of courses and programs.

As a result, the Clearinghouse engaged Emerging Directions Consulting Ltd., to undertake this research project entitled "Types of Post-Secondary Education and Training Current and Potential Adult Students Want." The purpose of the project was to conduct research with current and prospective students in the Clearinghouse catchment area specifically focused on:

- The types of post-secondary education and training programs and courses current and prospective students express interest in undertaking;
- The post-secondary education and training programs and courses current and prospective students indicate they need to undertake for their career goal (employment or further education);
- The types of post-secondary education and training programs and courses current and prospective students say that they are or would be willing to enroll in;
- The willingness and preparedness of current and prospective students to participate in e-learning;
- Current and prospective student views on the merits of credit versus non-credit programs or courses; and
- To what extent, current and prospective students differ in terms of how they view credit or non-credit offerings.

The purpose of this project report is threefold. First, it is to present a review of literature related to the project's focus areas. Second, it is to incorporate relevant data from the 1996 and 2001 Census data that reflect trends in a variety of career preparation/training/education programs, including: literacy and basic education, high school and general equivalency diploma, career certificate or diploma, university, and those employed who are in need of or desire upgrading or advanced/continuing education. Third, it provides an analysis of the results of survey data gathered from students currently enrolled in academic and career programs in the partner colleges as well as a sample of Northern Alberta residents accessing services through Alberta Human Resources and Employment Labour Market Information Centres or a Youth Connections program.

II. RESEARCH METHODOLOGY

The secondary data collection methods utilized in preparing this report included a literature review using print and on-line materials. A review was undertaken of all available high school data from a recent Clearinghouse survey and Statistics Canada reports and data, including 2001 Census Data for Alberta provided by the Northern Alberta Development Council. This information was gathered, analyzed, and incorporated into this report.

Primary data was collected by means of a survey (see Appendix A for the survey instrument). The survey was to be targeted at students 18 years of age and over who had not entered post-secondary education directly from high school. These individuals may have dropped out of high school or entered the labour force and later decided to pursue their education. The survey was distributed to current and prospective post-secondary students attending the five Clearinghouse partner colleges. It was also distributed to prospective students seeking career services through Alberta Human Resource and Employment Labour Market Information Centres and Youth Connections programs in the catchment area.

1. Plan for Distribution of Surveys

Each of the five Clearinghouse partner colleges was provided with 100 copies of the survey (a total of 500 surveys distributed in all). It was intended that 50 surveys would be completed by students currently enrolled in career programs or university transfer programs and 50 completed by perspective students including those enrolled in career preparation or academic upgrading programs.

Another 500 surveys were to be sent to Alberta Human Resources and Employment (AHRE) for distribution across their offices in Northern Alberta. These surveys would be distributed to youth accessing services through a Labour Market Information Centre or Youth Connections program. It was also determined that the inclusion of persons of Aboriginal ancestry in the sample population was very important.

2. Resultant Survey Distribution

Institutional Research and Planning staff of the five colleges reviewed the draft survey. In addition, Research Ethics Committees for Keyano College and Northern Lakes College, the Instructional Chair Committee at Grande Prairie Regional College and the Vice-Presidents Academic for Grande Prairie Regional College and Portage College reviewed the survey. The five distributed surveys colleges between late March and mid-April 2005.

Contacts in each Alberta Human Resources and Employment Regional Office were identified and approached, prior to sending the surveys, so that their support was enlisted to assist in distributing the surveys to the previously mentioned clients for completion. Once the surveys are completed, they were couriered to the NADC Office in Peace River where they were collected and sent to Emerging Directions Consulting Ltd. in Edmonton. The original deadline of June 1, 2005 for submission of completed surveys was extended to August 30, 2005 in an effort increase the survey response rate.

Each survey distribution site was provided with an Informed Consent form, Survey Instruction Sheet and Administration Reporting Template (see Appendix B of this report for copies of the aforementioned documents).

3. Sampling Information

The five colleges varied in their approach to determining the sample population for survey distribution:

- Northern Alberta Institute of Technology sent surveys to all English as a Second Language, academic upgrading, business administration and office administration programs. Fairview and Grand Prairie campuses were not included since they do not offer these programs.

- Keyano College was unable to distribute the survey to students in their classrooms based on a policy established by the College's Research Ethics Committee. Institutional Research staff contacted instructors of students in the target group to announce the study in class. Any student interested in completing the survey outside of class time was urged to contact Institutional Research. This approach was undertaken in all Keyano College communities. In addition, at the Fort McMurray campus, signs were posted on bulletin boards to assist in recruiting students. Despite these efforts, only four students completed surveys.

- Grande Prairie Regional College Institutional Research and Planning staff met with Academic Chairs of the Academic Upgrading program and Year 1 and Year 2 University Transfer programs. These program areas were selected since it was thought that these students would be either undecided about their future course of study or open to new ideas about programs and courses.

- Northern Lakes College held a training session for Access Facilitators via teleconference and campuses that had a representative at the training session meeting were selected to participate in the survey. A count of all registered students across 27 locations including part-time students was undertaken. This data was grouped by program type (career, upgrading and university studies). The sampling was approximated based on the locations and program types using a proportional sampling method. A written instruction sheet was also provided with the surveys. In order to encourage completion of surveys by students, a cash incentive (first prize of $50 and second prize of $30) was implemented.

- Portage College distributed surveys to 12 College Prep classes, four Upgrading 200 classes, four Upgrading 300 classes and four Upgrading 400 classes.

Detailed information about the survey sample population is provided in Table One on the following page.

Table One - Sampling Information

Program Type	Total Sample Size	Number of Returned Surveys	Number of Classes Selected
Grande Prairie Regional College			
ESL/Upgrading	40	34	3
University Transfer	60	52	
			2 English, 2 Psychology
Institutional Total	100	66	
Keyano College		4	Not able to distribute in class
Institutional Total		4	
Northern Alberta Institute of Technology			
ESL/Upgrading	71	51	8
Career/technical	29	25	2
Peace River	41	32	5
La Crete	17	16	2
High Level	42	27	4
Institutional Total	100	75	
Northern Lakes College			
Career	Athabasca 4 Faust 1 Grouard 11 High Prairie 2 Peace River 2 Slave Lake 12 Swan Hills 2 Wabasca 7		
Upgrading	Athabasca 3 Atikameg 3 Calling Lake 3 East Prairie 3 Faust 3 Grouard 4 High Prairie 7 Lon River 2 Manning 3 Peerless Lake 4 Slave Lake 6 Swan Hills 1 Wabasca 5		
University Studies	Grouard 5 Slave Lake5 Wabasca 2		
Institutional Total	100	56	*
Portage College			
College Prep			12 classes
Upgrading 200			4 classes
Upgrading 300			4 classes
Upgrading 400			4 classes
Institutional Total	115	100	

* No completed surveys were received from Atikameg, East Prairie, Manning, Peerless Lake and Wabasca campuses.

4. Data Analysis

Survey data was entered as it was received into Raosoft EZSurvey, a proprietary survey software. The data was then analyzed using the Raosoft EZ Report 2005 to plot data tables and create cross tabs. The data was analyzed using the following procedures:

- Developing a frequency table for each question.
- Providing single banner cross-tabs between select questions and independent demographic variables.
- Creating single-banner cross-tabs between select questions to explore relationships.

Open-ended questions from the survey were analyzed to identify common themes expressed in response to the questions asked.

Figures from the analysis of survey data have been incorporated into the Appendices of the Final Report as a Technical Report (Appendix D). Analysis of open-ended survey questions is also included as a separate appendix (Appendix E).

5. Context for the Study

(i) Guiding principles

The research work was shaped by belief in and observance of the following guiding principles:

- Each person is entitled to the right of privacy and dignity of treatment.
- Research findings should be presented honestly, without distortion.
- All research gathered for a project is the exclusive property of the client.
- All research activities must conform to provincial FOIPP and the Federal Privacy Act.

(ii) Research assumptions

The following research assumptions guided this study:

- Individuals participating in this research study were reflective of the diversity of clients accessing these services through the Northern Colleges and Alberta Human Resources and Employment during the study period.

- Individuals participated in this study of their own free will.

- Participation in this research study did not in any way affect the relationship between the individual and a Northern College or Alberta Human Resources and Employment.

(iii) Limitations of research

- The study was time bound between the period March and August, 2005.
- The study was limited to the responses collected from the surveys and the information available in documents during the study period.
- The study was limited to those who chose to participate.
- Respondents self-reported level of education and socioeconomic information and this data was not verified through other sources.
- Data collection occurred primarily during the spring and summer months. End of term activities and vacation time may have had an impact on the number of individuals who completed the surveys and necessitated a longer period of data collection.
- Available resources limited the sample size for this study however the sample was designed to be representative of the larger population.
- The number of surveys completed by Alberta Human Resources and Employment clients limited the number of respondents who were perspective students. As a result, the number of perspective students is underrepresented in the study sample.
- The number of respondents from Keyano College was limited by venues for survey distribution and the time available to do so. As a result, the number of Keyano College students is underrepresented in the study sample.
- The findings, conclusions, and recommendations are posited only as they relate to the current study.

III. HIGHLIGHTS FROM LITERATURE REVIEW AND 2001 CENSUS DATA

The purpose of the review of literature and 2001 Census Data was to identify and review relevant material related to the project's focus areas (see Appendix C for the complete Literature Review and 2001 Census Data Results).

A. Summary of Review of Literature

Through an extensive review of literature related to post-secondary participation, participant profiles, types of delivery, student satisfaction, and program and course selection, the following major themes were identified in the literature:

- Characteristics of post-secondary participants
- Characteristics of learners involved in Alberta Human Resources and Employment's Skills Investment programs
- Components contributing to successful transition from secondary to post-secondary education
- Conditions at post-secondary institutions that attract older students and the services provided to them
- Characteristics of post-secondary undergraduate distance learning participants
- Post-secondary undergraduate satisfaction with distance education
- Post-secondary student course choice in distance education.

1. Post-secondary Participants: Who They Are and When Do They Attend

Tomkowicz and Bushnik (2003) cited a number of research studies that indicate that high school graduates who delay their post-secondary education have certain characteristics that differentiate them from high school graduates who enroll in a post-secondary institution immediately after high school. Those 20 year olds[1] who delay their post-secondary education are more likely to be:

- Male
- From lower socio-economic status families
- Enrolled in a non-academic high school program
- Have lower tested ability and lower school grades. (p. 7)

Those young adults who choose not to pursue a post-secondary education at all were shown in several studies to be different from those who enroll in a post-secondary program. Those who do not go on to post-secondary education at all were more likely to be:

- Male
- Rural youth
- Aboriginal youth
- Children of parents with low education
- Come from single parent families

[1] Only respondents who were 20 years of age at the time of the interview were included in these three groups. The age of 20 was chosen because it was deemed to be the one age at which all respondents, regardless of province, had the greatest likelihood of being out of high school for at least 12 months.

- Enroll in non-academic high school stream
- Demonstrate low academic performance. (p. 6)

Tomkowicz and Bushnik (2003) identified three pathway takers to post-secondary education - right awayer, delayer, and no-goer. They noted the following significant differences between delayers and right-awayers were:

- Delayers were not as engaged in high school as right-awayers, either academically or socially. Twelve percent of delayers said they were very academically engaged compared to 18% of right-awayers. Nine percent of no-goers indicated they were very socially engaged in high school compared to 22% of right-awayers.
- Delayers had lower marks in school than right-awayers. Only 37% of delayers reported having a high school average over 80% while over one-half of right-awayers reported having such an average. (pp. 9, 23)
- Thirty-two percent of delayers reported having all friends planning to attend a post-secondary institution compared to 41% of right-awayers.
- Approximately 20% of delayers reported working 20-30 hours a week during their last year of high school, while only 12% of right-awayers did so.
- Twenty-one percent of delayers received scholarships, awards or prizes compared to 33% of right awayers. (p. 9)

Tomkowicz and Bushnik (2003) identified the following differences between no-goers and right-awayers:

- Fifty-eight percent of no-goers were male compared to 45% for right-awayers.
- Eighty percent of no-goers had learned English as their mother tongue compared to 57% of no-goers.
- Twelve percent of no-goers were married compared to 6% for right-awayers.
- Six percent of no-goers reported having children as compared to 2% of right awayers.
- Twenty three percent of no-goers lived in rural communities compared to 17 % of right-awayers.
- Only 14% of no-goers had a parent with a university degree as compared to 36% of right-awayers.
- Twenty nine percent of no-goers had three or more siblings compared to 18% of right-awayers.
- Less than 50% of no-goers reported their parents thought continuing education after high school was very important compared to about 80% for right-awayers.

