

Demand for Degree and Applied Degree Programs in Northern Alberta

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I. Introduction

The Labour Market Information Clearinghouse Project is a consortium of northern Alberta colleges and the Northern Alberta Development Council. The focus of the Project is to conduct research concerning labour market issues in northern Alberta.

The college partners have expressed interest in the demand for degrees and Applied Degrees by employers and students.

II. Background

a. Alberta Perspective

The granting of degrees and Applied Degrees is an extension of the traditional mandate of the public colleges and technical institutes. Traditionally, these organizations have prepared adults for a variety of skilled careers, primarily through one-year certificate and two-year diploma programs.

Applied Degrees were first introduced in fall 1995 with the launching of eight programs as part of a pilot project. In July 1998, based on the success of the pilot project, an advisory committee recommended that Applied Degrees be continued in Alberta.

In 1999, the number of Applied Degree programs increased substantially, expanding from the original eight programs to 17. By the end of 2000, the number of Applied Degree programs in Alberta had increased to 23. At present there are 25 Applied Degree programs approved in Alberta. A listing of these programs is provided in Appendix A.

The Alberta Applied Degree is offered by public colleges and technical institutes where there is a demonstrated labour market demand for programming more extensive than what can be offered in a two-year diploma program. The programs focus on advanced study in career or technical fields, and combine six semesters of formal instruction with two semesters of formally credited work experience. Industry support for the provision of paid work experience for students is a key aspect of Applied Degree programs.

The approval model adopted by Alberta Learning for new Applied Degree offerings focuses on the following issues:

- Overall system coordination
- Duplication of programming
- Impact on diploma programs
- Transferability (both transfer into and transfer from) and mobility of the credential
- Additional cost to the student, to the public and to institutions
- Market demand and relevancy of programs
- Career opportunities for graduates
- Recognition (by industry, relevant professional associations, other educational institutions)
- Assurance of appropriate standards of quality
- Accountability for the use of public funds

(Alberta Learning, 1999)

In Alberta, publicly funded postsecondary institutions that have the authority to grant university degrees are the four universities (University of Alberta, University of Calgary, University of Lethbridge and Athabasca University). Seven privately funded colleges have approval to grant degrees (Augustana University College, Canadian University College, Concordia University College of Alberta, DeVry Institute of Technology – Calgary, The King’s College, Nazarene University College, North American Baptist College. Publicly funded colleges and technical institutes do not have the authority to grant degrees with the exception of the Alberta College of Art and Design that offers Bachelor of Fine Arts degrees..

Public colleges and technical institutes in Alberta do have the authority to offer the first two years of certain degree programs. Students completing these University Transfer programs then transfer to the appropriate university to continue in the third year of their studies. These transfers are dependent upon the student achieving the requisite grade point average and subject to a “space” being available. Students can receive an Associate Certificate upon completion of 30 credits of a University Transfer program or an Associate Diploma upon completion of 60 credits of a University Transfer program.

b. Other Jurisdictions

(i) British Columbia

The British Columbia Institute of Technology (BCIT) offers applied degrees referred to as Bachelor of Technology Degrees. The number of Applied Degrees offered by the institution has grown from four in 1997 to 13 in 2001. Applied Degree programs are developed and

offered only in fields recommended by industry advisory committees. The need for the program must be clearly demonstrated.

Before BCIT received degree-granting status some degree programs were offered through the Open Learning University, as degree completion initiatives building on Advanced Diploma programs. Although there is some variation by program, the BCIT model generally includes: a related 2-year diploma in technology and 2 years of related work experience as prerequisites; advanced courses in the technical specialty; management courses; and liberal education courses (which the student acquires through another college or university). In most programs, the advanced technical training includes an industry-based practicum. All Bachelor of Technology degrees are designed to be completed on a part-time basis and many have the capacity to be delivered on a distance-education basis. All the degrees must be completed within 6 years.

The British Columbia Associate Degree is the equivalent of Alberta's University Transfer program. The Associate Degree general requirements are specified by provincial legislation and fulfill the first two years of university course study (60 credits). This is transferable to third year entry at a university, dependent on the major requirements at a particular university and the grade point standards set by the university.

