Alberta
LEARNING

2001/02 Post-Secondary Institution Graduate Outcomes Survey

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Background

Alberta Learning and the publicly funded post-secondary institutions collaborate to conduct a biennial survey of graduates. The data collected help to inform policy development and program and service review and improvements. This report presents findings from the *2001/2002 Graduate Outcomes Survey*, which surveyed fall 2001 and spring 2002 graduates from parchment programs[1] at Alberta universities, private university colleges, public colleges and technical institutes. The survey was conducted during the period January 15 – April 19, 2004.

The report is primarily focused on system-wide, sector and field of study findings and is organized around six broad areas of enquiry:

1. Graduate demographics
2. Graduate employment outcomes
3. Graduate satisfaction
4. Graduate awareness of post-secondary options and graduate transitions
5. Financing of post-secondary studies
6. Attitudes towards and experiences in regard to life-long learning

This survey is one in a series of similar surveys conducted by Alberta post-secondary institutions since 1998; however, this survey was the first in which all twenty-five publicly funded post-secondary institutions utilized a common survey instrument and a common survey methodology. Because of the significant methodological changes inherent in the 2004 survey, comparisons with previous graduate survey findings were not conducted.

Malatest and Associates Ltd. conducted the survey on behalf of Alberta Learning and the twenty-five participating post-secondary institutions. Graduates were provided with two response options – a telephone survey option and an online response option. In total, 15,622 respondents completed the survey (14,297 via telephone and 1,325 online) out of a valid sample of 26,780 graduates. The response rate of 58.3% provides a high level of confidence that findings are representative of the population as a whole.

Significant findings

Graduate Demographics

- The typical graduate was found to be young (median age was 26 at the time of the survey), single (75%) and female (61%).
- Some 60% resided in urban centers when they last attended school at the Kindergarten to Grade 12 level; 86% reported living in urban centers at the time of the survey, indicating a migration to urban centers upon completion of post-secondary studies.
- 37.9% of the graduates reported having at least one parent who had completed a university degree.
- There is considerable variation between sectors and also between fields of study in these generalized findings. For example, although 61% of the graduates were female overall, only 42% of the graduates from technical institutes were female.

Graduate Employment Outcomes

- The labour force participation rate was 91.6% at the time of the survey and the employment rate was 94.4%, representing virtually full employment. This compares to a participation rate of 73.4% and an employment rate of 94.9% for Albertans fifteen years of age and older[2].
- 78.7% reported that their main job was related to the program from which they had graduated.
- The median income ($34,320) compares very favourably with that for all Albertans 15 years of age or older ($23,025)[3].

[1] Parchment programs are those that lead to a credential at the certificate, diploma or degree level.

[2] Statistics Canada, E-STAT http://estat.statcan.ca/cgi-win/CNSMCGI.EXE

[3] Statistics Canada, Community Profiles http://www12.statcan.ca/english/profil/PlaceSearchForm1.cfm

Executive Summary

- 510 graduates (3.6%) were unemployed, actively looking for work, and non-students at the time the survey was conducted. However, a large percentage of these graduates still reported they were satisfied with their educational experience (86.8%).
- There was a large spread in median incomes, depending on field of study, with lower median incomes in Arts ($25,116) and the highest median incomes in Math and Natural Sciences ($40,000).
- Median incomes increased as the credential level earned increased, but peaked at the Masters level ($60,000 compared to $52,000 for graduates with a PhD).
- Median incomes for Aboriginal graduates ($31,170) were lower than for Non-Aboriginal graduates ($34,632).

Graduate Satisfaction

- 79.1% were satisfied overall with their educational experience.
- 74.4% were satisfied with the quality of teaching in their program.
- 98.8% reported that they had a primary goal when they entered post-secondary, and, of these, 91% achieved their goal.
- 85.9% agreed that they would recommend the program from which they had graduated to someone else.
- 72.9% felt that the benefits of post-secondary education were worth the financial cost to themselves and their families.
- The highest ranked benefit overall of post-secondary studies was the "opportunity to improve oneself" (84.4%).
- The highest ranked skill was the ability to "learn independently" (75.9%).
- Although the university sector had the highest percentage of graduates who stated that they had achieved their primary goal (92.7%), they were the lowest rated in terms of overall graduate satisfaction (76.2%) and satisfaction with the quality of teaching (69.9%).
- Technical institute graduates' ratings of the skills, knowledge and/or abilities acquired were the lowest of the four sectors (51.7%). A possible explanation may be that the skills presented in the survey are generic in nature (ex. develop awareness of ethical issues) whereas the technical institutions may be more focused on job-specific skills.
- Math and Natural Sciences was the field of study with the lowest ratings in terms of skills, knowledge and/or ability acquisition (57.3%); satisfaction with the quality of teaching (67.5%); and the percentage that would recommend their program to others (82.3%).
- Arts was rated as the field of study in which the highest percentage of graduates felt their program had helped them acquire skills, knowledge and abilities (67.4%); however, it was the lowest rated in terms of benefits relative to the cost (64.0%).

Awareness of Post-Secondary Options and Graduate Transitions

- 84.8% of the respondents began their post-secondary studies within three years of completing K-12 studies
- 68.9% of the respondents from universities tended to enroll immediately after completing K-12 studies. This was also true, but to a lesser extent for graduates from private university colleges (58.8%), but not for graduates from technical institutes and public colleges (where only 35.7% and 35.3% respectively attended right after completing K-12).
- 60.8% attended a post-secondary institution in the same area where they had last attended K-12.
- 84.7% remained in the same geographical area where they graduated.
- 97.8% felt qualified to well qualified for the main job they held at the time of the survey.
- 89.3% of the respondents who had prior post-secondary education reported receiving the transfer credits they expected to get. This percentage varied by sector, from a high of 94.2% for technical institute graduates to a low of 88.4% for university graduates.

Executive Summary

Financing of Post-Secondary Studies

- 69.5% of the respondents worked while attending school.
- 61.9% of the respondents had secured a loan(s) to finance their post-secondary studies; 38.1% had not.
- 76.4% of the funds were borrowed from government.
- 63% of the respondents had received grants, scholarships or bursaries (median amount - $2,500; mean amount - $5,825). The median amount owing at the time of graduation was reported to be $13,500; the mean amount owing was $17,076.
- By field of study, graduates from Arts had among the highest median loans ($15,000) but also had the greatest percentage reporting that they had received grants or scholarships (71.0%).
- Graduates at the PhD level, had the highest median ($16,500) and mean ($21,789) loan amounts. However, they also had the highest percentage reporting having received grants, scholarships or bursaries (91.8%), with the median amount reported being $40,000 (significantly higher than the overall median amount for all graduates - $2,500).

Lifelong Learning

- 27.1% of the graduates reported that they were enrolled as students at the time of the survey, 18.2% as full-time students and 8.9% as part-time.

Overview

Introduction

This report presents findings from the *2001/2002 Graduate Outcomes Survey*, which surveyed fall 2001 and spring 2002 graduates from parchment programs[4] at Alberta universities, private university colleges, public colleges and technical institutes. This survey represents a marked departure from previous surveys in that it measures both the graduate employment outcomes and student satisfaction outcomes in one survey instrument. Additional significant changes are as follows:

- Graduates were surveyed two years after graduation. Previously, the college and technical institute graduates had been surveyed six to nine months after graduation, while the satisfaction survey was conducted towards the end of the academic year in which students finished their studies.
- Alberta Learning conducted the survey on behalf of all institutions. Previously, the colleges and technical institutes had conducted their own graduate follow-up studies.

Objectives

The graduate survey is an important source of information for both Alberta Learning and the publicly funded post-secondary institutions in that it provides information that helps assess graduate outcomes, and as such helps to inform policy development and the review of programs and services. Some of the data are used by the department to reward institutional performance. The survey provides information on management indicators and the following broad areas of enquiry.

1. *Demographics* – An analysis of survey findings by age, gender and geography in order to determine if trends and patterns are linked to graduate demographics.
2. *Employment Outcomes* – An examination of the extent to which graduates of parchment programs find employment, and the extent to which they find employment related to their education and training. The survey questions in this section also pertain to the respondent's employment income and benefits.
3. *Satisfaction* – An examination of how satisfied graduates are with their post-secondary education. This section pertains to the graduates' levels of satisfaction with their post-secondary schooling, such as the relevance of courses taken, their opinions as to the perceived return on investment, value, the usefulness of skills acquired, satisfaction with teaching quality, and overall satisfaction with their program of study.
4. *Awareness and Transitions* – An analysis of how well prepared students felt to enter post-secondary studies, including awareness of personal options and financial assistance. Also, an analysis of the extent to which students make successful transitions. This section includes questions on awareness of programs such as student finance, the role of guidance counselors, and the importance of other information sources in deciding whether or not to attend a particular program or institution. Additionally, this section examines issues associated with the transition from secondary to post-secondary, as well as from school to work and/or post-graduate studies.
5. *Financing of Post-Secondary Studies* – Analysis of the students' primary financial resources, inclusive of student debt levels required to complete post-secondary studies in relation to program type. Questions regarding student loans and other sources of funding used to complete studies are examined in this section.
6. *Lifelong Learning* – An examination of the extent to which lifelong learning is incorporated into the lives of graduates. These questions seek to determine if the respondents are pursuing another credential or any other further education.

[4] Parchment programs are those that lead to a credential at the certificate, diploma or degree level.