Of the high school experience variables, the following predicted post-secondary non-enrolment by age 20:

- Low high school grade point average
- Few friends planning on furthering their education
- Working 20 or more hours per week. (p. 14)

Bragg (1999) reported that financial concerns are a major reason why those traditionally viewed as non-college bound do not get to college. Also involved are issues related to the adequacy of high school academic preparation. Those with an over-reliance on basic high school courses are missing advanced math, science and technical courses from their high school programs of study. (p. 2)

2. Profile of Learners Involved in Skills Investment Programs

Alberta Human Resources and Employment (AHRE) offers Skills Investments Programs designed to provide training to learners to improve their employment situation. AHRE (2004) noted that in 2003 approximately 22% (10,855 Skills Investments Programs' learners out of a total of 48,854) were between the ages of 20 to 24, the age range of focus to this Northern Labour Market Clearinghouse Study. Another 7.3% of Skills Investments Programs' learners (3,574) in 2003 were between the ages of 18 and 19. (p. 9)

The two major Skills Investment Programs are:

- Tuition-Based Skills Development Programs which assist financially disadvantaged people in terms of education or training in academic upgrading, literacy, English as a Second Language, life management, pre-careers training and Integrated Training.
- Contracted Training Programs that included Job Placement, Self Employment, Skills for Work, Temporary Programs and Training on the Job.

AHRE (2004) identified the following learner profiles for each of these two major programs:

Tuition-Based Skills Development Programs (SDP)
In 2002/2003:

- 34,803 learners or 71% of the 48,854 learners in Skills Investment programs took part in Skills Development Programs.
- Fifty-nine percent of participants were female and 41% were male. Thirty-four percent of Skills Development Program learners were in the programs for a duration of seven to nine months.

Contracted Training Programs
In 2002/2003:

- 14,051 Skills Investment Program learners (29%) were in Contracted Training Programs.
- Fifty-two percent of participants were male and 48% were female.
- 27% of participants were in Contracted Programs for a duration of four to six months.

(pp. 4 – 5)

3. Components Contributing to Successful Secondary to Post-secondary School Transition

Bragg (1999) has identified that in order for students to be successful in the shift from secondary to post-secondary education, they require a well-planned and well-executed education system. Six components that enhance students' opportunities to make a successful transition from high school to college are:

- Rigorous and engaging learning.
- Formal articulation strategies.
- Meaningful linkages between theory and practice.
- Outcomes-focused curriculum.
- Access and opportunity for all secondary-to-post-secondary transition opportunities available to all students.
- Longevity through collaboration. (pp. 4-11)

4. Conditions at Post-secondary Institutions that Attract Older Students and Services Provided to Them

An extensive literature search suggests that there has been little research focused on the notion of career choice of older students. Instead, the literature has focused on conditions at a post-secondary institution that attract older students and the services that should be provided for them. Fleet, Moore and Rodgers (1997) of the University of Western Ontario investigated the academic decision-making of mature students and the "personal and/or institutional factors that facilitate or hinder their progress toward completion of a particular degree" (1997, p. 1). The focus of the study was on the conditions at the institution that attracted and retained mature students.

The reasons for attending can be summarized as follows:

- Gaining knowledge and skills
- Fulfilling a personal dream
- Wanting a different job. (p. 3)

The reasons for choosing the university were:

- The school offered the programs they wanted
- The school had a good reputation
- Encouragement from family and friends. (p. 3)

Morgan and Ambaye (2002) of the University of Western Australia undertook a study to determine if pre-enrolment decision-making influenced student outcomes. Their findings are as follows:

- There was no difference in student success attributed to the relationship between the variables of student segment and responsiveness to any of the pre-training influences.
- There is a slight relationship between students who achieved their primary goals and the information they received when choosing training.
- There is a moderate to strong increase in success relative to a positive view of the information about careers and jobs available.
- There is a moderate to strong relationship between success and a positive view of student counselling services. (pp. 8-9)

The authors concluded "pre-enrolment decision making is an important factor in determining whether a student attains their primary outcome from training" (p. 11). Further, "information about careers and jobs available to you" was the most important predictor of success.

Nichols Applied Management (1999) attempted to identify the key factors in student decisions regarding post-secondary studies among northern Alberta students. The methodology involved administering a survey questionnaire to a random sample of grade nine and grade twelve students living in towns and cities. The same survey was conducted in remote communities and the results were compared.

In the course of the research Nichols examined historical high school completion rates for the areas surveyed. For the school year 1989/90, 57% of students completed high school within six years (compared to a 70% completion rate for the province as a whole). The study estimated that approximately 2,900 students left school between the grade nine class of 1995/96 and the grade twelve class of 1998/99. (p. 9)

The results indicated that those most likely to attend a post-secondary institution tend to be:

- Female
- Children of parents with higher education
- From non-remote communities. (p. 11)

The researchers examined students' perceptions of the benefits of post-secondary education. The two highest ranked variables were work-related: a better chance of getting a good job, and as a requirement for a specific job. (p. 12)

The students surveyed ranked a number of perceived impediments to attending a post-secondary institution. The results indicated that students in grade nine and, to a lesser extent, in grade twelve do not feel that they have enough information concerning financial realities, information about institutions, and programs of study or career alternatives. The researchers viewed the difference in level of information between grades nine and twelve as having implications for the kind of information that the early school leavers would possess (Nichols, p.13).

5. Characteristics of Post-secondary Undergraduate Distance Learning Participants

Sikora and Caroll (2002) in their profile of American distance delivery education in 1999-2000 identified that those undergraduates who were more likely to participate in distance education were:

- Females
- Part-time students
- Those whose primary language at home was English
- Age 24 and over
- Married
- Full-time employed
- Those with dependent children
- Single parents
- Independent (not financially dependent on their parents)
- Earn $50,000 per year or more
- Parents' highest level of education is less than a bachelor's degree
- Lived 10 or more miles from the institution they were enrolled in
- Education students
- Delayed entry for more than two years.
- Those with two or more persistence risk factors.[2] (p. 132)

[2] Index of risk represents an index from 0-7 that relates to seven characteristics known to adversely affect persistence and attainment. These characteristics include delayed enrollment, no high school diploma (including GED recipients), part-time enrollment, financial independence, having dependents other than spouse, single-parent status, and working full-time while enrolled.

Lemone (2001) reported the following characteristics were found to be predictive of success in web-based distance learning and was confirmed by distance delivery students themselves upon course completion:

- Self-disciplined
- Motivated
- Comfortable learning outside the classroom
- Comfortable on the web
- Self-directed (able to search for information)
- Able to keep to a schedule
- Able to work independently and isolated
- Be a full-time student (referring to the amount of time the course took)
- Not easily distracted
- Not needing close attention and one-on-one attention
- Not needing physical contact with instructor and classmates
- Not a procrastinator
- No interfering family responsibilities (for those who work at home). (pp. 132-133)

Jenkins, Buboltz, Wilkinson, and Beatty (2001) contend that distance education courses may not be in the best interest of students attending college directly from high school. They argue "The transition from high school to college is a period of educational social adjustment for most students. New levels of social relationships are being developed that are important to the development of the student. This is also often a first experience of living away from one's family and friends and, according to Horn (1977), "those who extend their associations beyond the classroom may well find their transformation into college students to be easier and more complete" (p. 104).

6. Post-secondary Undergraduate Satisfaction with Distance Education

Sikora and Caroll (2002) noted that among those American undergraduates surveyed in 1999-2000 who participated in distance education:

- 23% were more satisfied with the quality of instruction in their distance education classes than in their regular classes;
- 47% were equally satisfied with instruction in distance education classes and regular classes;
- 31% were less satisfied with the instruction in their distance education classes when compared with their regular classes (pp. 23-24).

DeBourgh (1999) contends that satisfaction in distance-education

> is related to the performance of the instructor – just as for traditional face-to-face courses. Students acclimate to the instructional reality – traditional, campus-based face-to-face instruction or technology-mediated distance education and once accustomed to that reality, it is the quality and effectiveness of the instructor and the instruction, not the technology that is associated with satisfaction (p. 7).

Gabrielle (2001) found that among technologically advanced students, student-teacher interaction and perceived media quality were consistent positive predictors of student perceptions of distance education instruction effectiveness and student satisfaction. Less technologically advanced students perceived only media quality as significant (p. 81).

Based on a review of distance education literature, DeBourgh (1999) lists the following factors related to students' satisfaction with elements of the quality and effectiveness of the instructor:

- Teacher behaviors that create a sense of belonging and inclusion in the class
- Effective communication skills
- Enthusiasm during instruction
- Organization and preparation for each class
- Access to the instructor and response for students' questions
- Perceptions of the instructor's professional behaviors. (p. 4)

DeBourgh (1999) found in his review of distance education literature the following factors related to students' satisfaction with elements of the quality and effectiveness of the instruction:

- The clarity of communication and course expectations
- The selection, quality and instructional use of visuals
- The timeliness of feedback on course work
- The use of instructional strategies that aid students in understanding the course content. (p. 4)

7. Post-secondary Student Course Choice in Online, Open and Distance Learning Settings

Simpson (2004) identified that inappropriate course choice has been cited as one of the four main reasons for dropping out after accessing a course. A 2002 annual survey of distance learning students' withdrawal at the Open University Institute of Educational Technology found that "inadequate course choice guidance" was the second most chosen item after "insufficient time" as a reason for withdrawing students' greatest dissatisfaction (pp. 1-2).

In making course selections, Simpson (2004) notes that there are students who understand the subject and level of their intended course and will go on to study successfully. However, he also suggests there are students who will make course choices that are not suitable and students who do not know what courses they want. Initially, such students rely on course title and description for their decision (p. 2).

While all institutions provide course titles and descriptions to help potential students, Simpson (2004) points out several issues:

- Length. Descriptions are often too short and incomplete or too long and difficult to understand.
- Vocabulary. The vocabulary used is often imprecise or written in terms of outcomes that students may have yet to learn.
- Conflict between recruitment and retention. Course descriptions may be written with a secondary intention of encouraging recruitment into the course. There is a fine line between encouraging fairly well qualified students to take a course and allowing less qualified students to gain an impression that a course is easier than it really is.
- Assumed entry behavior. While course descriptions can be helpful in providing previous knowledge assumed and skilled required, it will not help students in an open learning

> environment who do not have that qualification but who might be able to study the course. (p. 2)

Simpson (2004) argues it is not enough to rely on course descriptions to ensure students have the best view of a course before deciding to take it. One alternative is to offer them advice from a course choice advisor. Instead, Simpson (2004) focuses on alternative methods of providing course choice so that a potential student 'self-advises' by working through different kinds of materials. These include: students' comments on courses, course preview materials (or 'taster packs'), and diagnostic materials (p. 3).

Simpson (2004) concludes that all methods for course choice - descriptions, previews, comments, and diagnostic materials have limitations either in terms of cost or the partial view of courses they offer. He argues that perhaps the best advice for developing a satisfactory course choice system is to utilize all these methods in some form or another in order to describe a course completely (p. 9).