(ii) Ontario

In 1971, Ryerson Polytechnic University was granted the right to confer degrees and in 1993 became Ryerson Polytechnic University, a full university with a stronger emphasis on research. Degree programs offer a combination of theory and applied learning and are four academic years in length. Some programs offer a limited cooperative component of 20 months (4 work terms) which extends the length of the program.

In April 2001, the province of Ontario implemented a new *Post-Secondary Education Choice and Excellence Act*. The Act was developed in response to:

- Changing expectations from employers, particularly increasing entry-to-practice qualifications requiring a degree-level education for new entrants.
- Increasing demands from students for expanded access to degree programs.

A Quality Assessment Board is in place to review requests to establish new degree granting institutions either from new privately funded Ontario-based institutions or out-of province institutions. It is thought that allowing private universities to offer degree programs in Ontario may create significantly more opportunities for :

- Working adults
- Mature students who want to upgrade their education and training

- Traditional university students who may be attracted to unique programs or alternate delivery models offered by new universities.

Through this Act the Ontario government is implementing a pilot project to provide colleges with the opportunity to seek Applied Degree status for selected programs. Up to eight projects per year will be introduced over the period of three years.

An Applied Degree program will be defined to include programs that:

- Offer a high quality of education
- Respond to demonstrated demand for students and employers
- Do not duplicate programs normally offered at universities in Ontario
- Incorporate other features as determined by the Minister following public consultation.

(iii) Maritimes

The University College of Cape Breton offers a combination of degree, engineering and science programs and the technological, trades and vocational programs more commonly offered through a community college. Programs offered include cooperative education work placements and internships designed to integrate academic study with career-oriented paid work experience.

Holland College is also investigating Applied Degree programs.

III. Methodology

Telephone interviews were conducted with two Alberta Learning staff members. Materials that were provided by these individuals were reviewed and information was also collected from the Alberta Learning website and Information Services.

Telephone interviews were also conducted with content specialists in Ontario and British Columbia to gather perspectives on other jurisdiction's experience with Applied Degree programs and degree granting status for colleges.

Perspectives on degree and Applied Degree programs were gathered from Northern Alberta high school counsellors, parents and students as part of the data gathering process for the "Why Are Students Going South" report.

Interviews were conducted with individuals knowledgeable about labour market requirements in Northern Alberta for six professions – accounting, agriculture, engineering, health care, social work, and teaching.

IV. Profiles of Learners

a. Applied Degree Programs

Learner profile data for students enrolled in Applied Degree programs is not yet available through Alberta Learning. Enrolment figures for Applied Degree programs will be reported as part of the Performance Indicators process. This information will be available in 2002 and 2003.

Data from other jurisdictions indicates that students in Applied Degree programs range from 21 to 50 years of age. The average age of these students ranged from 24 to 27 years of age.

b. University Transfer Programs

During the first few years that University Transfer programs were offered in Alberta, these programs were typically viewed as the “second choice” option for university studies.

The profile of early University Transfer students was:

- High school graduates with a Grade 12 GPA of 70 or less **OR**
- Students not entering directly from high school because they were
 - Previously unsuccessful in a program of study at an Alberta university
 - Had withdrawn from a program of study at an Alberta university
 - Were employed full-time since graduating from high school
 - Were employed part-time and were enrolled in high school upgrading courses

Colleges marketed the following advantages of enrolling in University Transfer courses:

- Smaller class sizes
- Easier access to academic staff
- Lower tuition costs
- Lower costs for books and materials
- Easier access to computer laboratories, science laboratories, library materials, library reserve materials, etc.

Despite these efforts, students, parents and high school counselors initially questioned the value of University Transfer programs compared to degree programs at Alberta universities in terms of:

- Academic rigour of the curriculum
- Quality of instruction
- Qualifications of instructors/faculty
- Ease of transfer to a university for 3rd and 4th year of program of study

- The level of competition for ‘spaces’ in university programs at the 3rd and 4th year level

V. Changing Market for Applied Degrees and University Transfer Programs

a. Applied Degrees

Historically, Applied Degrees have been considered “entrance to practice” degrees. This has been demonstrated in Australia, the United Kingdom, Germany and Canada.