Methodology/Demographics

Survey Background

This survey represents one iteration in a series of surveys designed to collect data on graduate outcomes. In 1998, Alberta Advanced Education and Career Development (now part of Alberta Learning) and Alberta post-secondary institutions agreed on a set of common standards for collecting feedback on graduate satisfaction and graduate employment outcomes. Graduate satisfaction and graduate employment outcome surveys were conducted in alternating years. There were, however, some notable differences in survey methodology:

- The colleges and technical institutes conducted an employment survey six to nine months after graduation while the satisfaction survey was conducted towards the end of the academic year in which students finished their studies.
- The universities and university colleges collaborated with Alberta Learning on a joint survey of graduates, conducted by a contractor. The employment survey was conducted two years after graduation. The satisfaction survey was conducted towards the end of the academic year in which students finished their studies, similar to what was being done by the colleges and technical institutes.

In the fall of 2002, Alberta Learning initiated discussions with the institutions leading to an agreement to develop a standardized approach to the 2004 graduate outcomes surveys, based on the following characteristics:

- All twenty-five publicly funded post-secondary institutions agreed on a common survey methodology. A list of participating institutions is provided in Appendix One.
- All institutions committed to using the same survey instrument (see Appendix Two).
- The survey instrument is based on a common set of survey objectives.
- The survey instrument combines the satisfaction and employment outcomes surveys into one instrument.
- Alberta Learning contracted with R. A. Malatest and Associates Ltd. to conduct the survey on behalf of all institutions.
- The graduate records submitted to the contractor were based on Alberta Learning LERS[5] files, supplemented with personal information provided by the institutions.

Because of the significant methodological changes inherent in the 2004 survey, comparisons with previous survey findings are problematic.

Research activities completed by the Contractor, R.A. Malatest and Associates Ltd., included modification of the survey instrument, field-testing of the survey, administration of the survey, extensive tracking and tracing activities, as well as cleaning and coding of the raw data files for delivery to the Client. A methodological report was provided to Alberta Learning by the Contractor outlining the specific survey activities (see Appendix Three).

Completion targets were set at the institutional and field of study levels for a pre-determined level of statistical confidence so that the institutions would be able to conduct secondary analyses on their own data. By suspending interviews at the institutional and field of study levels once completion targets were met, the survey does not reflect probability in the manner of a completely random study. As such confidence intervals and significance levels should be considered guidelines only.

Full survey administration commenced on January 15 and concluded on April 19, 2004. The contractor regularly checked response targets at the institutional, field of study and program levels.

[5] LERS – the Learner & Enrolment Reporting System. Use of LERS to generate the graduate files allowed for a consistent delineation of the frame for the survey.

Where targets proved difficult to reach, tracking and additional surveying resources were devoted.

Brokering arrangements exist between certain institutions. This means a graduate may take a program at one institution, although another confers the credential. In these cases, graduate responses were attributed to the credentialing institution rather than the host institution. For example, the Unit Clerk program at Red Deer College is attributed to Bow Valley College, the credentialing institution.

Following the necessary cleaning and coding of the collected data, the contractor prepared a data set for Alberta Learning of all respondents from all participating institutions, with personal identifiers removed. The contractor subsequently prepared electronic data packages for each institution with only the institution's graduate outcome data. Again, personal identifiers were removed before the data were sent to the institutions.

Survey Response Rates

In total 15,622 respondents completed the survey (14,297 via telephone and 1,325 online). Such a large overall sample was necessary to provide each institution with adequate samples at the program and field of study levels. Overall call dispositions and response rates are provided in Table MD1. Table MD2 provides a summary of the response rates by post-secondary sector. Table MD3 provides response rates by field of study.

Table MD1 - Overall Call Dispositions

Gross Sample	*28,025 (100%)*
Moved out of North America	986 (3.5%)
Non-Qualified*	259 (0.9%)
Valid Sample	***26,780 (100%)***
Language/Communication Problem	42 (0.2%)
NIS**/Wrong#/Business/Fax/Modem	6,584 (24.6%)
Call back (Busy, appointments etc)	2,691 (10.0%)
Refusal/Incomplete	1,841 (6.9%)
Valid Completions and Response Rate	***15,622 (58.3%)***

*Non-Qualified were deceased, or stated they did not attend the institution.
** Not in Service

Table MD2- Response Rate by Post-Secondary Sector

Post-Secondary Sector	Gross Sample	Valid Sample	Overall Completions	Valid Response Rate	Margin of Error *
Universities	14,002	13,190	7,705	58%	±0.7%
Private Colleges	568	540	399	74%	±2.5%
Public Colleges	8,836	8,541	5,008	59%	±0.9%
Technical Institutes	4,619	4,509	2,510	56%	±1.3%
Total	28,025	26,780	15,622	58%	±0.5%

* At the 95% confidence level, based on valid sample by institution

Table MD3 – Response Rate by Field of Study

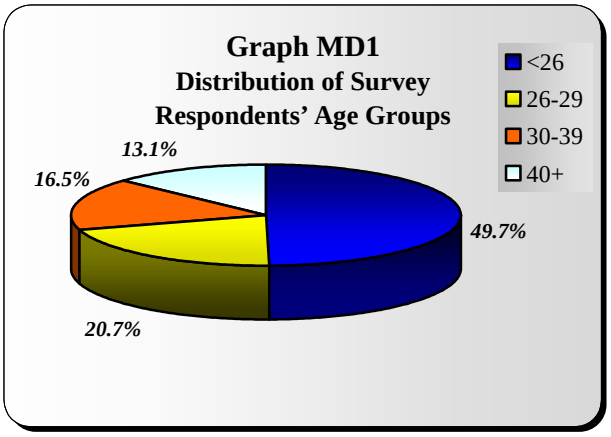
Field of Study[6]	Gross Sample	Valid Sample	Overall Completions	Valid Response Rate	Margin of Error*
Math and Natural Science	6,385	6,137	3,518	57%	±1.1%
Life Sciences	1,247	1,215	773	64%	±2.1%
Health and Medical Sciences	3,997	3,898	2,285	59%	±1.3%
Social Sciences and Related Applications	5,390	5,134	3,097	60%	±1.1%
Arts	3,597	3,382	2,025	60%	±1.4%
Business and Related Studies	5,947	5,641	3,185	56%	±1.1%
General Studies	1,462	1,373	739	54%	±2.4%

[6] See Appendix Four for the program composition of each field of studies.

Socio-Demographic Characteristic of Graduates- Who is the average graduate?

Analyses were conducted in order to develop a sense of the demographic profile of the average graduate two years after graduating from Alberta post-secondary institutions, with attention also directed toward notable sub-populations. The following were the key findings:

- The mean age of respondents was just under 29 years of age (28.8), with a median age of 26. 70.4% (10,898) were under the age of 30.

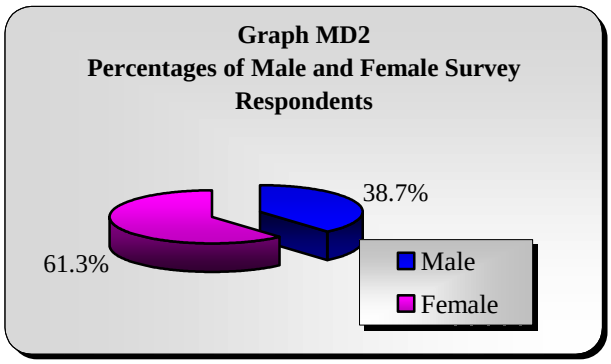


- The mean age for university and public college respondents is slightly higher than the mean for the total population (29.3 in both), likely a reflection of the longer program lengths in these sectors.
- 3.7% (569) of the respondents identified themselves as Aboriginal. The mean age of Aboriginal students was 32.1, with a median age of 30.
- 75.3% (11,717) of the graduates interviewed were single when they first started their studies, and 21.8% (3,382) were married. 19.4% (2,934) were responsible for dependants while in school.
- 1.9% (295) of the population reported themselves as persons with a disability.
- For Alberta students only, roughly 60% (6,844) resided in urban centers, and 40% (4,505) in rural areas when they last attended Kindergarten to grade 12 (K-12). Of the graduates who remained in Alberta after their post-secondary studies, 86.4% (11,851) reported living in urban locations (see Appendix Eight for a breakdown by sector).
- Whether the graduates last attended K-12 in urban or rural locations seemed to have no impact on program choice as indicated by field of study. However, when looked at by program length, 56.1% (2,572) of the graduates that last attended K-12 in rural Alberta graduated from 1 or 2 year programs as compared to 40.5% (2,772) for graduates who last attended K-12 in urban Alberta.

Table MD4
Length of Program, Urban vs. Rural

Program Length in Years	*Urban K-12*	*Rural K-12*	*Total Population*	*N*
1	15.4%	24.4%	19.0%	2153
2	25.1%	31.7%	27.7%	3145
3	7.0%	6.5%	6.8%	771
4	44.1%	30.5%	38.7%	4393
5	8.4%	7.0%	7.8%	887

- 61.3% (9,580) of the graduates were female, and 38.7% (6,042) were male.



- 58% (1,461) of the graduates from technical institutes in the study were males (see Appendix Eight for a detailed breakdown by sector).

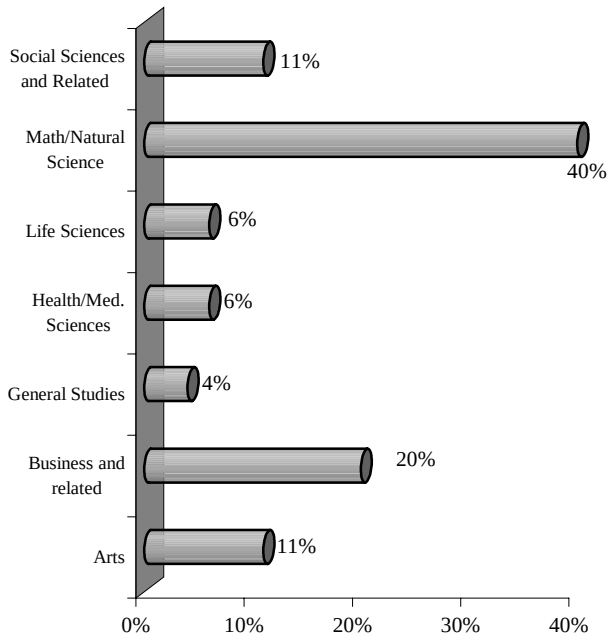
- 68% (2,413) of all Math and Natural Science graduates in the study were male.
- 78% (2,403) of all Social Science graduates and 84% (1,911) of the Health and Medical Sciences graduates were females.