B. Summary of Relevant 2001 Census Data

This study reviewed data from Statistics Canada's 2001 Census data related to the six census divisions which include the catchment area of the Northern colleges that are the Clearinghouse partners: Grande Prairie Regional College, Keyano College, Northern Lakes College, Portage College and the Northern campuses of the Northern Alberta Institute of Technology (NAIT). The six census divisions that comprise this region are: Census Divisions 12, 13, 16, 17, 18, and 19. (For ease of use, the area comprising the six Northern Alberta census divisions will henceforth be known as "Northern Alberta").

The following 2001 Census Data was identified as particularly relevant to this research study and is provided in this section of the report:

- The percentage of the Northern Alberta and Alberta population 15 – 24 years of age;
- A comparison of labour force activity by Northern Albertans and Albertans 15 – 24 years of age;
- Total population 20 years of age and older by highest level of schooling for Northern Albertans and Albertans;
- Total Northern Alberta population with post-secondary qualifications by major fields of study; and
- Total Northern Alberta population with post-secondary qualifications by major fields of study and gender.

According to the results of the 2001 Census, a total of 323,440 people (or 10.9% of Alberta's 2,974,805 2001 Census population) lived in Northern Alberta. The 15 – 24 year old age group comprised 47,985 individuals in 2001, or 14.9% of the Northern Alberta population. This was higher than the Alberta average of 14.6% (Statistics Canada. *2001 Census*).

Northern Albertans 15-24 years of age have a lower participation rate than Albertans 15 – 24 years of age as a whole (66.6% versus 71.5%) and a lower rate of employment (59.4% as compared to 64.1%) (Statistics Canada. *2001 Census*).

Northern Alberta has a higher proportion of population age 20 years and older whose highest level of schooling is less than Grade 9. However, Northern Alberta has a higher proportion of population age 20 years and older whose highest level of schooling is Grades 9 to 13 or a Trades Certificate or Diploma (Statistics Canada. *2001 Census*).

The top four major fields of study among Northern Albertans who hold a post-secondary qualification were:

- Applied Science Technologies and Trades (37.1%);
- Commerce, Management and Business Administration (17.5%);
- Educational, Recreation and Counselling Services (11.5%); and
- Health Professions and Related Technologies (10.8%) (Statistics Canada. *2001 Census*).

The top four major fields of study with the highest percentage of Northern Alberta females who hold a post-secondary qualification were:

- Commerce, Management and Business Administration (29.6%);
- Health Professions and Related Technologies (19.1%);
- Educational, Recreation and Counselling Services (18.4%); and
- Social Sciences and Related Fields (7.9%) (Statistics Canada. *2001 Census*).

The vast majority of Northern Alberta males who hold a post-secondary qualification (63.9%) indicated that their major field of study was Applied Science Technologies and Trades. The three largest major fields of study for Northern Alberta males who hold a post-secondary qualification were as follows:

- Commerce, Management and Business Administration (6.9%);
- Educational, Recreation, and Counselling Services (5.9%); and
- Agriculture, Biological, Nutritional, and Food Sciences (5.3%) (Statistics Canada. *2001 Census*).

IV. SURVEY RESULTS

The following section of the report provides a description of the results obtained from surveys completed at the five Clearinghouse post-secondary institutions and three Alberta Human Resources and Employment (AHRE) offices.

A. Profile of Survey Respondents

[See Technical Report Figures 1 - 32]

1. Gender

The gender distribution for all survey respondents was 98 males (29%), 242 females (71%), and two no responses (1%). The 33 respondents who completed the surveys in Alberta Human Resources and Employment offices were divided almost equally between 16 male respondents (48.5%) and 17 female respondents (51.5%). The high number of female respondents is reflected in the proportionately higher number of females enrolled in Northern Alberta colleges.

2. Age Category

Among survey respondents, 167 (49%) were between the ages of 18 and 24 years. A further 86 respondents (25%) were age 25 to 33 years, and 64 (19%) were between the ages of 35 and 44. Seven percent of survey respondents did not provide data about their age.

Alberta Human Resources and Employment survey respondents were older. Thirteen respondents (40%) were age 35 to 44 years, eight respondents (24%) were aged 25 to 34 years, six respondents (18%) were age 18 to 24 years, and five respondents (15%) were age 45 to 54 years. One respondent did not provide age data.

3. Marital Status

One hundred and eighty-eight survey respondents (55%) were single /divorced /separated / widowed, 122 respondents (36%) were married or living common law, 26 respondents (8%) did not wish to provide information, and the remainder were non-respondents. The Alberta Human Resources and Employment survey respondents population reflected a similar distribution in terms of marital status.

4. Family Support

Among respondents, 168 (49%) supported children while 156 (45%) did not. The remainder did not wish to provide this information or did not respond. Alberta Human Resources and Employment survey respondents showed a slightly higher percentage of those supporting children (57.5%).

5. Highest Level of Education

One hundred and fifty-two survey respondents (44%) had not completed high school, 113 respondents (33%) had completed high school, and 43 respondents (13%) had completed community college or

technical/vocational school. Among the Alberta Human Resources and Employment survey respondents, 14 respondents (42.4%) had completed community college or technical/vocational school, nine respondents (27.2%) had not completed high school, and eight respondents (24.2%) had completed high school.

6. Number of Years Since Last Attended School

One hundred and six survey respondents (31%) had been out of school for more than five years while 96 respondents (28%) had been out of school for one year. The remainder had been out of school between two and five years or provided no response. Among the Alberta Human Resources and Employment survey respondents, six respondents (48.5%) had been out of school for more than five years and nine respondents (27.2%) had been out of school for one year.

7. Current Status

Two hundred and forty (70%) survey respondents were full-time students and 36 respondents (10%) were part-time students. The remainder were employed full-time, part-time, were unemployed, at home, retired, or did not wish to provide the information.

Sixteen (48.4%) of Alberta Human Resources and Employment survey respondents were employed full-time, eight respondents (24.2%) were unemployed, and four respondents (12%) were employed part-time.

8. Combined Family Income

One hundred and fifty survey respondents (44%) had a combined family income of under $25,000 and 121 respondents (35%) did not know or did not wish to provide this information.

Alberta Human Resources and Employment survey respondents had a similar combined family income profile.

9. Residency

Among survey respondents, 217 (63%) considered themselves residents of a rural community while 117 (34%) self-identified as residents of an urban area. Survey respondents from the Alberta Human Resources and Employment offices had a similar residency profile.

10. Aboriginal Ancestry

Forty-nine percent of respondents considered themselves to be a person of Aboriginal ancestry, while 50 percent did not, and three individuals (1%) did not respond to the question. Among Alberta Human Resources and Employment survey respondents, 13 respondents (39.4%) considered themselves to be a person of Aboriginal ancestry while 20 respondents (60.6%) did not.

11. Involvement in Academic Upgrading

Among survey respondents, 207 (67%) reported they were currently enrolled in academic upgrading, 93 (30%) indicated they were not in academic upgrading, and 10 (3%) did not respond to the question.

When those enrolled in academic upgrading were asked to what extent lack of finances was a barrier to enrolling in education or training programs, 140 (68%) said that lack of finances was a large barrier or somewhat of a barrier to enrolling in education or training. Among those survey respondents not enrolled in academic upgrading, 50 (54%) indicated that lack of finances was a large barrier or somewhat of a barrier to enrolling in education or training.

12. Satisfaction with Range of Courses Currently Available

Among survey respondents, 283 (83%) reported they were very satisfied or somewhat satisfied with the range of education or training courses currently available to them. Thirty respondents (9%) reported they were not very satisfied with the range of education or training courses currently available to them. Six respondents (1%) reported they were dissatisfied. Twenty-four respondents (7%) offered no response to this question.

B. Responses to Survey Questions

1. Major Occupational Training and Education Programs or Courses/Duration of Study

[See Technical Report Figures 33 - 58]

Survey respondents were asked, “Within the next two years, how likely would you be to enroll in the following occupational training or education?” If they indicated that they were “Very Likely” or “Somewhat Likely” to enroll in a particular occupational training or education program or course, they were then asked to indicate how long they would like to study and any particular courses they might be interested in.

An analysis of the survey data shows that survey respondents are strongly inclined to identify the types of occupational training or education programs they were “Not at All Likely” to enroll in. In each of

the thirteen major occupational training or education programs listed on the survey, respondents' "Not at All Likely" response varied between a low of 34% for Business to a high of 57% for Law Enforcement. On average, across the 13 major occupational training or education programs, the average percentage of those who chose "Not at All Likely" was 46%.

Among the major occupational training or education programs, the percentage of survey respondents who indicated they were "Very Likely" or "Somewhat Likely" to enroll in within the next two years were:

- Business (36%)
- Arts (33%)
- Humanities (32%)
- Education (29%)
- Computer Information Systems (26%)
- Health and Wellness (26%)
- Language or Literacy (26%)
- Social Services (24%)
- Engineering Technology (24%)
- Trades (23%)
- Aboriginal Arts and Design or Aboriginal Culture (23%)
- Information Technology and Computer Training (18%)
- Law Enforcement (13%).

Survey respondents were asked to indicate how long they wished to take the programs or courses they were "Very Likely" or "Somewhat Likely" to enroll in. The choices they were provided included: short course, one-year program, two-year program, and four-year program.

Short courses were strongly preferred by those who said they were "Very Likely" or "Somewhat Likely" to enroll in the following major occupational training or education programs/courses:

- Aboriginal Arts and Design or Aboriginal Culture- 26 respondents (43%)
- Arts - 35 respondents (41%)
- Computer Information Systems - 37 respondents (40%)
- Language or Literacy - 30 respondents (33%).

Those who reported they were "Very Likely" or "Somewhat Likely" to enroll in Information Technology and Computer Training programs indicated a slight preference for a one-year program (14 respondents or 23%) over a short course (13 respondents 21%). However, 18 respondents (30%) had no response regarding the duration they wished to study Information Technology and Computer Training. In the Trades, participants were closely divided in their preference for a one-year program (19 respondents or 23%) and a two-year program (20 respondents or 24%).

Those who indicated they were "Very Likely" or "Somewhat Likely" to enroll in the following programs indicated the following preference for a two-year program:

- Business – 33 respondents (41%)
- Engineering Technology – 21 respondents (37%)
- Law Enforcement – 14 respondents (29%)

- Health and Wellness – 20 respondents (25%).

Survey respondents were evenly divided in terms of their preference for duration of courses in Humanities. Twenty-three respondents (21%) favored a two-year program and 23 (21%) respondents preferred a short course. Those respondents, who indicated they were "Very Likely" or "Somewhat Likely" to enroll in Social Services programs or courses, were evenly divided between a two-year program (19 respondents or 24%) and a four-year program (19 respondents or 24%).

Survey respondents who said they were "Very Likely" or "Somewhat Likely" to enroll in Education preferred a four-year program (27 respondents or 28%).

2. Specific Courses Proposed for Each Major Occupational Training and Education Program

Survey respondents had a number of suggestions for specific courses of interest in each of the 13 major occupational training and education program areas (see Appendix E for detailed course listings by college). A listing of several of the more frequently identified specific courses of interest are identified by major program area in Table Two on the following page.