Due to changing labour market conditions, there is a growing trend for graduates of full degree programs to enter Applied Degree programs in pursuit of practical work skills. This evolving market has resulted in an increased interest in Applied Degree programs in several jurisdictions.

The British Columbia Institute of Technology (BCIT) has experienced increased competition for students as other colleges throughout the province have implemented Applied Degree programs. In response to this increased competition and the increased level of interest in recent university graduates in these programs, BCIT is considering lessening their current enrollment requirement of two years of work experience to six months.

b. University Transfer Programs

The level of acceptance of the value of University Transfer programs has improved substantially. Certainly in the urban centres, these programs are now being viewed as a “first choice” option for many students. The profile of these learners has changed significantly in terms of:

- The majority of students are now entering directly from high school
- An increasing number of students are choosing this option for ‘professional’ degrees such as engineering, education, etc.
- The tuition fees for University Transfer programs are lower than the tuition fees for the first two years of study at an Alberta university. Parents and students are choosing this lower cost option.
- High school counsellors and parents have increased awareness of the ‘success rate’ of University Transfer students due to marketing strategies.

VI. Perceptions of the Need for Applied Degree and Degree Programs in Northern Alberta

a. Employer Perceptions

All interviewees were aware that several Northern Alberta colleges offer University Transfer programs. They all agreed that the opportunity for students to commence their postsecondary studies in a Northern community was of value to the student, their family and the community.

The perceived benefits of students having the option to commence university studies in Northern Alberta included:

- Students can maintain closer connections to family, peers and community.
- The cost of postsecondary education will be less than the cost of attending a university “in the south” of Alberta
- Students have time to mature before dealing with challenges of urban life.
- Students will likely achieve greater academic success because of smaller class sizes.
- Students can have more contact with faculty since the “publish or perish” requirement is not as stringent as in the university setting.
- Students view the North through “new eyes” as they conduct case studies and research projects in the local environment.
- Students can gain work experience in local communities
- Perception by some that starting university studies in Northern Alberta increased the chance that the individual will return to Northern Alberta upon graduation from university

No specific suggestions for further University Transfer offerings were received from interviewees.

Interviewees were less clear about Applied Degree programs in terms of:

- The purpose of Applied Degrees
- The types of Applied Degrees that are offered and by which institution
- The role of employers with regard to Applied Degrees

Applied Degrees were perceived as a potential mechanism for employers to upgrade the skills of their workforce. It was suggested that alternate delivery strategies should be considered to allow for maximum flexibility in combining work and study options.

No suggestions for new Applied Degrees were offered by the interviewees.

b. High School Counsellor Perceptions

Eighty-two percent of surveyed northern Alberta high school counsellors (17 counsellors) were aware that the Northern Alberta colleges offered University Transfer programs. Of this group less than 25 percent could name specific University Transfer programs at the various colleges, however, they indicated that this information is available through published materials or on-line. None of these counsellors had completed University Transfer courses.

In the opinion of these counsellors, the benefits for students enrolling in University Transfer courses offered at the Northern Alberta colleges were:

- Smaller class sizes
- Lower tuition costs
- Ability to continue to live with their parents thereby reducing cost of education
- Ability to maintain employment while studying. The value of students being able to help out with the family business or family farm was noted by several counsellors.
- Time to mature before facing the challenge of 'life in the big city'
- Ability to maintain relationships with family members, peers and boyfriend/girlfriend

The counsellors were not familiar with Applied Degree program offerings in Northern Alberta. They were also unclear about the purpose of Applied Degrees.

c. Student Perceptions

As part of the data gathering process for the "Why Students Move South" report, students participating in focus groups were asked about their awareness of University Transfer and Applied Degree programs in northern Alberta colleges. These students are currently enrolled in postsecondary programs at Grant MacEwan College, the Northern Alberta Institute of Technology, and the University of Alberta.