Table MD5
Gender Of Respondents by Field of Study

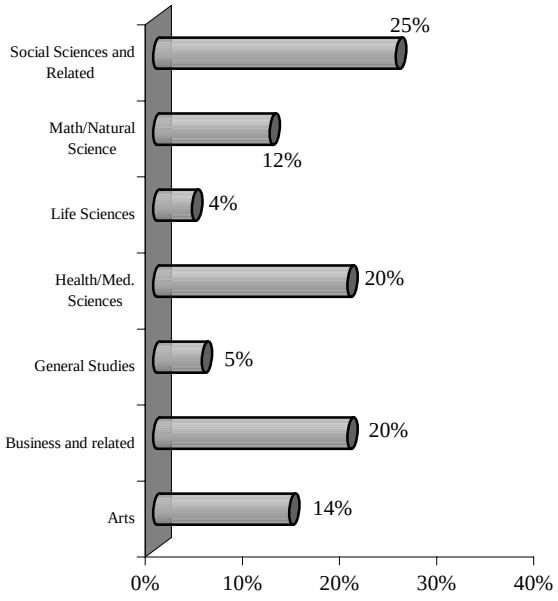
Field of Study	*N*	*Male*	*Female*
Arts	2025	34%	66%
Business and Related Studies	3179	39%	61%
General Studies	739	35%	65%
Health and Medical Sciences	2285	16%	84%
Life Sciences	773	49%	51%
Math and Natural Science	3524	68%	32%
Social Sciences	3097	22%	78%
Total	*15622*	*39%*	*61%*

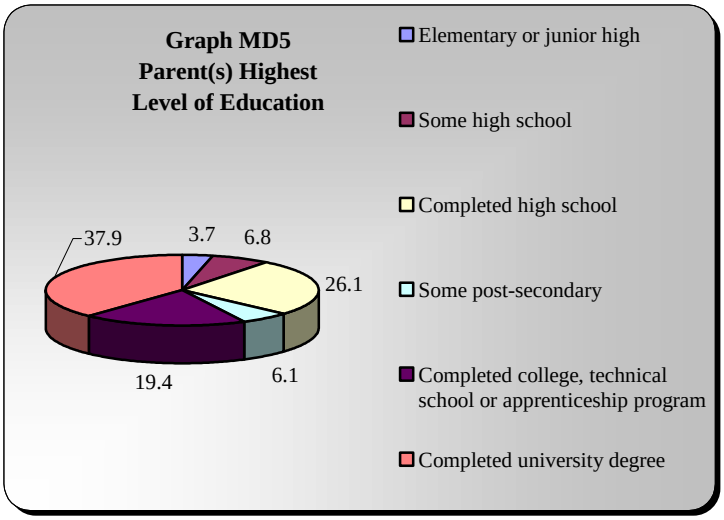
- The most commonly reported fields of study from which males graduated were Math/Natural Sciences (40%); Business and Related (20%); Social Sciences and Related (11%); and Arts (11%).
- For female graduates, the most commonly reported fields of study were Social Sciences and Related (25%); Health/Medical Sciences (20%); Business and Related (20%); and Arts (14%).

Graph MD3
Distribution of Male Respondents Among Fields of Study



Graph MD4
Distribution of Female Respondents Among Fields of Study



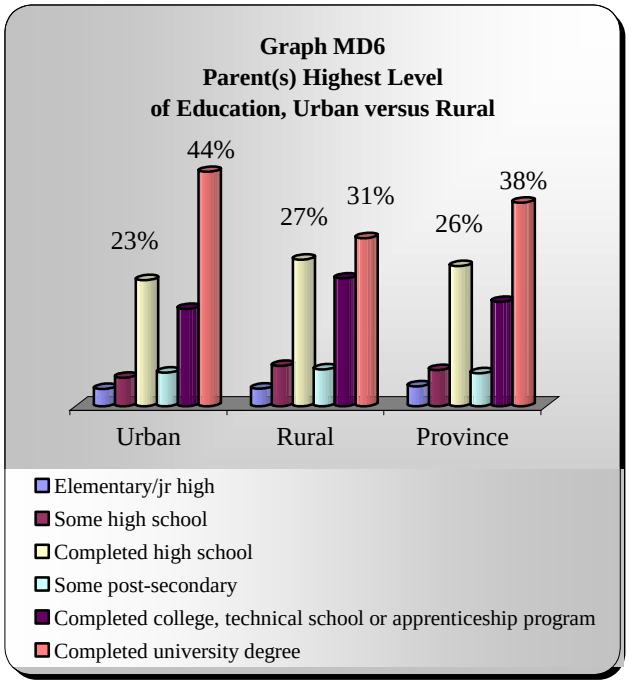


- 37.9% (5,718) of the graduates reported having a parent(s) who had completed a university degree.
  - 42% (2,449) of the male graduates had a parent(s) with a university degree, compared to 35% (3,269) of females.
  - 18% (103) of the Aboriginal graduates reported having a parent(s) with a completed university degree.
  - 29% (156) of the total Aboriginal graduates reported "elementary or junior high school" or "some high school" as their parent's highest level of education, compared to 10.5% (1,418) of the non-Aboriginal graduates.
- By sector, the percentage reporting that a parent(s) had completed a university degree was lowest for the public colleges (26.9%) and highest for the universities (46.5%).

Table MD6
Parent(s) Highest Level of Education by Sector

Percent of Sector	*Elem/jr high*	*Some HS*	*Comp. HS*	*Some PS*	*Comp. college, tech. or app.*	*Comp. univ. degree*
Public Colleges	5.5%	9.5%	31.5%	6.5%	20.2%	26.9%
Technical Institutes	2.7%	5.2%	28.0%	8.0%	24.3%	31.9%
Private University Colleges	2.3%	5.3%	24.3%	6.1%	20.5%	41.5%
Universities	3.0%	5.6%	22.2%	5.3%	17.4%	46.5%
Overall	3.7%	6.8%	26.1%	6.1%	19.4%	37.9%

- The percentage of graduates from urban areas reporting parent(s) with a university degree was higher (44%) than those from rural areas (31%).



Discussion/Areas for Further Study

Analysis in this report is primarily focused on system-wide, sector and field of study findings. A system-wide response rate of 58.3% provides a high level of confidence that findings are representative of the population as a whole.

The typical graduate was found to be young (median age 26 at the time of the survey), single (75%) and female (61%). Some 60% resided in urban centers when they last attended school at the Kindergarten to Grade 12 level, while 86% reported living in urban centers at the time of the survey, indicating a migration to urban centers upon completion of post-secondary studies.

37.9% of the graduates reported having at least one parent who had completed a university degree. This compares to 20.3% for the total Alberta population aged 25-64[7], suggesting that coming from a family with higher education background increases the chance of completing post-secondary studies.

There is considerable variation between sectors and also between fields of study in these generalized findings. For example, although 61% of the graduates were female overall, 58% of the graduates from technical institutes were male. Differences in demographics between sectors and fields of study may be fruitful areas for further analysis.

[7] Statistics Canada, Community Profiles http://www12.statcan.ca/english/profil/PlaceSearchForm1.cfm

Employment Outcomes

Objectives

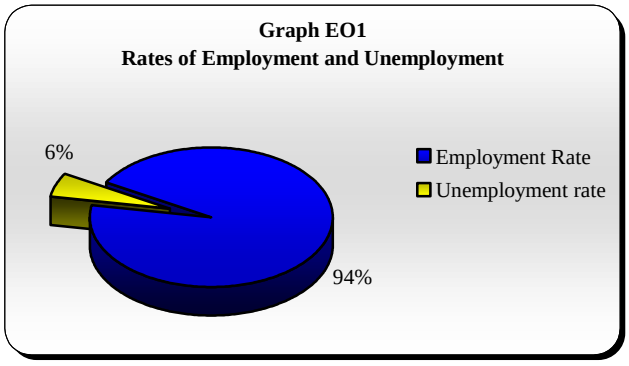
The survey sought to determine to what extent graduates of parchment programs find employment and to what extent they find employment related to their education and training. The survey also enquired about the respondent's employment income.

Did Graduates Find Jobs?

For the class of 2004, Alberta's nation-leading economic growth and comparatively low unemployment rates were conducive to graduates obtaining and/or maintaining employment, however this is not to say some graduates were not struggling to find meaningful employment at the time they were surveyed.

The following are key findings related to graduate employment outcomes

- The overall employment rate for graduates surveyed was 94.4%, with 13,500 of the 14,306 graduates in the labour force being employed.
- The overall labour force participation rate among graduates surveyed was 91.6%.
- 806 (5.6%) of the graduates reported that they were not currently working, but actively looking for work.



- The employment rate among graduates in rural areas (94.9%) was roughly the same as the employment rate for graduates in urban centers (94.2%).
- The employment rate was 95.0% for females (91.1% participation), and 93.4% for males (92.5% participation).