Table Two -Sample Specific Courses of Interest by Major Program Area

Major Program Area	Sample Specific Courses of Interest (by # of Respondents)
Aboriginal Arts and Design or Aboriginal Culture Courses	• Aboriginal culture (6) • Aboriginal Arts and design (5) • Native studies in general (3)
Arts	• Painting (13) • Music (11) • Dance (10) • Sculpture (10)
Business	• Business administration/management (24) • Accounting (11) • Office administration (11) • Human resources management (10)
Computer Information Systems Courses	• Networking (7) • Information (7) • Basic computer skills (5) • Hardware (5) • Upgrading systems (5)
Information Technology and Computer Training Courses	• Systems analyst (4)
Education	• Early Childhood Development (16) • Bachelor of Education-Elementary (11) • Teacher Assistant (9) • Bachelor of Education (7)
Engineering Technology	• Power Engineering (5) • University Transfer-electrical engineering (3)
Health and Wellness Courses	• Licensed Practical Nurse program (14) • Bachelor of Nursing degree (13) • Emergency Medical Technician (8) • Health care aide (7)
Humanities	• Law (22) • Justice (21) • Psychology (21)
Language/Literacy Courses	• Cree (18) • Professional writing course (8)
Law Enforcement	• Police officer training (9) • RCMP training (4)
Social Services	• Social work (26) • Child and family services (17)
Trades	• Hair stylist (17) • Carpenter (11) • Welder (10)
Other Courses	• Environmental science (5) • Horticultural design (2)

3. Preference for Credit or Non-Credit Courses

[See Technical Report Figures 59-61m]

Survey participants showed a high degree of preference for credit courses (215 respondents or 63%) as compared to 88 respondents (26%) who favored both credit and non-credit courses, and seven respondents who indicated a preference for non-credit courses. Alberta Human Resources and Employment survey respondents showed less of a preference for credit courses (15 respondents or 45.5%) and a greater interest in both credit and non-credit courses (11 respondents or 33%).

As the Table Three below indicates, the majority of respondents who identified a major program area in which they were likely or somewhat likely to enroll, indicated a preference for credit courses. However, to varying degrees, there was also a strong minority opinion among those surveyed to have both credit and non-credit courses available in their preferred major program area.

Table Three - Respondents Likely or Somewhat Likely to Enroll by Major Program Area and Preference for Credit Courses, Non Credit Courses or Both

Major Program Area	Credit Courses	Non-Credit Courses	Both Credit and Non Credit Courses
Aboriginal Arts and Design or Aboriginal Culture Courses	30	1	21
Arts	40	2	27
Business	84	4	29
Computer Information Systems Courses	54	4	24
Information Technology and Computer Training Courses	40	2	15
Education	60	0	29
Engineering Technology	34	0	17
Health and Wellness Courses	54	1	18
Humanities	63	1	35
Language/Literacy Courses	53	2	27
Law Enforcement	23	1	17
Social Services	54	0	28
Trades	51	1	21

4. Factors Influencing a Decision to Enroll in a Course or Program at a Northern Alberta College

[See Technical Report Figures 62 – 69]

When survey respondents were asked about certain factors that influenced their decision to enroll in a course or program at a Northern Alberta college, they rated the following factors as “Very Important”:

- Preparing or improving oneself for the job market (248 respondents or 72%)
- Obtaining a professional designation (240 respondents or 70%)
- Gaining the skills and knowledge to undertake more responsibilities in their job (237 respondents or 69%)

- Obtaining a college diploma (221 respondents or 64%)
- Obtaining a university degree (165 respondents or 48%)
- Keeping their current job (23%)
- Obtaining a journeyman trades certificate (55 respondents or 16%).

Six survey respondents offered the following individual comments about factors important in their decision to enroll in a Northern Alberta college course or program:

- "Completing my Grade 12."
- "Getting a better job."
- "Getting the courses I want."
- "Meeting other people."
- "Having fun and enjoyment".
- "Having professional, knowledgeable and approachable professors and administrative staff."

5. Barriers as a Northern Albertan in Enrolling in Education or Training

[See Technical Report Figures 70 – 78]

Survey respondents identified that the largest barriers as a Northern Albertan enrolling in education or training were:

- A lack of finances to take training or courses (130 respondents or 38%)
- Having to leave their community to complete their education (96 respondents or 28%).

The barrier of having to leave their community to complete their education was analyzed on the basis of Aboriginal ancestry. For those who considered themselves to be a person of Aboriginal descent, 79 respondents (47%) said they saw leaving the community to complete their education as a "Large Barrier" or "Somewhat of a Barrier". Ninety-four non-Aboriginal survey respondents (54%) said that leaving the community to complete their education was a "Large Barrier" or "Somewhat of a Barrier".

The barrier of having to leave their community to complete their education was also examined on the basis of respondent residency. Sixty-two percent of those who resided in a rural area saw having to leave their community to complete their education as a "Large Barrier" or "Somewhat of a Barrier" barrier, compared with 36% of urban residents who responded to the survey. For those who considered themselves to be a person of Aboriginal descent, 79 respondents (46%) said that having to leave their community to complete their education was a "Large Barrier or "Somewhat of a Barrier" compared to 94 respondents (54%) who were non-Aboriginal.

Respondents identified the following items as **not** being a barrier to enrolling in education and training as a Northern Albertan:

- Telephone or Internet service in their area (186 respondents or 54%)
- Access to technology (131 respondents or 38%).

Among respondents who identified themselves as being of Aboriginal descent, 51 (30%) saw telephone or Internet service in their area as being a barrier to enrolling in education or training. Of non-Aboriginal respondents, 39 (22%) thought telephone or Internet service in their area was a barrier to enrolling in education or training.

Access to telephone and Internet was cross-tabulated by residency of survey respondents. It was found that 65 respondents (30%) who identified themselves as rural residents saw access to telephone and Internet service as a "Large Barrier" or "A Slight Barrier" compared to 23 respondents (19.6%) who identified themselves a urban respondents.

Access to technology was also cross-tabulated by identified residency of survey respondents. It was found that survey respondents who identified themselves as rural residents saw access to technology as a greater barrier than their urban counterparts. Eighty-seven rural respondents (40%) viewed access to technology as a "Large Barrier" or "Somewhat of a Barrier" compared to 33 urban respondents (28%). When access to technology was analyzed for survey respondents who considered themselves of Aboriginal descent, 67 respondents (40%) of Aboriginal descent reported access to technology as a "Large Barrier" or "Somewhat of a Barrier" compared to 55 respondents (32%) of non-Aboriginal descent.

Personal reasons were identified by 166 survey respondents (49%) as a "Large Barrier" or "Somewhat of a Barrier" to enrolling in education or training as a Northern Alberta resident. Those respondents who chose to reveal specific personal reasons that they viewed as barriers to enrolling in education or training identified the following:

- Family responsibilities (5 respondents)
- Dial-up Internet (2 respondents).

Individual reasons listed included:

- Foreign university degree not recognized
- Internet costs of $60 - $70 per month
- Health.

Among respondents who considered themselves of Aboriginal descent, 83 (50%) reported personal reasons were a "Large Barrier or "Somewhat of a Barrier" to enrolling in education or training, compared to 82 (47%) of non-Aboriginal respondents.

6. Participation and Interest in Distance Delivery Education or Training Program

[See Technical Report Figures 80 – 97]

One hundred and forty-four survey respondents (42%) reported that they had taken a distance delivery course. One hundred and ninety-five survey respondents (57%) said they had not taken a distance delivery course. Of those who reported having taken a distance delivery course, the locations where they took the course were identified as:

- A site in their community (93 respondents or 54%)
- A site in another community (32 respondents or 18%)
- Their home (11 respondents or 6%)
- Their workplace (4 respondents or 2%)
- No response (33 respondents 19%).

Few respondents had enrolled in a course either through eCampus Alberta or Alberta-North. When survey respondents were asked if they had enrolled in a course through eCampus Alberta:

- Two hundred and fifty-six respondents (75%) said, “No”.
- Seventeen respondents (5%) said, “Yes”.
- Three respondents (1%) had no response.
- Sixty-seven respondents (20%) said, “I do not know”.

Three survey respondents offered the following individual comments about eCampus Alberta:

- “There needs to be a more elaborate [selection] of course offerings.”
- “Distance education has a stigma.”
- “There is nothing that compares to face-to-face-learning! There needs to be more of it available in Northern Alberta.”

When survey respondents were asked if they had enrolled in a course through Alberta-North:

- Two hundred and twenty-nine respondents (67%) said, “No”.
- Twenty-five respondents said, “Yes”.
- Two respondents (1%) had no response.
- Eighty-seven respondents (25%) said, “I do not know.”

A total of 152 survey respondents (44%) said they were “Very Interested” or “Somewhat Interested” in taking programs or courses by distance delivery. One hundred and eighty-six respondents (54%) claimed they were “Not Very Interested” or “Not Interested at All” in taking distance delivery programs or courses.

An analysis of distance delivery survey data shows that 56% of survey respondents are “Very Interested” or “Somewhat Interested” in taking programs and courses by distance delivery had previously taken a distance delivery course. Of those survey respondents who had not previously taken a distance delivery course, 70 respondents (36%) indicated that they were “Very Interested” or “Somewhat Interested”.

When asked if having distance delivery services in their community would make them more likely to take courses or training, 236 respondents (69%) indicated they “Strongly Agreed” or “Somewhat Agreed”. Those survey respondents of Aboriginal ancestry (127 respondents or 76%) “Strongly Agreed” or “Somewhat Agreed” with this statement compared to 107 non-Aboriginal respondents (62%). A higher percentage of those survey respondents who identified themselves as rural residents (157 respondents or 72%) agreed that having distance delivery services in their community would make them more likely to take courses or training compared to 74 urban respondents (63%).

Survey respondents were mixed in their response as to whether taking training by distance learning would be a good alternative to taking it in-person (face-to-face) in a classroom with an instructor. One hundred and sixty respondents (47%) “Strongly Agreed” or “Somewhat Agreed” with the statement while 178 respondents (52%) “Somewhat Disagreed” or “Strongly Disagreed”. When analyzed by residency, 114 rural respondents (52.5%) said they “Strongly Agreed” or “Somewhat Agreed” that taking training by distance delivery would be a good alternative to in-person, face-to-face classroom instruction compared to 44 urban respondents (38%).

Two hundred and twenty-four (65%) survey respondents “Strongly Agreed” or “Somewhat Agreed” that distance education can help them gain new job opportunities in Northern Alberta. When analyzed in terms of age cohort, among those who “Strongly Agreed” or Somewhat Agreed”, 64 respondents (74%) were age 25 – 34 years, 46 respondents (72%) age 35 – 44 years and 15 respondents (94%) were age 45 – 54 years.

APPENDIX A

Northern Labour Market Information Clearinghouse Survey

Survey 2005: Educational and Training Needs of Northern Alberta Residents

Emerging Directions Consulting Ltd. is conducting this survey for the Northern Labour Market Information Clearinghouse and its partner organizations – Grande Prairie Regional College, Keyano College, all Northern Alberta campuses of Alberta Institute of Technology (NAIT), Northern Lakes College and Portage College and the Northern Development Council – Alberta Aboriginal Affairs. The purpose of the study is to provide information about educational and training needs in Northern Alberta to the Clearinghouse and its partner organizations.

- -The audiences for this research report are the members of Northern Labour Market Information Clearinghouse.
- -Your participation in this study is voluntary.
- -Your participation in this study will not affect your education or employment.
- -Your comments will be anonymous.

If you have further questions please contact Sam Warrior, Project Manager, Northern Labour Market Information Clearinghouse by e-mail at Sam.Warrior@gov.ab.ca or by telephone at (780) 624-6433.

1. Are you currently taking classes through a postsecondary institution?

☐ Yes
☐ No ***(If your response is "no", please proceed to Question 5)***

2. Are you currently taking classes offered by one or more of these colleges? (*Please check all that apply*)

☐ Grande Prairie Regional College
☐ Keyano College
☐ Northern Alberta Institute of Technology (NAIT) – _____ Campus
(Please specify Fairview, Grande Prairie, La Crete, High Level or Peace River campus)
☐ Northern Lakes College
☐ Portage College
☐ Other postsecondary institution *(Please provide name of institution)*_____

3. Please list the name of the program or course(s) that you are currently enrolled in (for example, Academic Upgrading, Forestry, etc.)

_____
_____

4. Please rate your satisfaction with the range of courses currently available to you

Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Dissatisfied
4	3	2	1

INSTRUCTIONS

STUDENTS

If you are currently enrolled in a course(s) or program and **do not** think you will take further education or training towards your career goal after completing your current studies, please proceed to Question 6.

OR

If you are currently enrolled in a course(s) or program and think you **might** take further education or training towards your career goal after completing your current studies, please proceed to Question 5.