Of the 28 students who participated in the focus group sessions, 65% were aware of University Transfer programs and 14% were aware of Applied Degree programs. Of the 65% who were aware of University Transfer programs:

- 79% thought these programs were less expensive than studying at a university
- 72% thought that the academic staff were less qualified
- 72% questioned whether University Transfer students from the northern colleges would be able to successfully transfer to an Alberta university
- 72% thought they would have a more limited opportunity for elective courses in a University Transfer program

Those who indicated an awareness of Applied Degree programs did not understand:

- the purpose of these programs
- the entrance level requirements for these programs
- the role of employers and work experience in these programs

One student commented that these programs “sound like watered-down degree programs.” Two students were concerned that “employers will not recognize this credential” and that this could affect their future career options, particularly outside of Alberta.

While new high school graduates are unlikely candidates to enroll directly in Applied Degree programs, they may consider doing so at a later date. Also, these students could inform friends and family members to consider pursuing this learning option.

VII. Factors Influencing the Success of University Transfer and Applied Degree Programs

a. University Transfer Programming

This research identified that a number of factors can influence the level of enrolment in University Transfer programs at colleges including the following:

- extent to which the programs are publicized to high school counsellors, high school students, and parents
- college marketing strategies relative to university marketing strategies
- transfer rates to universities of students completing University Transfer courses
- comparative tuition fees of University Transfer programs to university programs
- availability of ‘spaces’ for students to transfer to their university of choice
- perceptions of students, high school counsellors, parents and employers of quality of University Transfer program
- student perception of attractiveness of college amenities relative to university amenities
- student perception of attractiveness of Northern Alberta community amenities compared to amenities of major urban centres in Alberta

b. Applied Degree Programs

This research identified a number of factors that can influence the level of enrolment in Applied Degree programs at colleges including the following:

- extent to which the programs are publicized
- college marketing strategies relative to university marketing strategies
- lack of understanding of Applied Degrees by career counselling personnel and human resource personnel
- program accessibility (options such as distance delivery, evening or weekend course scheduling, compressed time frames)
- portability of credential. How receiving institutions treat an Applied Degree.
- promotion of “career laddering” so that certificates, diplomas, and Applied Degrees are viewed as integrated learning experiences
- willingness of professional associations, industry sectors and employers to participate in the design and implementation of the Applied Degree
- willingness of professional associations and industry sector personnel to promote the Applied Degree with their membership
- availability of resources for college program staff to continue to work with professional associations and industry sectors to promote the Applied Degree among their membership
- overall image of the postsecondary institution

VIII. General Implications of Research and Findings

Attracting students to attend Northern Alberta postsecondary institutions will continue to be a challenge. The following ideas are presented as possible strategies to further engage the interest of students, employers, parents, counsellors and the community in University Transfer and Applied Degree opportunities in Northern Alberta.

a. Engaging Student Interest

- Ensure that on-line and print publications promote these programs
- Provide information about graduates – University Transfer, Applied Degree
- Share insights of students enrolled in these programs of their value
- Promote Applied Degree programs to organizations who are working with unemployed youth, adults in career transition
- Consider how distance learning technology can be used to support the delivery of Applied Degree programs in Northern Alberta

- b. Engaging Employer Interest**
- Share information about Applied Degrees with Program Advisory Committee members, college alumni, donors to college Foundations, etc.
 - Host a workshop in Northern Alberta focusing on Applied Degrees (this was done in Edmonton on November 13)
 - Continue to work with Program Advisory Committees, professional associations, sector councils to explore potential for new Applied Degrees
- c. Engaging High School Counsellors and Career Counsellors**
- Continue to promote University Transfer and Applied Degrees with print and on-line materials
 - Promote Applied Degree programs to organizations who are working with unemployed youth, adults in career transition
 - Promote “career laddering” concept showing how certificates, diplomas, Applied Degrees integrate
- d. Engaging Parents and Adult Learners**
- Offer information workshops that showcase “career laddering” concept showing how certificates, diplomas, Applied Degrees integrate over the course of one’s career. This strategy has been very successful for British Columbia Institute of Technology. The workshops are offered twice yearly and more than 1,000 people attend each session.
 - Advertise Applied Degree programs in local newspapers in the Employment or Career section