Table EO1 - Employment Outcomes by Gender and Field of Study

	In Labour Force	*Percentage Employed*	*Percentage Unemployed*	*Participation Rate*
Male				
Arts	604	91.7%	8.3%	88.2%
Business	1178	94.6%	5.4%	95.2%
General Studies	234	93.2%	6.8%	90.3%
Health/Med. Sc.	357	97.8%	2.2%	95.5%
Life Sc.	343	91.0%	9.0%	90.5%
Math/Natural Sc.	2208	92.5%	7.5%	91.5%
Social Sc.	663	94.6%	5.4%	95.5%
Female				
Arts	1169	93.6%	6.4%	85.4%
Business	1794	94.8%	5.2%	90.9%
General Studies	418	91.9%	8.1%	83.3%
Health/Med. Sc.	1825	97.7%	2.3%	93.7%
Life Sc.	350	91.1%	8.9%	88.8%
Math/Natural Sc.	948	93.8%	6.2%	95.0%
Social Sc.	2215	95.5%	4.5%	89.5%
Total				
Arts	1773	92.9%	7.1%	87.6%
Business	2972	94.7%	5.3%	93.5%
General Studies	652	92.3%	7.7%	88.2%
Health/Med. Sc.	2182	97.7%	2.3%	95.5%
Life Sc.	693	91.1%	8.9%	89.7%
Math/Natural Sc.	3156	92.9%	7.1%	89.6%
Social Sc.	2878	95.3%	4.7%	92.9%

- Employment outcomes were positive, regardless of field of study or gender. Nonetheless, the highest rates of employment overall were found in the Health and Medical Sciences (97.7%), and the highest unemployment rates were in the Life Sciences (8.9%). There were no significant differences in employment rates by sector.[8]
- The highest overall labour force participation rate was in the Health and Medical Sciences (95.5%), and the lowest in Arts (87.6%).

[8] See Appendix Eight for employment outcomes by sector.

- The highest participation rates for males were in Health/Medical Sciences and Social Sciences (95.5%) and lowest in Arts (88.2%), while for females the highest participation rate was in the Math and Natural Sciences (95.0%) and lowest in General Studies (83.3%).

In What Types of Industries are Graduates Employed?

- The industries employing the largest percentages of graduates are Health Care and Social Assistance (21.1%), Educational Services (16.8%) and Professional Scientific and Technical Services (13.0%).
- 80.6% (1,717) of the Health and Medical Sciences Graduates were employed in the Health Care sector.
- 48.3% (1,324) of the Social Science graduates were employed in Educational Services.

Table EO2
Graduate Employment, by Industry and Field of Study

Industry \ *Field of Study*	*Arts*	*Business and Related Studies*	*General Studies*	*Health and Medical Sciences*	*Life Sciences*	*Math and Natural Science*	*Social Sciences and Related Applications*	*Total*
Accommodation and Food Services	5.3%	6.2%	8.2%	0.9%	3.0%	1.7%	2.1%	3.4%
Admin, support, remediation and waste management	2.2%	3.2%	3.7%	0.4%	2.4%	1.9%	1.8%	2.1%
Agriculture/Forestry	0.6%	0.7%	0.3%	0.5%	19.7%	0.8%	0.3%	1.5%
Arts, Entertainment and Recreation	6.6%	2.3%	4.3%	2.3%	4.3%	1.4%	1.2%	2.6%
Construction	1.9%	2.8%	1.7%	0.5%	3.3%	5.9%	0.6%	2.5%
Educational Services	18.6%	4.4%	23.1%	3.4%	3.3%	9.6%	48.3%	16.8%
Finance/Insurance	3.3%	11.5%	4.8%	0.8%	2.9%	1.4%	1.9%	4.0%
Health Care and Social Assistance	10.5%	8.0%	12.0%	80.6%	6.0%	3.4%	18.9%	21.1%
Information	8.0%	2.5%	1.2%	0.2%	0.8%	2.5%	0.7%	2.3%
Manufacturing	3.2%	3.8%	0.7%	0.5%	3.0%	7.5%	0.4%	3.1%
Mining	2.0%	8.1%	2.5%	0.3%	8.7%	16.0%	1.2%	6.2%
Oil and Gas	1.2%	3.1%	1.8%	0.3%	3.8%	2.0%	0.4%	1.6%
Other Services (except public admin)	4.4%	2.4%	3.2%	1.0%	3.8%	3.0%	1.5%	2.5%
Professional Scientific and Tech services	10.1%	15.9%	10.0%	1.0%	17.0%	24.4%	8.6%	13.0%
Public Administration	6.9%	7.1%	5.0%	2.8%	5.9%	4.6%	6.4%	5.6%
Real Estate	0.8%	2.3%	1.2%	0.1%	1.0%	0.6%	0.4%	0.9%
Retail Trade	9.1%	7.3%	9.5%	3.5%	5.1%	4.3%	2.6%	5.3%
Transportation and warehousing	1.4%	2.1%	2.2%	0.2%	2.1%	2.8%	0.9%	1.6%
Utilities	0.3%	1.6%	0.7%	0.0%	1.6%	2.4%	0.3%	1.0%
NAICS* code unknown	3.6%	4.7%	4.2%	0.8%	2.5%	3.7%	1.6%	3.0%
Total Column (n)	1648	2813	601	2130	631	2931	2741	13496

*NAICS stands for North American Industry Classification System

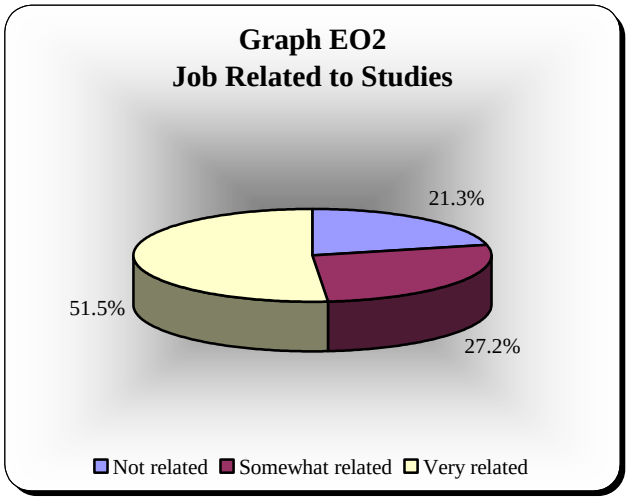
What Kind of Jobs Did Graduates Have?

While it is true that a large percentage of graduates surveyed were employed, this figure does not speak to the type of employment the graduates found. Analyses were conducted to examine the types of employment graduates found relative to their training/studies, which resulted in the following findings.

- 78.7% (10,609) of graduates surveyed reported that their jobs were somewhat or very related to their studies (i.e. program

from which they graduated), and 21.3% (2,875) of graduates surveyed reported that their jobs were not related to their studies.

Graph EO2
Job Related to Studies



- 76.6% (3,993) of males reported that their main job was either somewhat related (29.5%) or very related (47.1%) to their studies. For females, 80% reported that their jobs were either somewhat related (25.8%) or very related (54.2%).

Table EO3
Job Related to Studies, Male Vs. Female

	Male	Female
Not related	23.3%	20.1%
Somewhat related	29.5%	25.8%
Very related	47.1%	54.2%

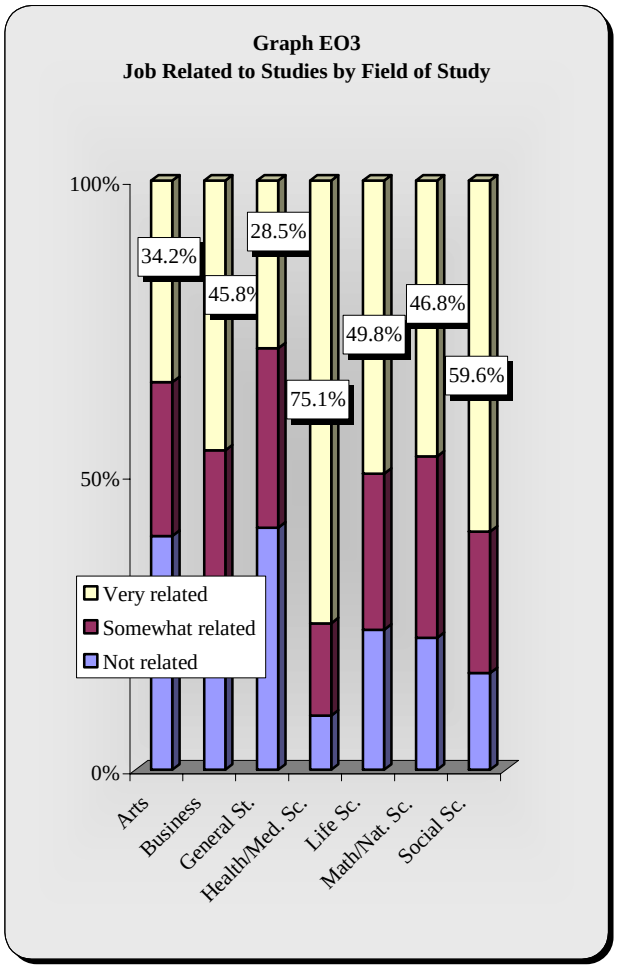
- Based on credentials achieved, graduates of PhD programs had the highest percentage reporting that their jobs were very related to the program from which they graduated (75.5%); 3 or 4 year degree or diploma graduates had the lowest (47.3%).