NOT A STUDENT

If you are not currently enrolled in a course(s) or program, please proceed to Question 5.

5. Within the next two years, how likely would you be to enroll in the following occupational training or education? *If you are "Very Likely" or "Somewhat Likely" to enroll please indicate how long you would like to study and any specific courses you may be interested in.*

a) Aboriginal Arts and Design or Aboriginal Culture

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

b) Arts (including visual arts, painting, sculpture, video, dance, drama, music)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

c) Business (including business administration, accounting, human resources management, office administration, etc.)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

d) Computer Information Systems (including hardware/networking, software development, information systems)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

e) Information Technology (IT) and Computer Training (such as systems analyst, microcomputer specialist)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

f) Education (including teacher assistant, early childhood development, teacher)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

g) Engineering Technology (including chemical, electrical, industrial, power)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

h) Health and Wellness (including nursing, practical nursing, health care aide, emergency medial technician, etc.)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

i) Humanities (such as psychology, geography, history, political science, law and justice)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

j) Language or Literacy (such as professional writing, Cree, etc.)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

k) Law Enforcement (such as security officer, police officer, etc.)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

l) Social Services (such as social work, family services, disability and community support, child and family services)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

m) Trades (such as Carpenter, Electrician, Hairdresser, Instrument Technician, etc.)

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

n) Other (*please specify*)

_____

Very Likely	Somewhat Likely	Not Very Likely	Not at All
4	3	2	1

I would like to enroll in a

Short Course	One-year program	Two-year program	Four-year program
4	3	2	1

Specific courses of interest

_____

_____

6. There are two types of post-secondary courses that may be taken: credit courses and non-credit courses. Credit courses lead to a certificate, diploma or degree. They require completing course assignments and writing examinations that are assigned a mark or grade. Non-credit courses are taken for interest and a mark or grade is not given.

Would you prefer to take?

- ☐ Credit courses
- ☐ Non-credit courses
- ☐ Both
- ☐ No response

7. How important are each of the following factors in your decision to enroll in a course or program at a Northern Alberta college?

a) Keeping your current job

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

b) Preparing or improving yourself for the job market

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

c) Gaining the skills and knowledge to take more responsibilities in your job

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

d) Obtaining a professional designation

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

e) Obtaining a journeyman trades certificate

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

f) Obtaining a college diploma

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

g) Obtaining a university degree

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

h) Gaining skills and knowledge for personal interest

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

i) Other *(Please describe factor)*_____

Very Important	Somewhat Important	Not Very Important	Not Important at All
4	3	2	1

8. In your opinion, which of the following are possible barriers for you, as a resident of Northern Alberta, to enrolling in education or training?

a) Having to leave your community to complete your education

A Large Barrier	Somewhat of a Barrier	A Slight Barrier	Not a Barrier
4	3	2	1

b) Access to technology (such as computer hardware or software)

A Large Barrier	Somewhat of a Barrier	A Slight Barrier	Not a Barrier
4	3	2	1

c) The telephone or Internet services in your area

A Large Barrier	Somewhat of a Barrier	A Slight Barrier	Not a Barrier
4	3	2	1

d) A lack of finances to take training or courses

A Large Barrier	Somewhat of a Barrier	A Slight Barrier	Not a Barrier
4	3	2	1

e) Personal reasons (such as health, family responsibilities, etc.)

A Large Barrier	Somewhat of a Barrier	A Slight Barrier	Not a Barrier
4	3	2	1

9. Have you taken a distance delivery course where you are connected to an instructor through a learning technology (for example, audioconferencing, videoconferencing or correspondence)?

- ☐ No
- ☐ Yes

If you responded "yes", did you take part in this course at?(*Choose one of the following*)

- ☐ a site in your community
- ☐ a site in another community
- ☐ your home
- ☐ your workplace

10. Have you enrolled in a course through eCampusAlberta?

- ☐ Yes
- ☐ No
- ☐ Do not know

11. Have you enrolled in a course through Alberta-North?

- ☐ Yes
- ☐ No
- ☐ Do not know

12. How interested are you in taking programs or courses by distance delivery?

Very Interested	Somewhat Interested	Not Very Interested	Not Interested at All
4	3	2	1

13. Rate the degree to which you agree with the following statements:

a) If I needed training or to take a course, I would prefer to stay in my own community to do so

Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
4	3	2	1

b) Having distance education services in my community would make me more likely to want to take courses or training

Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
4	3	2	1

c) Taking training by distance learning would be a good alternative to taking it in person (face-to-face) in a classroom with an instructor

Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
4	3	2	1

d) Distance education can help me gain new job opportunities in Northern Alberta

Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
4	3	2	1

Demographic Information

Are you?

- ☐ Male
- ☐ Female

Which age category would you be in?

- ☐ 18-24 years
- ☐ 25-34 years
- ☐ 35-44 years
- ☐ 45-54 years
- ☐ 55-64 years
- ☐ 65 years and over
- ☐ Do not wish to provide this information

Are you?

- ☐ Single/divorced/separated/widowed
- ☐ Married/common-law partner
- ☐ Do not wish to provide this information

Are you supporting a family?

- ☐ Yes (How many are children under the age of 18?___)
- ☐ No
- ☐ Do not wish to provide this information

What is the highest level of education you have completed?

- ☐ Primary/Grade School (7 years or less)
- ☐ NOT COMPLETED High School
- ☐ COMPLETED High School
- ☐ Community College or Technical/Vocational School
- ☐ Undergraduate University Degree
- ☐ Do not wish to provide this information

How many years has it been since you last attended school?

- ☐ One year
- ☐ Two years
- ☐ Three years
- ☐ Four years
- ☐ Five years
- ☐ More than five years (*Please indicate how many years _____)*

Presently are you*? (Please indicate all responses that apply to you*)

- ☐ A full-time student (attending at least 60% of an approved training program)
- ☐ A part-time student (attending less than 60% of an approved training program)
- ☐ Employed full-time (working at least 30 hours per week)
- ☐ Employed part-time (working less than 30 hours per week)
- ☐ Unemployed
- ☐ At home
- ☐ Retired
- ☐ Do not wish to provide this information

What is your combined family income?

- ☐ Under $25,000
- ☐ Under $35,000
- ☐ Under $50,000
- ☐ Under $75,000
- ☐ Under $100,000
- ☐ Over $100,000
- ☐ Do not know/Do not wish to provide this information

Do you consider yourself a resident of a rural or urban community?

- ☐ Rural
- ☐ Urban

Do you consider yourself to be a person of Aboriginal ancestry?

- ☐ Yes
- ☐ No

Thank you for participating in this survey.

APPENDIX B

Informed Consent
Survey 2005: Educational and Training Needs of Northern Alberta Residents

The Northern Labour Market Information Clearinghouse and five Northern Alberta colleges are conducting a study to learn more about the education and training needs of adults living in Northern Alberta communities. Northern Lakes College is a partner in this research study and is interested in learning about the educational and training needs of their students. Some students currently attending courses offered by Northern Lakes College are being invited to complete the attached questionnaire as part of this research.

- Your participation in this research study is voluntary.
- You may choose not to answer any or all of the questions contained in the questionnaire.
- Your decision to complete or not complete the questionnaire will have no effect your current or future academic achievement at Northern Lakes College.
- Your completed Informed Consent document will be filed separately from your completed questionnaire to ensure your anonymity.
- The results of the questionnaires completed by Northern Lakes College students will be included in the final research report provided to the Northern Labour Market Information Clearinghouse.
- A copy of this final research report will be provided to the Freedom of Information and Protection Privacy Coordinator, Northern Lakes College and questions about the results of this research study can be directed to this individual.

I have reviewed this Informed Consent information. I understand the contents and agree to complete a **Survey 2005: Educational and Training Needs of Northern Alberta Residents** questionnaire.

_____
Print Name

_____ _____
Signature Date

APPENDIX B

Northern Labour Market Information Clearinghouse Survey

Survey 2005: Educational and Training Needs of Northern Alberta Residents

Survey Instruction Sheet

Introduction

READ THE ITALIZED PORTIONS TO CLASS:

This survey is being conducted on behalf of the Northern Labour Market Information Clearinghouse in cooperation with a consortium of Northern Alberta colleges.

Students at Grande Prairie Regional College, Keyano College, the Northern Alberta Institute of Technology (NAIT) Northern Alberta campuses (including Fairview, Grande Prairie, La Crete, High Level or Peace River), Northern Lakes College and Portage College will participate in this survey. Persons accessing services through Alberta Human Resources and Employment Labour Market Information Centres in Northern Alberta will also complete this survey. This survey is being conducted so that the Northern Labour Market Information Clearinghouse and its partner colleges may learn more about the educational and training needs of persons living in Northern Alberta.

This survey will take about 15 to 20 minutes to complete. Your participation in this study is voluntary and all responses will be completely anonymous.

Completing the Form

READ THE ITALIZED PORTIONS TO CLASS:

Instructions on how to complete the form are included in the questionnaire.

Completed Questionnaires

Please return the completed questionnaires to:

_____

Institutional Contact

APPENDIX B

ADMINISTRATION REPORTING TEMPLATE

In order to facilitate the assessment of the comparability of data from various colleges, it is important for all institutions to record and report the final results of the survey administration.

Please record all survey administration on this template and return it to:

Sam Warrior (sam.warrior@gov.ab.ca)

Name of institution:_____

Name of contact person:_____

Dates of survey administration:_____

Description of sampling method used:

_____
_____
_____
_____
_____
_____
_____

Sampling Information

Program Type	Total Sample Size	Number of Completed Surveys	Number of Classes Selected
Institutional total			
ESL/Upgrading			
Career/technical			
University Transfer			
Total Campus 01			
Total Campus 02			
Total Campus 03			

Note: If you have distributed the surveys to more than three campuses please indicate this. Also, please provide the names of participating campuses.

Description of any issues encountered:

_____
_____
_____
_____

Appendix C – Literature Review and 2001 Census Data Results

Through an extensive review of literature related to postsecondary participation, participant profiles, types of delivery, student satisfaction, and program and course selection, the following major theme areas were identified in the literature:

- Characteristics of postsecondary participants
- Characteristics of learners involved in Alberta Human Resources and Employment's Skills Investment Programs
- Components contributing to successful transition from secondary to postsecondary education
- Conditions at postsecondary institutions that attract older students and the services provided to them
- Characteristics of postsecondary undergraduate distance learning participants
- Postsecondary undergraduate satisfaction with distance education
- Postsecondary student course choice in distance education.

Post Secondary Participants: Who They Are and When Do They Attend

Tomkowicz and Bushnik (2003) cite a number of research studies that indicate that high school graduates who delay their post-secondary education have certain characteristics that differentiate them from high school graduates who enroll in a post-secondary institution immediately after high school. Those 20 year olds who delay their post-secondary education are more likely to be:

- Male
- From lower socio-economic status families
- Enrolled in a non-academic high school program
- Have lower tested ability and lower school grades.

Those young adults who choose not to pursue a post-secondary education at all were shown in several studies to be different from those who enroll in a post-secondary program. Those who do not go on to post-secondary at all were more likely to be:

- Male
- Rural youth
- Aboriginal youth
- Children of parents with low education
- Come from single parent families
- Enroll in non-academic high school stream
- Demonstrate low academic performance (p. 6).

Tomkowicz and Bushnik (2003) identified three pathway takers to postsecondary education[3]- right awayer, delayer, and no-goer. Each of these was defined as follows:

[3] Only respondents who were 20 years of age at the time of the interview were included in these three groups. The age of 20 was chosen because it was deemed to be the one age at which all respondents, regardless of province, had the greatest likelihood of being out of high school for at least 12 months.

- *A righter-awayer* is a high school graduate who is enrolled in a post-secondary program within 12 months of graduating from high school.
- *A delayer* is a high school graduate who delayed his/her enrolment in a post-secondary program by more than 12 months after high school graduation.
- *A non-goer* is a high school graduate who has been out of high school for more than 12 months and has not yet enrolled in a post-secondary program (p. 7).