IX. Sources

- Alberta Agriculture
Betty Vladicka (780) 427-0840
- Alberta College of Social Workers
Alison MacDonald – Associate Registrar (403) 421-1167
- Alberta Learning website <http://www.learning.gov.ab.ca>
- ALIS website <http://www.alis.gov.ab.ca>
- BCIT website <http://www.bcit.ca>
- Certified General Accountants Association of Alberta
Nora Molina – Manager Education (403) 299-1321
- Anne McArthur, Dean, British Columbia Institute of Technology
- Murray Lindman, Alberta Learning (currently on leave)
- Ontario Ministry of Training, Colleges and Universities (October 4 2001) Canada's
Newest University to Meet the Demand for Market-Driven Degree Programs –
Province to Invest \$60 Million in Ontario Institute of Technology
- Ontario Ministry of Training, Colleges and Universities. (April 2000). Increasing
Degree Opportunities for Ontarions – A Consultation Paper
- Eileen Passmore, Alberta Learning (780) 427-5710
- The Association of Professional Engineers, Geologists and Geophysicists
Len Shrimpton, Director Professional Education (780) 426-3990
- Eydie Troper, Senior Policy Advisor
Colleges Branch,
Ministry of Training, Colleges and Universities (Ont.) (416) 325-6892

Appendix A

Applied Degree Programs in Alberta

Applied Degree	Institution(s)
Applied Forest Resources Management	Grande Prairie Regional College
Applied Petroleum Engineering Technology	SAIT
Applied Communications	Mount Royal College
Bachelor of Applied Business and Entrepreneurship – Computer Information Systems	Mount Royal College
Applied Integrated Environmental Management	Lakeland College
Applied Conservation Enforcement	Lakeland College
Applied Information Systems Technology	NAIT SAIT
Applied Horticultural Technology	Olds College
Applied Interior Design	Mount Royal College
Applied Child Studies	Mount Royal College
Applied Justice Studies	Mount Royal College
Applied International Business and Supply Chain Management	Grant MacEwan College
Applied Human Service Administration	Grant MacEwan College
Applied Visual Communications	Medicine Hat College
Applied Ecotourism & Outdoor Leadership	Medicine Hat College Mount Royal College
Applied Communications in Professional Writing	Grant MacEwan College
Applied Agricultural Technology and Entrepreneurship	Olds College
Applied Industrial Ecology	Mount Royal College
Applied Policy Studies	Mount Royal College
Applied Business Administration- Accounting	NAIT SAIT Grant MacEwan College Mount Royal College
Applied Business Administration –Electronic Commerce	NAIT
Applied Motion Picture Arts	Red Deer College
Applied Geographic Information Systems	SAIT
Applied Financial Services	Fairview College Lakeland College Mount Royal College
Applied Corrections	Lethbridge Community College

Appendix B

University Transfer (UT) Programs in Northern Alberta

University Transfer (UT) Program	Institution(s)
Arts UT	Grande Prairie Regional College
Agriculture, Forestry, Home Economics UT	Grande Prairie Regional College
Bachelor of Applied Financial Services	Fairview College
Bachelor of Commerce UT	Grande Prairie Regional College
Business/Commerce UT	Keyano College
Computing/Computing Science UT	Grande Prairie Regional College
Education UT	Grande Prairie Regional College Keyano College
Education UT – Teacher Education North	Grande Prairie Regional College
Engineering UT	Keyano College
Fine Arts UT	Grande Prairie Regional College
Kinesiology UT	Grande Prairie Regional College
Music UT	Grande Prairie Regional College
Physical Education UT	Grande Prairie Regional College
Pre-Social Work UT	Grande Prairie Regional College
Social Work UT	Keyano College
Science UT	Grande Prairie Regional College
UT (Sunrise Project)	Northern Lakes College
University Studies	Lakeland College