Table EO4
Job Related to Studies, by Credential Achieved

	Not related	*Somewhat related*	*Very related*	*Total row n*
1 year cert.	22.6%	21.2%	56.2%	2693
1 or 2 year Dip.	21.0%	27.7%	51.3%	3617
3 or 4 year Deg./Dip.	23.8%	29.0%	47.3%	5934
Master's	8.5%	32.1%	59.4%	1085
PhD	3.9%	20.6%	75.5%	155
Total	21.3%	27.2%	51.5%	13484

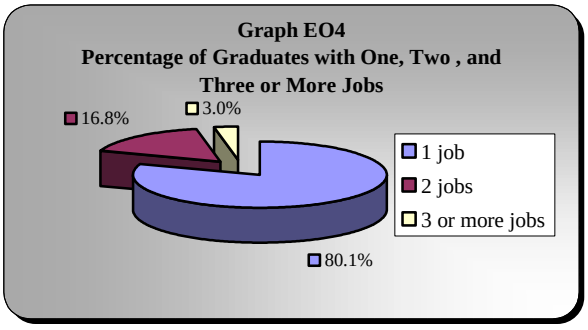
- By sector, graduates of Health and Medical Sciences had the highest percentage reporting very related employment (75.1%), while graduates from Arts and General Studies had the lowest (28.5%).

Graph EO3
Job Related to Studies by Field of Study



Employment Outcomes

- Fully 80% (10,806) of all graduates surveyed who had jobs, had only one job, while 19.9% (2,678) had more than one job at the time the survey was conducted.



- Not quite 28% (457) of Arts graduates had more than one job (the highest percentage) compared to 13.2 % (385) of Math and Science graduates (the lowest percentage) (see Appendix Eight for details).
- There were no significant differences between the percentages of urban or rural graduates, with one job, or more than one. (See Appendix Eight for details)
- By sector, the lowest sub-group of graduates with more than one job were from the technical institutes, at 15.9% (349).

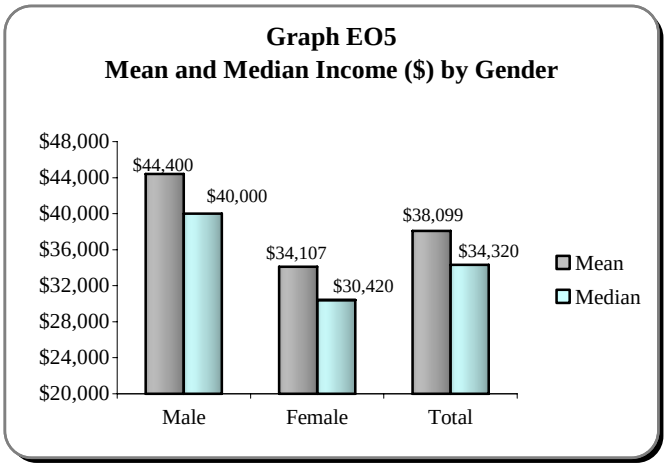
Table EO5
Number of Jobs, by Sector
(Number and Percent of Respondents)

	One job	*More than one job*	*Total*
Public Colleges	3326 77.0%	995 23.0%	4321
Technical Institutes	1851 84.1%	349 15.9%	2200
Private Univ. Colleges	235 73.7%	84 26.3%	319
Universities	5394 81.2%	1250 18.8%	6644
Total	***10806***	***2678***	***13484***

- 22% (2,958) of the graduates with jobs were employed in seasonal or temporary positions.
- 8.9% (1,194) of all graduates surveyed were self-employed.

What were Income Levels like for Graduates?

- The mean income based on the salary for the main job of graduates at the time of the survey was $38,099. However, a small number of graduates reported very high incomes, skewing the mean upward to some extent. The median income is somewhat lower at $34,320.
- A significant gender gap was found, with males earning approximately $10,000 more per year than females from their main jobs, as measured by both the mean and the median. Mean incomes for females were 77% of that for their male counterparts (76% based on median incomes).

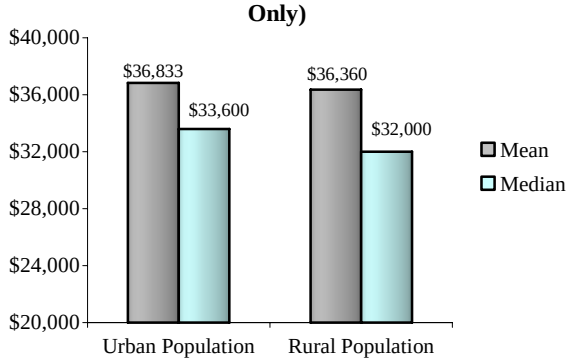


- The difference in male and female income levels of approximately $10,000 per year persisted in urban and rural analyses as well.

Employment Outcomes

- The incomes of graduates living in rural Alberta after graduation were relatively similar to those living in urban centers.

Graph EO6
Mean and Median Income ($) Rural Versus Urban (Students in Alberta After Graduation Only)



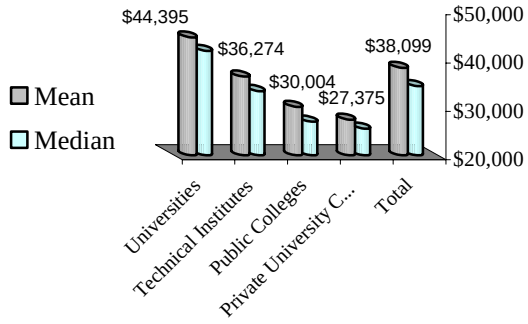
- The highest median income by field of study was for graduates of Math and Natural Sciences programs ($40,000). Only 29.9% (770) of the graduates in this field of study were women, and they tended to earn less than their male counterparts in the same field of study.
- The lowest median income was for graduates of Arts programs at $25,116.
- The gap between male and female incomes was greatest for Health and Medical Science graduates ($10,450) and Business graduates ($10,000).

Table EO6
Median Income by Field of Study and Gender

Field of Study	*Total Median*	*Male Median*	*Female Median*
Arts	$25,116 (1405)	$27,600 (475)	$24,960 (930)
Business	$33,779 (2429)	$40,000 (966)	$30,000 (1463)
General St.	$26,000 (528)	$29,120 (191)	$25,000 (337)
Health/Med. Sc.	$36,000 (1889)	$44,000 (319)	$33,550 (1570)
Life Sc.	$31,720 (559)	$36,400 (269)	$27,450 (290)
Math/Natural Sc.	$40,000 (2574)	$41,600 (1804)	$33,625 (770)
Social Sciences	$36,000 (2368)	$42,000 (534)	$34,000 (1834)
Total	*$34,320 (11752)*	*$40,000 (4558)*	*$30,420 (7194)*

- By sector, mean and median incomes were highest for university graduates and lowest for graduates of the private university colleges.

Graph EO7
Mean and Median Income ($) by Institution Sector



Employment Outcomes

- As might be expected, graduates' median incomes increased with higher-level credentials, peaking overall at the Master's level ($60,000 compared to $52,000 for graduates with a PhD).
- Graduates at the Master's level in Business and Related Studies had the highest median incomes ($88,000).

Table EO7

Median Incomes by Field of Study and Level of Qualification

Field of Study	*1 year certificate*	*1 or 2 year Diploma*	*3 or 4 year Degree/Diploma*	*Master's*	*PhD*
Arts	$19,880 (84)	$26,000 (301)	$25,000 (918)	$39,500 (102)	0
Business and Related Studies	$26,000 (579)	$30,000 (844)	$40,000 (744)	$88,000 (262)	0
General Studies	$12,480 (203)	$18,720 (25)	$31,200 (177)	0	$51,558 (123)
Health and Medical Sciences	$24,980 (868)	$42,000 (260)	$48,000 (698)	$56,500 (62)	Suppressed
Life Sciences	$35,000 (47)	$30,000 (352)	$36,000 (159)	Suppressed	0
Math and Natural Science	$41,092 (382)	$37,000 (897)	$40,000 (1055)	$47,000 (233)	$54,996 (7)
Social Sciences and Related Applications	$19,200 (172)	$27,717 (484)	$40,000 (1444)	$65,000 (264)	$88,000 (4)
Total	$25,510 (2335)	$31,200 (3163)	$38,000 (5195)	$60,000 (924)	$52,000 (135)

- Aboriginal graduates earned slightly lower mean and median incomes than non-Aboriginal graduates. However in three fields of study Aboriginal graduates earned higher median incomes than the non-Aboriginal graduates (Arts, General Studies, Math and Natural Sciences).
- Aboriginal women earned a mean income of $31,588 and a median of $29,388 (based on 297 respondents). Aboriginal men earned a mean income of $42,263, and a median of $40,000 (based on 113 respondents).

Table EO8

Incomes by Field of Study, Aboriginal vs. Non-Aboriginal Graduates

	Aboriginal*			***Non-Aboriginal***		
Field of Study	*n*	*Mean*	*Median*	*n*	*Mean*	*Median*
Arts	56	$29,269	$29,112	1348	$27,103	$25,000
Business and Related Studies	91	$30,988	$27,000	2335	$42,608	$34,000
General Studies	22	$29,324	$31,500	505	$31,187	$26,000
Health and Medical Sciences	63	$33,857	$30,000	1825	$38,859	$36,000
Life Sciences	11	$37,764	$31,200	548	$34,801	$31,760
Math and Natural Science	57	$43,307	$42,328	2510	$42,014	$40,000
Social Sciences and Related Applications	110	$36,695	$34,348	2256	$38,057	$36,000
Total	410	$34,530	$31,170	11327	$38,234	$34,632

* 410 of the 569 respondent s who identified themselves as Aboriginal, provided information on their income levels at the time of the survey; another 91 reported being full-time students, and 46 reported being part-time students.

Who Did Not Find Work?

Of the 15,622 graduates surveyed, 2,104 were not employed at the time of the survey. However, of those not employed, 1,290 were also not looking for work for various reasons, leaving 806 in the labour force, but not employed.

Of the 1,290 who were not employed and not looking for work, 948 were students (73.5%). 162 (12.6%) had family responsibilities that prevented them from working, and 84 (6.5%) cited other reasons which included such things as "having a baby", "visa expired" or "about to start a job".