Tomkowicz and Bushnik (2003) noted the following significant differences between delayers and right-awayers:

- Delayers were not as engaged in high school as right-awayers, either academically or socially. Twelve percent of delayers said they were very academically engaged compared to 18% of right-awayers. Nine percent of no-goers indicated they were very socially engaged in high school compared to 22% of right-awayers.
- Delayers had lower marks in school than right-awayers. Only 37% of delayers reported having a high school average over 80% while over one-half of right-awayers reported having such an average (pp. 9, 23).

- Thirty-two percent of delayers reported having all friends planning to attend a post-secondary institution compared to 41% of right-awayers.
- Approximately 20% of delayers reported working 20-30 hours a week during their last year of high school, while only 12% of right-awayers did so.
- Twenty-one percent of delayers received scholarships, awards or prizes compared to 33% of right awayers (p. 9).

Alberta was also one of five provinces where respondents were more likely to delay their post-secondary education as compared to Ontario residents. (Pg. 12) Tomkowicz and Bushnik (2003) did not find that any of the family-related factors were significant predictors of delayed post-secondary enrolment. The only high school factors found to be significantly predictive of delaying post-secondary education were grade point average and social engagement.

Tomkowicz and Bushnik (2003) identified the following differences between no-goers and right-awayers:

- Fifty-eight percent of no-goers were male compared to 45% for right-awayers.
- Eighty percent of no-goers had learned English as their mother tongue compared to 57% of no-goers.
- Twelve percent of no-goers were married compared to 6% for right-awayers.
- Six percent of no-goers reported having children as compared to 2% of right awayers.
- Twenty three percent of no-goers lived in rural communities compared to 17 % of right-awayers.
- Only 14% of no-goers had a parent with a university degree as compared to 36% of right-awayers.
- Twenty nine percent of no-goers had three or more siblings compared to 18% of right-awayers.
- Less than 50% of no-goers reported their parents thought continuing education after high school was very important compared to about 80% for right-awayers.

Alberta was one of four provinces with the highest rate of no-goers (approximately 30%) (p. 10). Of the family-related factors, parents' education and attitudes and the number of siblings were significant predictors of not going to post-secondary education. The odds of not going to post-secondary education were three times greater for respondents whose parents had no post-secondary education as compared to respondents whose parents had completed a university degree. The odds of not enrolling in post-secondary programs were 1.7 times greater for a 20 year old who had three or more siblings as compared to those with one sibling. The odds of not going on to post-secondary studies were three times greater if the parents thought continuing education after high school was not very important.

Of the high school experience variables, the following predicted post-secondary non-enrolment by age 20:

- Low high school grade point average
- Few friends planning on furthering their education
- Working 20 or more hours per week (p. 14).

Bragg (1999) reports that financial concerns are a major reason why those traditionally viewed as non-college bound do not get to college. Also involved are issues related to the adequacy of high school academic preparation. Those with an over-reliance on basic high school courses are missing advanced math, science and technical courses from their high school programs of study (p. 2).

Profile of Learners Involved in Skills Investment Programs

Alberta Human Resources and Employment (AHRE) offers Skills Investments Programs designed to provide training to learners to improve their employment situation. AHRE (2004) noted that in 2003 approximately 22% (10,855 Skills Investments Programs' learners out of a total of 48,854) were between the ages of 20 to 24, the age range of focus to this Northern Labour Market Clearinghouse Study. Another 7.3% of Skills Investments Programs' learners (3,574) in 2003 were between the ages of 18 and 19 (p. 9).

The two major Skills Investment Programs are:

- Tuition-Based Skills Development Programs which assist financially disadvantaged people in terms of education or training in academic upgrading, literacy, English as a Second Language, life management, pre-careers training and integrated training.
- Contracted Training Programs that included Job Placement, Self Employment, Skills for Work, Temporary Programs and Training on the Job.

AHRE (2004) identified the following learner profiles for each of two major programs:

Tuition-Based Skills Development Programs (SDP)
In 2002/2003:

- 34,803 learners or 71% of the 48,854 learners in Skills Investment Programs took part in Skills Development Programs.
- Fifty-nine percent of participants were female and 41% were male. 34% of SDP learners were in the programs for a duration of seven to nine months.

Contracted Training Programs
In 2002/2003:

- 14,051 Skills Investment Program learners (29%) were in Contracted Training Programs.
- Fifty-two percent of participants were male and 48% were female.
- 27% of participants are in Contracted Programs for a duration of four to six months.

(pp. 4 – 5).

Overall in the Skills Investment Programs:

- There has been a higher percentage of females than males involved in Skills Investment Programs since 2000.
- Of the 48,854 Skills Investment learners in 2002-2003, the level of education attained by 26,875 of these learners (55%) is unknown. Of the 21,979 learners whose education levels are known, 13,818 (28%) have grade school (Grade 12 or less) (p. 6).
- Thirty-nine and a half percent of Skills Investment Program learners in 2002/2003 (19,294) were single, 24.9% (12,169) were couples with children, 24.3% (11,866) were single parents, and 11.1% (5,413) were couples with no children (p. 8).
- The majority of Skills Investment Program learners from 2000 to 2003 are between the ages of 20 and 48, with the peak number of learners between the ages of 20 and 24 years (p. 9).
- From 2000 to 2003, there has been a slight decrease in the total number of learners (from 51,585 learners in 2000/2001 to 48,854 in 2002/2003).
- From 2000 to 2003, there has been a slight increase in the average age of learners (from age 32 in 2000 to age 33 in 2002/2003) (p. 3).

Components Contributing to Successful Secondary to Post Secondary School Transition

Bragg (1999) has identified that in order for students to be successful in the shift from secondary to postsecondary education, they require a well-planned and well-executed education system. Six components that enhance students' opportunities to make a successful transition from high school to college are:

1. Rigorous and engaging learning – any core curriculum that links secondary to postsecondary education should ensure progressively rigorous subject matter. Educational experiences that are student-focused and project-based help students connect with the learning process. When this occurs, students are more likely to advance toward higher-level academic and occupational competencies that are required for success in college.

2. Formal articulation strategies – these legitimize secondary-to-postsecondary transition opportunities for students. Through formal articulation agreements transition becomes a reality for students. Educational administrators and faculty can gain confidence that the transition process is feasible. Students and their parents can realize that college studies are attainable.

3. Meaningful linkages between theory and practice – secondary-to-postsecondary transition systems can be strengthened when students learn to integrate theory and practice. School-to-work opportunities should be used to link learning in the school setting to the workplace and community.

4. Outcomes-focused curriculum – establishes clear goals for student performance through the secondary-to-postsecondary transition process.

5. Access and opportunity for all secondary-to-postsecondary transition opportunities must be available to all students. Secondary-to-postsecondary articulated curriculum must value the diversity that individual students bring to learning and support their unique goals and academic pursuits.

6. Longevity through collaboration – collaboration on all levels is essential to the success of student secondary to postsecondary transition, including systems, organizations, classroom, and student leadership organizations. Those students who have little support from home to go to college benefit greatly when a teacher, counselor, or peer helps them think through complex decisions about college and work (pp. 4-11).

Conditions at Postsecondary Institutions that Attract Older Students and Services Provided to Them

An extensive literature search suggests that there has been little research focused on the notion of career choice of older students. Instead, the literature has focused on conditions at an institution that attract older students and the services that should be provided for them.

Fleet, Moore and Rodgers of the University of Western Ontario investigated the academic decision-making of mature students and the "personal and/or institutional factors that facilitate or hinder their progress toward completion of a particular degree" (1997, p.1). The focus of the study was on the conditions at the institution that attracted and retained mature students.

The reasons for attending can be summarized as follows:

- Gaining knowledge and skills
- Fulfilling a personal dream
- Wanting a different job.

The reasons for choosing the university were:

- The school offered the programs they wanted
- The school had a good reputation
- Encouragement from family and friends (p.3).

An open-ended question encouraged the participants to identify services not presently offered that would help them with academic decision-making. Some of the responses included services that were offered but did not satisfy student needs. The participants stated a need for improved child-care facilities, an increased availability of distance education courses, smaller classes, and more evening classes on campus. In addition, extended hours for institutional services, on-line application forms and an interactive tutoring site were mentioned. Several suggested academic credit for work experience and more program-specific employment counselling.

The research group concluded that there was little statistical difference to distinguish between the importance of institutional factors and personal factors leading to the decision-making of adult students.

Morgan and Ambaye (2002) of the University of Western Australia undertook a study to determine if pre-enrolment decision-making influenced student outcomes. Students were clustered according to whether they were identified as:

- Labour market entrants
- Career changers
- Skill improvers
- Apprentice and trainees
- Further education seekers.

Students were assessed as to whether they had achieved their primary reason for attending an educational institution. Then they were asked to rate the quality of three variables:

1. The information you received when choosing your training
2. The information about careers and jobs available to you
3. Student counselling services.

The findings are as follows:

- There was no difference in student success attributed to the relationship between the variables of student segment and responsiveness to any of the pre-training influences.
- There is a slight relationship between students who achieved their primary goals and the information they received when choosing training.
- There is a moderate to strong increase in success relative to a positive view of the information about careers and jobs available.
- There is a moderate to strong relationship between success and a positive view of student counselling services (pp. 8-9).

The authors concluded "pre-enrolment decision making is an important factor in determining whether a student attains their primary outcome from training" (p. 11). Further, "information about careers and jobs available to you" was the most important predictor of success.

Nichols Applied Management (1999) attempted to identify the key factors in student decisions regarding postsecondary studies among northern Alberta students. The methodology involved administering a survey questionnaire to a random sample of grade nine and grade twelve students living in towns and cities. The same survey was conducted in remote communities and the results were compared.

In the course of the research Nichols examined historical high school completion rates for the areas surveyed. For the school year 1989/90, 57% of students completed high school within six years (compared to a 70% completion rate for the province as a whole). The study estimated that approximately 2,900 students left school between the grade nine class of 1995/96 and the grade twelve class of 1998/99 (p. 9).

The results indicated that those most likely to attend a postsecondary institution tend to be:

- Female
- Children of parents with higher education

- From non-remote communities (p.11).

The researchers examined students' perceptions of the benefits of postsecondary education. The two highest ranked variables were work-related: a better chance of getting a good job, and as a requirement for a specific job (p. 12).

The students surveyed ranked a number of perceived impediments to attending a postsecondary institution. The results indicated that students in grade nine and, to a lesser extent, in grade twelve do not feel that they have enough information concerning financial realities, information about institutions, and programs of study or career alternatives. The researchers viewed the difference in level of information between grades nine and twelve as having implications for the kind of information that the early school leavers would possess (Nichols, p.13).

The research also examined how students choose their postsecondary institution. In order of response frequency the findings were as follows:

- Reputation of the school in a desired program
- Availability of suitable housing
- Overall appeal of the campus and facilities
- Encouragement from family
- Reputation of the school overall
- Location of the school (city/town)
- Cost of tuition
- A school that friends will be attending
- Closeness to home (Nichols, p.16).

The United States Institute for Higher Education and the Education Resource Institute (1996) published a comprehensive examination of the implications for postsecondary institutions of the growing trend of older students. The authors reported that students over 40 are rapidly increasing as a proportion of total enrolment in formal higher education.

The trends described in the report as well as descriptions of adult students are of possible interest to Canadian readers more so than the actual data contained in the study which of are American. Changing attitudes towards older workers, increased longevity of the population, and people returning to the workforce are trends that have caused the increase in the enrolment of older students.

The study cites The American College Testing (ACT) organization survey of adult learners to determine the major reasons for continuing their education. The reasons were reported in order of frequency:

- To become better educated and informed
- For personal happiness or satisfaction
- To obtain a higher degree
- To improve my income
- To meet job requirements or improve job skills
- To learn a new occupation
- To obtain or maintain a certificate (pp. 28-29).