Of the 806 graduates who were not employed but were actively looking for work, 296 were currently enrolled as students. The 296 were factored out of the sample leaving 510 graduates who were not working, nor attending school, and currently looking for jobs. 54% (275) of the 510 graduates were females, and 46% (235) were males.

Analyses were carried out to determine (to a degree) the demographic profiles of these 510 employed graduates. The following key findings resulted.

- 45% (229) of the 510 graduated from universities,
- 37% (189) had parents who had completed a university degree.
- 19.8%(101) were married or living with someone else when they started their program.
- 21.9% (112) of the graduates in this particular group were responsible for dependents when they started their program. However, 30.8% (85) of females were responsible for dependents as compared to 11.7% (27) of males.
- The median age of the males was 25, while he median age for females was 27.
- 86.8% (443) of the graduates in this group are either satisfied or very satisfied with the overall quality of their educational experience.
- 71.2% (363) would recommend the same program of study to someone else.
- Despite the fact that they are unemployed, 68% (347) still agree that the program was worth the financial costs.

Discussion/Areas for Further Study

The class of 2004 reported generally very positive employment outcomes. Labour force participation rates were high (91.6%) as were employment rates (94.4%). Most reported that their main job was related to the program from which they graduated (78.7%). The median income ($34,320) compares very favourably with that for all Albertans 15 years of age or older ($23,025)[9]. Only 510 graduates (3.6%) were unemployed, actively looking for work, and non-students at the time the survey was conducted. However, a large percentage of these graduates still reported they were satisfied with their educational experience (86.8%).

There was a large spread in median incomes, depending on field of study, with lower median incomes in Arts ($25,116) and the highest median incomes in Math and Natural Sciences ($40,000). Also, median incomes increased the higher the credential earned, but peaked at the Masters level ($60,000 compared to $52,000 for graduates with a PhD).

Two areas that may warrant further study are the following:

- Incomes for females were found to be considerably lower than for males. Female respondents earned 77% of the mean income of their male counterparts (or 76% of the

[9] Statistics Canada, Community Profiles http://www12.statcan.ca/english/profil/PlaceSearchForm1.cfm

male median incomes). This is partly explained by the under-representation of females in Math and Natural Sciences, the field of study with the highest median income. However, offsetting this is the fact that female graduates were found to be well represented in the Health and Medical Sciences and in the Social Sciences, two fields where median incomes were also found to be higher than average. Within these fields of study however, females tend to earn less than their male counterparts. To more fully explain these differences, consideration would need to be given to employment outcomes at a lower level of aggregation than field of study such as at the occupation or job level.

- Median incomes for Aboriginal graduates ($31,170) were lower than for Non-Aboriginal graduates ($34,632). It is notable however, that Aboriginal males earned considerably higher median incomes ($40,000, based on 113 respondents) than Aboriginal females ($31,588, based on 297 respondents). The number of Aboriginal respondents was low, so caution needs to be exercised in use of these data. However, consideration of employment outcomes at the occupation or job level may throw further light on these differences in income levels.

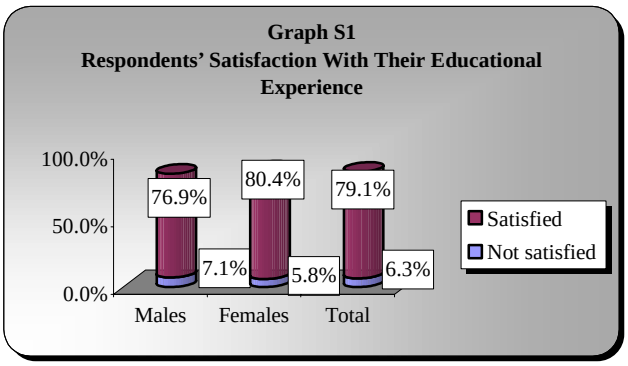
Satisfaction

Objectives

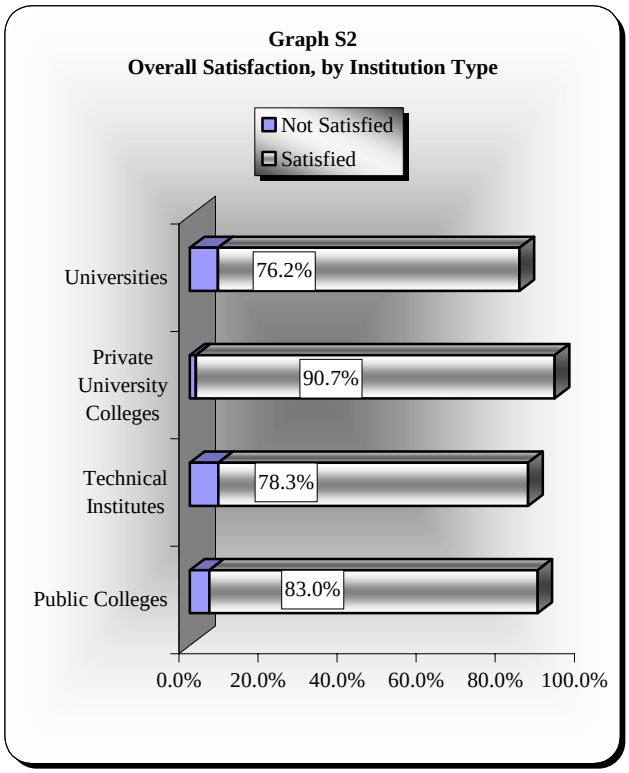
The survey sought to determine how satisfied graduates were with their post-secondary education. Specific questions related to the graduates' levels of satisfaction with the relevance of their courses, their opinions as to the perceived return on investment, usefulness of skills acquired, satisfaction with teaching quality, and overall satisfaction with their program of study.

Are Graduates Satisfied with the Overall Quality of Their Education?

Question 16b of the survey asked graduates to rate their overall satisfaction with the quality of their educational experience on a scale from 1 to 5, where one meant very dissatisfied, and five meant very satisfied. The satisfied and very satisfied responses were added together and divided by the total number of opinionated responses ("Don't know" and "No Response" were designated as system missing, i.e. not counted). When the new variable was analyzed, it showed that 79.1% (12,395) of the graduates were satisfied. 6.3 % (982) were not satisfied and 14.6% (2,279) were neither satisfied nor dissatisfied.



Very little variation existed in satisfaction levels among the various demographic "break-outs" (gender, field of study, qualification type etc.). The highest overall satisfaction level was among graduates from private university colleges.



Variations in satisfaction existed between the various demographic sub-populations when only those who reported being "very satisfied" were examined. (See Appendix Five for details.) However, given that the difference between "very satisfied" and "satisfied" is not known in a quantifiable manner, an in-depth analysis did not ensue. Rather, time was spent querying what factors most contribute to overall satisfaction or dissatisfaction.

Satisfaction

What Factors Play a Role in Explaining Satisfaction?

An ordinal regression model was used to examine what factors may help predict overall satisfaction with the graduates' post-secondary experiences. The variables found to be significantly positively correlated with overall satisfaction (r-square .639) were:

1. "Extent to which the program provided you with the following benefits
   - Skills needed for a particular job
   - Knowledge of a particular field of study
   - An opportunity to improve yourself
   - A desire to continue learning more about [a particular] subject
   - Improved employment outcomes"
2. "…Degree to which post-secondary added to skills knowledge and abilities
   - Solve problems
   - Become self-confident
   - Develop an awareness of political and social issues
   - Manage information"
3. "Satisfaction with quality of teaching"
4. "Amount owing from all government debt"
5. "Satisfaction with main job"
6. "How qualified do you feel you are for your main job"
7. "How related is your main job"
8. "Current age"

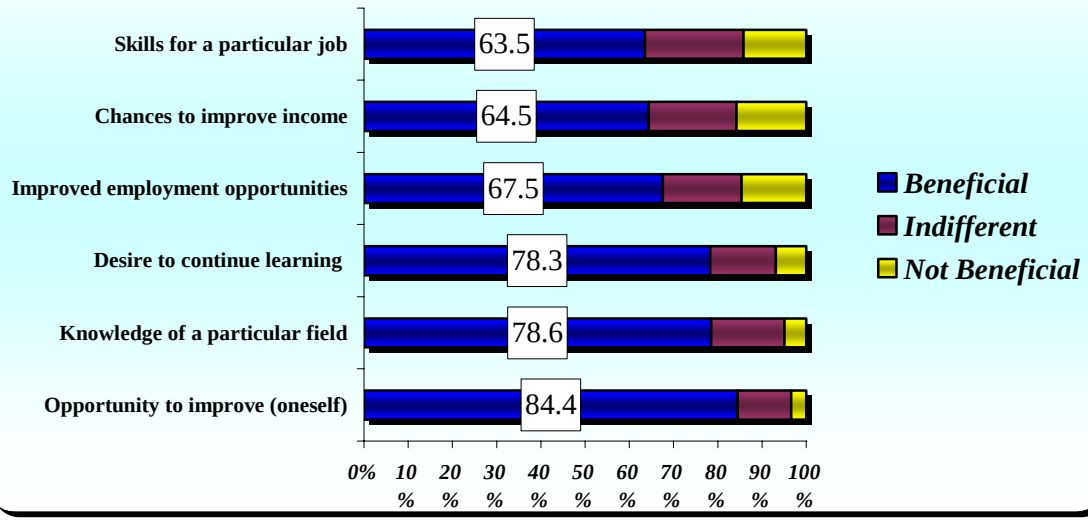
Variations in the model's fit were discovered when sub-groups were analyzed. For a further discussion of the variations see Appendix Six.

Are Graduates Satisfied that the Program *They Graduated From Was Beneficial?*

Graduates were asked about the extent to which the program they graduated from provided them with the following benefits: *The skills needed for a particular job, Knowledge of a particular field of study, An opportunity to improve oneself, Chances of improved income, A desire to continue learning more about this or other subjects*, and *Improved employment outcomes*.

The variable that ranked highest when each variable was looked at by institution type and field of study was consistently (in every sector and field of study) the variable "Opportunity to improve oneself" (84.4%, or 13,158 respondents).

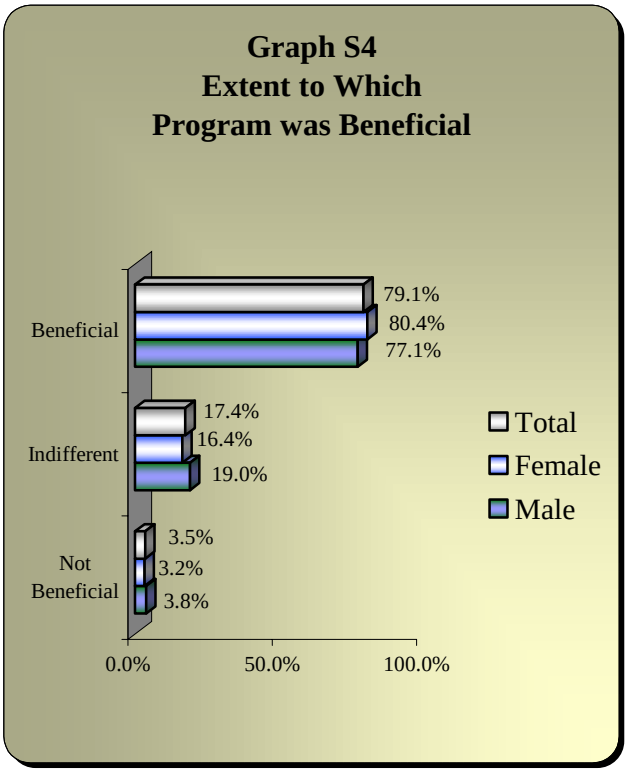
Graph S3
Highest Ranked Program Benefit Overall



Satisfaction

Graduates' responses to questions about program benefits were combined to form an overall index. Analyses of this variable resulted in the following key findings.

- The program benefit index was significantly (p-value .000), and strongly related (Gamma .646) to overall satisfaction with education.
- 79.1% (12,351) of all graduates felt the program they graduated from was beneficial, with this percentage being slightly higher for females (80.4%) than for males (77.1%).



- The highest percentage of graduates who felt their programs were beneficial was from the public colleges (82.4%; n = 4,118), while the lowest was from universities (77%; n = 5,932).
- General Studies and Arts had the lowest percentages of graduates reporting that their programs were beneficial (65.5%; n = 483 and 70.1%; n = 1,417 respectively).

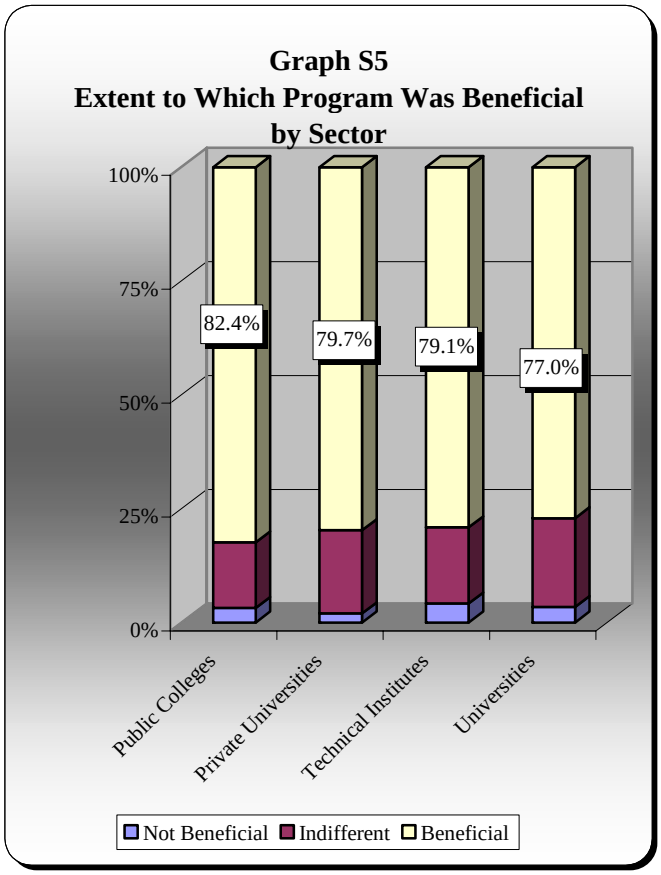


Table S1
Program Beneficial by Field of Study

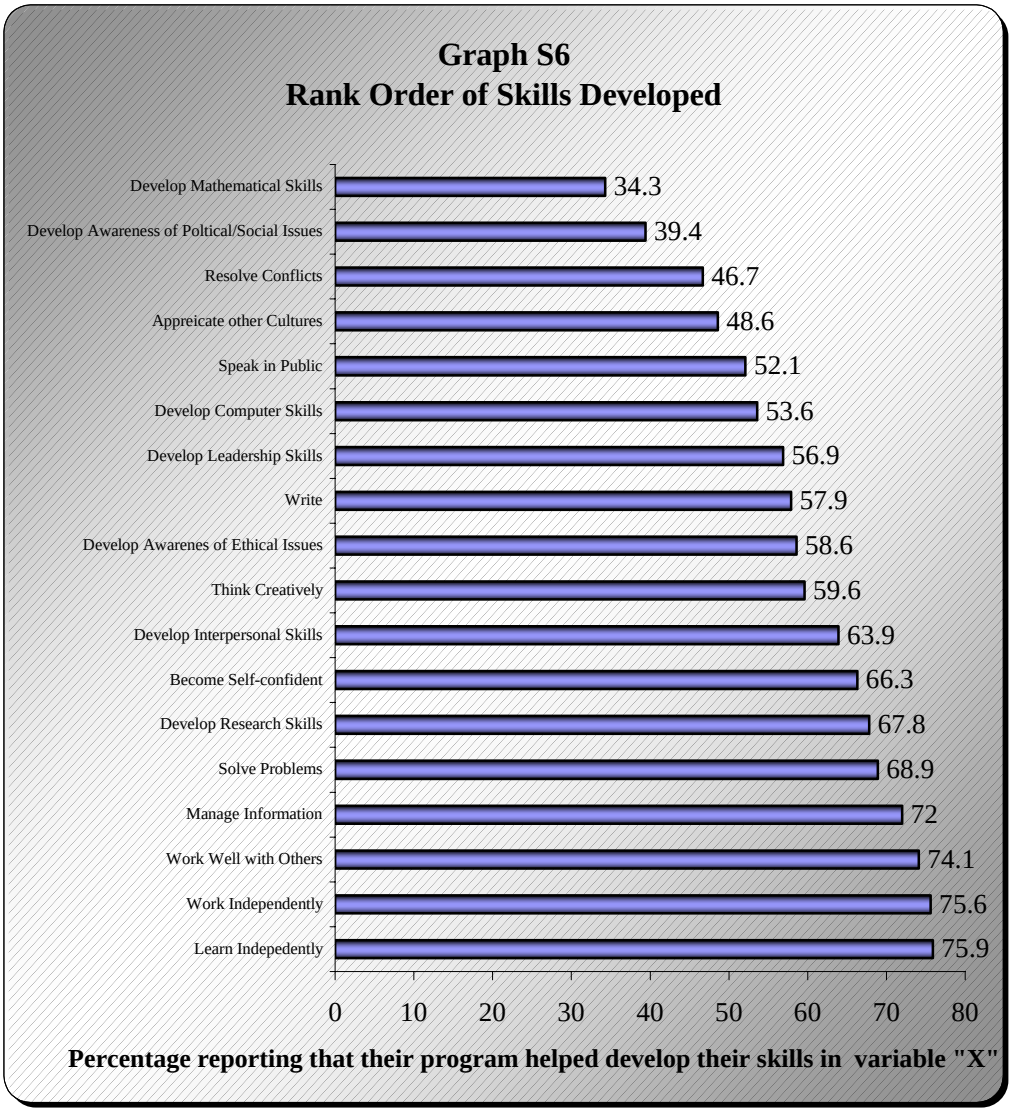
	Not Beneficial	*Indifferent*	*Beneficial*
Arts	4.5%	25.4%	70.1%
Business	3.4%	15.1%	81.5%
General St.	7.1%	27.4%	65.5%
Health/Medical Sc.	1.6%	9.2%	89.2%
Life Sc.	1.9%	16.2%	81.9%
Math/Natural Sc.	4.2%	18.7%	77.1%
Social Sc.	2.8%	17.0%	80.1%

Satisfaction

Are Graduates Satisfied with the Skills They Developed in Post-secondary Institutions?

Graduates were asked a set of questions (18 individual questions in all) pertaining to their perceptions of the skills, knowledge and abilities they acquired in their post-secondary studies.

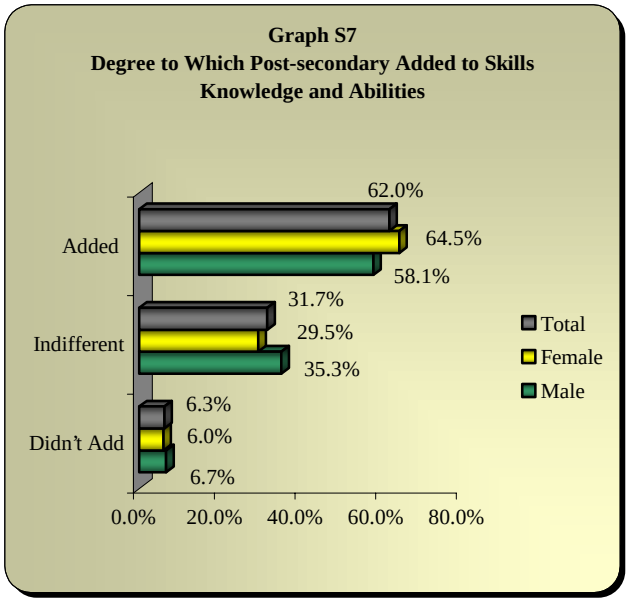
- Overall, of the 18 skills analyzed, the fewest number of respondents reported their program helped them to develop math skills.
- It is notable that the largest number indicated that "learning independently" was a skill they developed.