An examination of the courses that adult students engage in grouped the students in 1. remedial and basic education, 2. continuing education, 3. technical education and training, 4. undergraduate field of study and 5. graduate and professional programs (p. 58).

Characteristics of Postsecondary Undergraduate Distance Learning Participants

Sikora and Caroll (2002) in their profile of American distance delivery education in 1999-2000 identified that those undergraduates who were more likely to participate in distance education were:

- Females
- Part-time students
- Those whose primary language at home was English
- Age 24 and over
- Married
- Full-time employed
- Those with dependent children
- Single parents
- Independent (not financially dependent on their parents)
- Earn $50,000 per year or more
- Parents' highest level of education is less than a bachelor's degree
- Lived 10 or more miles from the institution they were enrolled in
- Education students
- Delayed entry for more than two years.
- Those with two or more persistence risk factors.[4]

Lemone (2001) reported the following characteristics were found to be predictive of success in web-based distance learning and confirmed by distance delivery students themselves upon course completion:

- Self-disciplined
- Motivated
- Comfortable learning outside the classroom
- Comfortable on the web
- Self-directed (able to search for information)
- Able to keep to a schedule
- Able to work independently and isolated
- Be a full-time student (referring to the amount of time the course took)
- Not easily distracted
- Not needing close attention and one-on-one attention
- Not needing physical contact with instructor and classmates
- Not a procrastinator

[4] Index of risk represents an index from 0-7 that relates to seven characteristics known to adversely affect persistence and attainment. These characteristics include delayed enrollment, no high school diploma (including GED recipients), part-time enrollment, financial independence, having dependents other than spouse, single-parent status, and working full time while enrolled. Sikora and Caroll (2002), p. 10.

- No interfering family responsibilities (for those who work at home) (pp. 132-133).

Jenkins, Buboltz, Wilkinson, and Beatty (2001) contend that distance education courses may not be in the best interest of students attending college directly from high school. They argue "The transition from high school to college is a period of educational social adjustment for most students. New levels of social relationships are being developed that are important to the development of the student. This is also often a first experience of living away from one's family and friends and, according to Horn (1977), "those who extend their associations beyond the classroom may well find their transformation into college students to be easier and more complete" (p. 104).

Postsecondary Undergraduate Satisfaction with Distance Education

Skora and Caroll (2002) noted that among those American undergraduates surveyed in 1999-2000 who participated in distance education:

- 23% were more satisfied with the quality of instruction in their distance education classes than in their regular classes;
- 47% were equally satisfied with instruction in distance education classes and regular classes;
- 31% were less satisfied with the instruction in their distance education classes when compared with their regular classes (pp. 23-24).

DeBourgh (1999) contends that satisfaction in distance-education

> is related to the performance of the instructor – just as for traditional face-to-face courses. Students acclimate to the instructional reality – traditional, campus-based face-to-face instruction or technology-mediated distance education and once accustomed to that reality, it is the quality and effectiveness of the instructor and the instruction, not the technology that is associated with satisfaction (p. 7).

Gabrielle (2001) found that among technologically advanced students, student-teacher interaction and perceived media quality were consistent positive predictors of student perceptions of distance education instruction effectiveness and student satisfaction. Less technologically advanced students perceived only media quality is significant (p. 81).

Based on a review of distance education literature, DeBourgh (1999) lists the following factors related to students' satisfaction with elements of the quality and effectiveness of the instructor:

- Teacher behaviors that create a sense of belonging and inclusion in the class
- Effective communication skills
- Enthusiasm during instruction
- Organization and preparation for each class
- Access to the instructor and response for students' questions
- Perceptions of the instructor's professional behaviors (p. 4).

DeBourgh (1999) found in his review of distance education literature the following factors related to students' satisfaction with elements of the quality and effectiveness of the instruction:

- The clarity of communication and course expectations

- The selection, quality and instructional use of visuals
- The timeliness of feedback on course work
- The use of instructional strategies that aid students in understanding the course content (p. 4).

Postsecondary Student Course Choice in Online, Open and Distance Learning Settings

Simpson (2004) begins with a widely held view among advice and guidance counselors that the process of course selection is an important factor in a student's retention or dropping out. Course choice among full-time students has been identified as an important cause of drop out. Inappropriate course choice has been cited as one of the four main reasons for dropping out after accessing a course. A 2002 annual survey of distance learning students' withdrawal at the Open University Institute of Educational Technology found that "inadequate course choice guidance" was the second most chosen item after "insufficient time" as a reason for withdrawing students' greatest dissatisfaction (pp. 1-2).

In making course selections, Simpson (2004) notes that there are students who understand the subject and level of their intended course and will go on to study successfully. However, he also suggests there are students who will make course choices that are not suitable and students who do not know what courses they want. Initially such students rely on course title and description for their decision (p. 2).

While all institutions provide course titles and descriptions to help potential students, Simpson (2004) points out several issues:

- Length. Descriptions are often too short and incomplete or too long and difficult to understand.
- Vocabulary. The vocabulary used is often imprecise or written in terms of outcomes that students may have yet to learn.
- Conflict between recruitment and retention. Course descriptions may be written with a secondary intention of encouraging recruitment into the course. There is a fine line between encouraging fairly well qualified students to take a course and allowing less qualified students to gain an impression that a course is easier than it really is.
- Assumed entry behavior. While course descriptions can be helpful in providing previous knowledge assumed and skilled required, it will not help students in an open learning environment who do not have that qualification but who might be able to study the course (p. 2).

Simpson (2004) argues it is not enough to rely on course descriptions to ensure students have the best view of a course before deciding to take it. One alternative is to offer them advice from a course choice advisor. There are a number of issues regarding this approach:

- One to one advice is expensive.
- Potential students may not be able to frame the questions to know which questions they should be answering about a course.
- Advisors may not have the detailed knowledge of a particular course to answer all potential questions.
- Students in distance education often appear reluctant to seek advice.
- Evidence exists that even when students receive advice that they do not put it into effect.
- Access to guidance may be difficult for some students who might most benefit from it because of remoteness, unassertiveness, etc. (p. 3).

Instead, Simpson (2004) focuses on alternative methods of providing course choice so that a potential student 'self-advises' by working through different kinds of materials. These include: students' comments on courses, course preview materials (or 'taster packs'), and diagnostic materials (p. 3).

According to Simpson, potential students value the views of students who have taken courses previously. They may not be guided entirely by these views but they are likely an influence in a potential student's decision. At the Open University UK, student comments are available in hard copy or on the web for approximately 150 courses. While the effectiveness of such comments is difficult to gauge, the Open University UK web site on which they are available receives approximately 850 hits a day. The site also receives students and tutor feedback that has been consistently very positive. Another approach has been to use computer conferencing to allow potential students to ask on-line questions of current students. However, Open University UK has had little success using computer conferencing for course choice discussion, perhaps due to the several thousand conferences going on at any one time. Simpson (2004) cautions that students' comments on courses cannot help potential students know whether or not they have the right background for a course (pp. 4-6).

Course preview materials or 'taster packs' have long been used in distance education to give potential students an opportunity to survey the course materials to determine its 'fit' with their interests. While course preview materials may be a cost-effective, self-advisory method to select courses, Simpson (2004) notes that preview materials also do not tell potential students that they have the appropriate background knowledge for a course (p. 9).

Diagnostic materials may be generic (testing applicants' suitability for higher education) and course specific (to test suitability for a particular course). Each may be externally or self-assessed. According to Simpson (2004), course-specific, self-assessed materials appear to be better suited to mass distance education. However, Simpson (2004) notes that there has been little research on the effectiveness of generic or course-specific diagnostic materials in helping students choose the correct courses.

Simpson (2004) concludes that all methods for course choice - descriptions, previews, comments, and diagnostic materials have limitations either in terms of cost or the partial view of courses they offer. He argues that perhaps the best advice for developing a satisfactory course choice system is to utilize all these methods in some form or another in order to describe a course completely (p. 9).

C. Results from Review of 2001 Census Data

In addition to a review of relevant literature, this study also reviewed data from Statistics Canada's 2001 Census data related to the six census divisions which include the catchment area of the Northern colleges that are the Clearinghouse partners: Grande Prairie Regional College, Keyano College, Northern Lakes College, Portage College and the Northern campuses of the Northern Alberta Institute of Technology (NAIT). The six census divisions that comprise this region are: Census Divisions 12, 13, 16, 17, 18, and 19. (For ease of use, the area comprising the six Northern Alberta census divisions will henceforth be known as "Northern Alberta").

The following 2001 Census Data was identified as particularly relevant to this research study and is provided in this section of the report:

- The percentage of the Northern Alberta and Alberta population aged 15 – 24 years old;
- A comparison of labour force activity by Northern Albertans and Albertans aged 15 – 24 years of age;
- Total population aged 20 years of age and older by highest level of schooling for Northern Albertans and Albertans;
- Total Northern Alberta population with postsecondary qualifications by major fields of study; and
- Total Northern Alberta population with postsecondary qualifications by major fields of study and gender.

According to the results of the 2001 Census, a total of 323,440 people (or 10.9% of Alberta's 2,974,805 2001 Census population) lived in Northern Alberta. The 15 – 24 year old age group comprised 47,985 individuals in 2001, or 14.9% of the Northern Alberta population. This was higher than the Alberta average of 14.6% (Statistics Canada. *2001 Census*).

As Table One shows, Northern Albertans aged 15-24 years of age have a lower participation rate than Albertans 15 – 24 years of age as a whole (66.6% versus 71.5%) and a lower rate of employment (59.4% as compared to 64.1%).

Table One: Northern Albertans and Albertans 15- 24 Years of Age by Labour Force Activity

Labour Force Activity	Northern Alberta	Alberta
Total Population 15- 24 Years of Age	47,985	435,330
In the Labour Force	32,490	311,140
• Employed	28,960	279,060
• Unemployed	3,530	32,085
Not in the Labour Force	15,495	124,185
Participation Rate	66.6	71.5
Employment Rate	59.4	64.1

Source: Statistics Canada. *2001 Census.*
Note: Totals may not add up due to rounding.

As Table Two illustrates, Northern Alberta has a higher proportion of population age 20 years and older whose highest level of schooling is less than Grade 9. However, Northern Alberta has a higher

proportion of population age 20 years and older whose highest level of schooling is Grades 9 to 13 or a Trades Certificate or Diploma.

Table Two: Total Population 20 Years of Age and Older By Highest Level of Schooling

Highest Level of Schooling	Northern Alberta	% of Total	Alberta	% of Total
Less than Grade 9	21,040	9.9	130,435	6.2
Grades 9 to 13	79,500	37.4	661,050	31.5
Trades Certificate or Diploma	38,640	18.2	294,985	14.0
College	46,030	21.6	510,065	24.3
University	27,465	13.0	503,835	24.0
TOTAL	212,695	100%	2,100,365	100.0

Source: Statistics Canada. *2001 Census.*
Note: Totals may not add up due to rounding.

Table Three shows that the top four major fields of study among Northern Albertans who hold a postsecondary qualification were:

- Applied Science Technologies and Trades (37.1%);
- Commerce, Management and Business Administration (17.5%);
- Educational, Recreation and Counselling Services (11.5%); and
- Health Professions and Related Technologies (10.8%).

Table Three: Total Northern Alberta Population with Postsecondary Qualifications By Major Field of Study, 2001

Major Field of Study	Population	% of Total
Educational, Recreation, and Counselling Services	10,640	11.7
Fine and Applied Arts	3,925	4.3
Humanities and Related Fields	2,345	2.6
Social Sciences and Related Fields	5,620	6.2
Commerce, Management and Business Administration	15,895	17.5
Agricultural, Biological, Nutritional, and Food Sciences	4,970	5.5
Engineering and Applied Sciences	2,695	3.0
Applied Science Technologies and Trades	33,720	37.1
Health Professions and Related Technologies	9,810	10.8
Mathematics, Computer, and Physical Sciences	1,155	1.3
No Specialization	110	0.1
TOTAL	90,890	100.0

Source: Statistics Canada. *2001 Census.*
Note: Totals may not add up due to rounding.

Table Four presents the top four major fields of study with the highest percentage of Northern Alberta females who hold a postsecondary qualification were:

- Commerce, Management and Business Administration (29.6%);
- Health Professions and Related Technologies (19.1%);
- Educational, Recreation and Counselling Services (18.4%); and
- Social Sciences and Related Fields (7.9%).

Table Four: Total Northern Alberta Population with Postsecondary Qualifications By Major Field of Study - Female Gender, 2001

Major Field of Study	Population	% of Total
Commerce, Management and Business Administration	12,530	29.6%
Health Professions and Related Technologies	8,075	19.1
Educational, Recreation, and Counselling Services	7,760	18.4
Social Sciences and Related Fields	3,340	7.9
Fine and Applied Arts	3,135	7.4
Applied Science Technologies and Trades	2,725	6.4
Agriculture, Biological, Nutritional, and Food Sciences	2,400	5.7
Humanities and Related Fields	1,255	3.0
Mathematics, Computer, and Physical Sciences	460	1.1
Engineering and Applied Sciences	455	1.1
No Specialization	70	0.2
TOTAL	42,210	100.0

Source: Statistics Canada. *2001 Census.*
Note: Totals may not add up due to rounding.

As Table Five shows, the vast majority of Northern Alberta males who hold a postsecondary qualification (63.9%) indicated that their major field of study was Applied Science Technologies and Trades. The three largest major fields of study for Northern Alberta males who hold a postsecondary qualification were as follows:

- Commerce, Management and Business Administration (6.9%);
- Educational, Recreation, and Counselling Services (5.9%); and
- Agriculture, Biological, Nutritional, and Food Sciences (5.3%).

Table Five: Total Northern Alberta Population with Postsecondary Qualifications By Major Field of Study - Male Gender, 2001

Major Field of Study	Population	% of Total
Applied Science Technologies and Trades	30,995	63.9%
Commerce, Management and Business Administration	3,365	6.9%
Educational, Recreation, and Counselling Services	2,880	5.9
Agriculture, Biological, Nutritional, and Food Sciences	2,570	5.3
Social Sciences and Related Fields	2,280	4.7
Engineering and Applied Sciences	2,240	4.6
Health Professions and Related Technologies	1,735	3.6
Humanities and Related Fields	1,090	2.2
Fine and Applied Arts	790	1.6
Mathematics, Computer, and Physical Sciences	695	1.4
No Specialization	40	0.8
TOTAL	42,680	100.0

Source: Statistics Canada. *2001 Census.*
Note: Totals may not add up due to rounding.

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APPENDIX D - Technical Report

APPENDIX E - Analysis of Open-ended Questions Survey Questions on Specific Courses of Interest

Table 1 - Aboriginal Arts and Design or Aboriginal Culture Courses[5] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Aboriginal culture	1	1			3			1		6
Aboriginal arts and design	1			1	3					5
Native studies in general	1				2					3
Aboriginal history		1								1
Fish scale art					1					1
Silversmithing						1				1
Beadwork and sewing						1				1
Native artisan instructor training						1				1
Drumming								1		1
Total	3	2	0	1	9	3	0	2	0	20

[5] There were no open-ended responses from Keyano College survey respondents.

Table 2 - Arts Courses[6] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Painting	1			2	2	6	1	1		13
Music	1			1	5	3		1		11
Dance	3				4	2		1		10
Sculpture	1			2	3	2	2			10
Drama	2			1		5				8
Visual arts				1		3				4
Art	2			1						3
Drawing/sketching					1	2				3
Sound editing						3				3
Screenwriting						2				2
Video production						1		1		2
Choir	1									1
Introductory Photoshop	1									1
Graphic art design						1				1
Architecture						1				1
Directing						1				1
Computer animation						1				1
Photography								1		1
Interior decorating								1		1
Total	12	0	0	8	15	33	3	6	0	77

[6] There were no open-ended responses from Keyano College survey respondents.

Table 3 - Business Courses[7] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Business administration/management	3		1	3	5	7	3	2		24
Accounting	2			2	3	2	1		1	11
Office administration	2					9				11
Human resources management		2		1	2	1	2	2		10
Office administration					2				1	3
Marketing	2									2
Bachelor of Commerce	1				1					2
Taxation	1							1		2
Small business management					1		1			2
Bookkeeping								1		1
Business law	1									1
Budgeting	1									1
Business administration degree		1								1
Excel				1						1
Business machines				1						1
Applied degree in accounting					1					1
Hotel/restaurant management					1					1
Accounting – computer applications						1				1
Insurance broker								1		1
Total	13	3	1	8	16	20	7	7	2	77

[7] There were no open-ended responses from Keyano College survey respondents.

Table 4 - Computer Information Systems Courses[8] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Networking					5	2				7
Information systems					3	3		1		7
Basic computer skills					4	1				5
Hardware					3	2				5
Upgrading systems		1					1	2	1	5
Computer technician/repari	1				1	1				3
Software development					2	1				3
AutoCAD software	1									1
Systems analysis					1					1
Computer programming					1					1
Art and drawing programs						1				1
Total	2	1	0	0	20	11	1	3	1	39

Table 5 - Information Technology and Computer Training Courses[9] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Systems analyst					3	1				4
Information technologist		1								1
Microcomputer specialist				1						1
Software programs					1					1
Graphic design					1					1
Computer systems technician						1				1
Computer engineering						1				1
Nanotechnologies						1				1
Total	0	1	0	1	5	4	0	0	0	11

[8] There were no open-ended responses from Keyano College survey respondents.
[9] There were no open-ended responses from Keyano College survey respondents.

Table 6 - Education Courses[10] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Early Childhood Development	5				7	4				16
Bachelor of Education – elementary		1		1	7	2				11
Teacher Assistant	2			1		4		2		9
Bachelor of Education	1	2		1	2			1		7
Bachelor of Education – year 1 and 2					3					3
T.E.N. Program	2									2
Aboriginal Teacher Assistant				1	1					2
Art teacher						1				1
Teaching English overseas								1		1
Upgrade from ECD worker								1		1
Adult educator/instructor								1		1
Total	10	3	0	4	20	11	0	6	0	54

Table 7 - Engineering Technology Courses[11] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Power engineering						5				5
University Transfer – electrical engineering					1	2				3
University Transfer – mechanical engineering			1			1				2
Construction engineering	1									1
University Transfer – engineering	1									1
University Transfer - industrial engineering						1				1
University Transfer – civil engineering						1				1
Total	2	0	1	0	1	10	0	0	0	14

[10] There were no open-ended responses from Keyano College survey respondents.
[11] There were no open-ended responses from Keyano College survey respondents.

Table 8 - Health and Wellness Courses[12] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Licensed Practical Nurse program	2		1		4	7				14
Bachelor of Nursing degree	6			1	3	3				13
Emergency Medical Technician	3			1	1	2		1		8
Health care aide				1	4	2				7
Bachelor of Science	1	3								4
Medical laboratory assistant		1		1		1				3
Occupation health and safety courses				1				1		2
Occupation health and safety courses				1				1		2
Ultrasound technician	1									1
Medicine				1						1
Fitness trainer					1					1
Massage therapist					1					1
First aid courses					1					1
Community health representative						1				1
Teacher of health courses								1		1
Physiotherapist								1		1
Addictions counsellor								1		1
Psychiatric nursing	1									1
Total	15	4	1	6	16	16	0	5	0	63

[12] There were no open-ended responses from Keyano College survey respondents.

Table 9 - Humanities Courses[13] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Law	6			1	7	5		3		22
Justice	6			1	6	5		3		21
Psychology	10			3	3	3		2		21
Political science	1				3	1		2		7
History					1	2				3
Sociology						2		1		3
Anthropology	1					1				2
Educational psychology	1									1
History	1									1
Child psychology		1								1
Criminal psychology						1				1
Criminology						1				1
Career development certificate							1			1
Eating disorders								1		1
Childhood sexual abuse								1		1
Group therapy								1		1
Total	26	1	0	5	20	22	1	14	0	88

[13] There were no open-ended responses from Keyano College survey respondents.

Table 10 - Language/Literacy Courses[14]

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Cree		1		2	10	4		1		18
Professional writing course	3			1	2	1		1		8
French	2			1	1	1				5
Creative writing course	3				1			1		5
Spanish	2						1	1		4
Journalism	3									3
Foreign languages	2									2
English	1					1				2
Writing plays	1									1
Critical reading and writing	1									1
Cree syllabics		1								1
Russian						1				1
Egyptian						1				1
Greek						1				1
Ancient languages						1				1
Hieroglyphics						1				1
Michief language course (Saskatchewan)						1				1
Total	18	2	0	4	14	13	1	4	0	56

[14] There were no open-ended responses from Keyano College survey respondents.

Table 11 - Law Enforcement Courses[15] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Police officer training	2				3	4				9
RCMP training					1	3				4
Security officer training	1					2				3
Criminologist						1				1
Tribal police officer						1				1
Probation officer						1				1
Total	3	0	0	0	4	12	0	0	0	19

Table 12 - Social Services Courses[16] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Social work	6	1			8	9		1	1	26
Child and family services	2			3	6	4		2		17
Community support work (persons with disabilities)				1	1	2		1		5
Community support worker					4		1			5
Counselling	1			1		1				3
Child counsellor		1			1					2
Bachelor of Social Work						1		1		2
Aboriginal liaison worker				1						1
Total	9	2	0	6	20	17	1	5	1	61

[15] There were no open-ended responses from Keyano College survey respondents.
[16] There were no open-ended responses from Keyano College survey respondents.

Table 13 - Trades Courses[17] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Hair stylist	3			2	3	8	1			17
Carpenter	1			1	2	5		1	1	11
Welder			1		2	5		1	1	10
Heavy duty mechanic			1	1						2
Instrument technician					1	1				2
Electrician					1	1				2
Mechanic	1									1
Auto mechanic			1							1
Partsman				1						1
Millwright				1						1
Plumber					1					1
Steam fitter / pipe fitter						1				1
Culinary arts						1				1
Mechanic						1				1
Radio technician						1				1
Total	5	0	3	6	10	24	1	2	2	53

[17] There were no open-ended responses from Keyano College survey respondents.

Table 14 - Other Courses[18] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Environmental science				2	2	1				5
Horticultural design	2									2
Veterinary medicine	1					1				2
Animal health technologist	1					1				2
Personal development courses (self-esteem, etc,)							1	1		2
Landscape management	1									1
Turf grass management	1									1
Landscape design	1									1
Recreation and leisure	1									1
Management/education degree (5 year)	1									1
Radio and television broadcasting	1									1
Computer drafting				1						1
Medical transcriptionist				1						1
Forestry technology				1						1
Bachelor of Science - forensics					1					1
Petroleum employment training –battery operator					1					1
Physics					1					1
Pulp and paper					1					1
Communications program (2 year)								1		1
Aboriginal business program (4 year)								1		1
Class 3 Licence (oilfield water truck driver)								1		1
Wildlife technician								1		1
Bachelor of Fine Arts						1				1
Therapy assistant (speech, OT, PT)						1				1
Bachelor of Science – archeology or ancient studies						1				1
Mining operations						1				1
Legal assistant						1				1
Total	10	0	0	5	6		1	5	0	35

[18] There were no open-ended responses from Keyano College survey respondents.

Table 15 - Barriers to Enrolment [19] (N=343)

Course	GPRC	NAIT HL	NAIT LC	NAIT PR	NLC	PC	AHRE Barrhead	AHRE GP	AHRE PR	Total
Family responsibilities	2	1				2				5
Dial-up internet	1				1					2
Foreign university degree not recognized	1									1
Internet costs of $60-70/month					1					1
Health						1				1
Total	4	1	0	0	2	3	0	0	0	10

[19] There were no open-ended responses from Keyano College survey respondents.