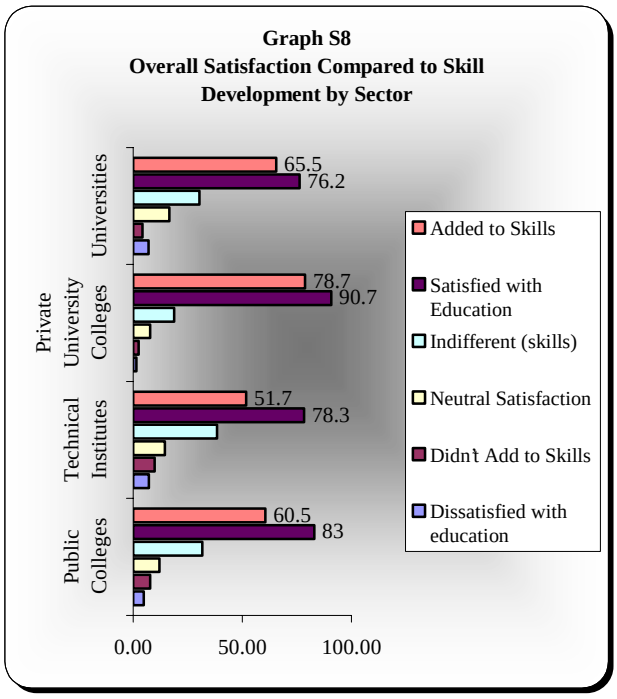
Satisfaction

No single variable was consistently highly ranked by all sectors. To gain a deeper understanding of the graduates' level of satisfaction with skill development, the eighteen variables were used to build an index of skill development, which was then analyzed, resulting in the following key findings.

- The skill development index was significantly (p = .000) related to the graduates' overall level of satisfaction with the quality of their educational experience, although not as strongly (gamma .549) as the program benefit index was.
- Overall, 62% (9,676) of the graduates agreed that their studies added to their skills, knowledge and abilities.
- 31.7% (4,955) were indifferent about the degree to which post-secondary studies added to their skills, knowledge and abilities.



- When looked at by sector, only 51.7% (1,297) of graduates from technical institutes felt that their studies added to their skills, knowledge and abilities. Nonetheless, 78.3% (1,961) were satisfied overall with the quality of their educational experience. When this number was further broken down, only 7.3% (184) felt that their studies added greatly to their skills, knowledge and abilities. 44.4% (1,113) felt it added, but not greatly.



- 67.4% (1,364) of graduates from Arts programs (the highest percentage among field of studies) felt that their program added to their skills, knowledge and abilities. The lowest percentage was for graduates of Math and Natural Science programs (57.3%; n = 2,019).

Table S2
Skill Development Index by Field of Study

	Didn't add to skills…	*Indifferent*	*Added to skills…*
Arts	4.4%	28.1%	67.4%
Business	6.1%	30.4%	63.5%
General St.	4.3%	30.8%	64.9%
Health/Med. Sc.	8.5%	31.6%	59.9%
Life Sc.	4.4%	36.7%	58.9%
Math/Natural Sc.	6.9%	35.7%	57.3%
Social Sc.	6.1%	30.0%	63.9%

- These findings suggest that the eighteen higher-level skills focused on in the survey

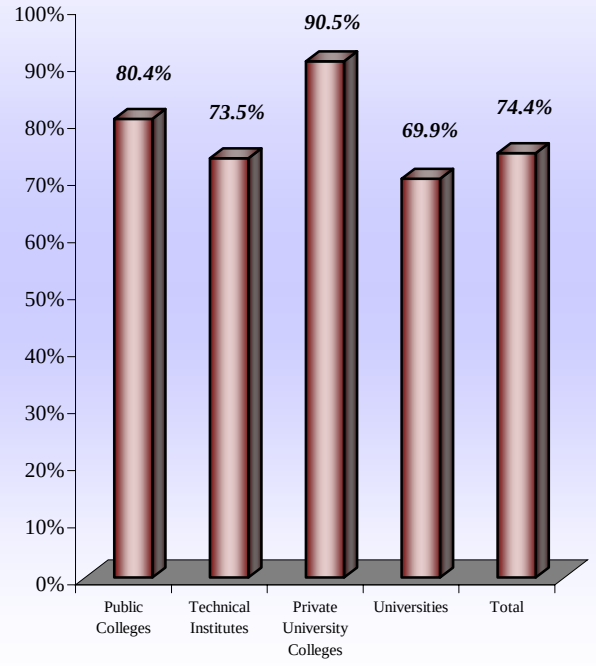
may not have been representative of the primary skills sought by all graduates. For example, they do not include job-specific skills that may be more valued by graduates of the technical institutes, or of graduates from fields of study such as Math and Natural Sciences.

Are Graduates Satisfied with the Quality of Teaching?

Graduates are generally satisfied with the quality of teaching in their programs.

- 74.4% (11,569) of graduates reported being either satisfied, or very satisfied.[10]
- Similar to overall satisfaction, graduates from the private university colleges had the highest satisfaction rating with the quality of teaching (90.5%; n = 361), while graduates from the universities had the lowest (69.9%; n = 5,361).

Graph S9
Satisfaction with Quality of Teaching by Sector



- When satisfaction with quality of teaching was analyzed by field of study, Business and Related Studies graduates had the highest level of satisfaction (78.9%; n = 2,493), and Math and Natural Science graduates had the lowest at 67.5% satisfied (n = 2,373).

Table S3
Satisfaction with Quality of Teaching, by Field of Study

	Dissatisfied	Satisfied
Arts	7.9%	75.8%
Business	5.3%	78.9%
General St.	4.9%	78.2%
Health/Med. Sc.	9.2%	75.8%
Life Sc.	6.5%	78.0%
Math/Nat. Sc.	10.4%	67.5%
Social Sc.	8.5%	73.7%
Total		

10 These numbers do not include non-opinionated responses. ("Don't Know" and "No response" were set as missing values.)

Were Graduates' Goals Met?

Most graduates (98.8%; n = 15,396) entered post-secondary studies with a primary goal in mind. The primary goals cited were as follows:

- 72.5% (11,294) - preparation for or completion of a specific degree/diploma
- 14.6% (2,273) - employment
- 7.4% (1,150) - expand knowledge in a particular subject/area
- 2.4% (373) - other goals
- 1.2% (183) - did not have a primary goal

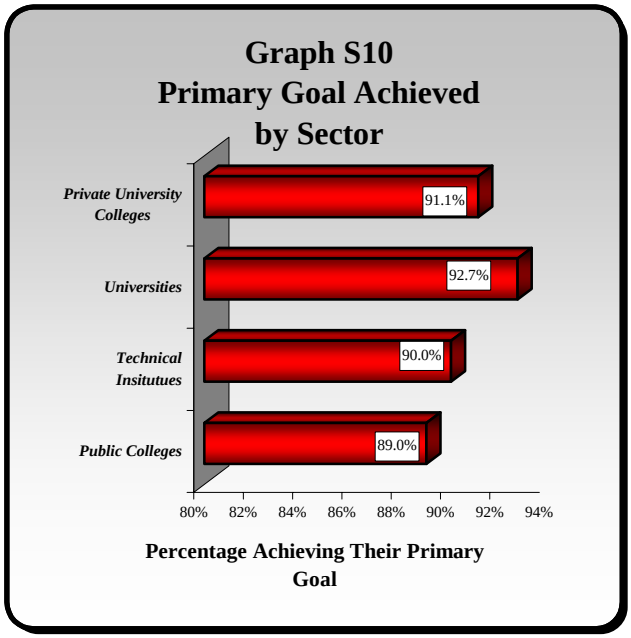
91.1% (13,974) of the graduates surveyed who had specific goals set when entering post-secondary studies, reported that they met their goals. This is perhaps not surprising given that graduates of post-secondary programs were surveyed, and nearly three quarters of the survey respondents cited completion of a specific program as their primary goal.

- The percentage of graduates reporting that they achieved their primary goal was fairly consistent across the fields of study.
- A slightly higher percentage of Social Sciences and the Health and Medical Science graduates reported having met their primary goal.

Table S4
Primary Goal Achieved by Field of Study

	Achieved Primary Goal (% and number)	
Arts	87.7%	1,727
Business	90.7%	2,839
General St.	85.2%	605
Health/Med. Sc.	94.6%	2,139
Life Sc.	91.0%	698
Math/Nat. Sc.	90.3%	2,125
Social Sc.	95.2%	2,841
Total	91.1%	13,974

- When the question regarding whether or not the graduate had achieved their primary goal was analyzed by sector, no major differences were noted.



Of the graduates who reported that their primary goal was not met:

- 38.2% (525) cited the completion of specific degree or diploma,
- 37.5% (515) cited employment as their primary goal. Of these 22.9% (118) are not currently employed.
- A disproportionate percentage of graduates who reported that they did not achieve their primary goal were from Arts and General Studies, compared to the percentages of Arts and General Studies graduates surveyed.

Table S5
Percent in Field of Study that Did Not Achieve Their Primary Goal Compared to Percent Surveyed by Field of Study

	Percent Not Achieving Primary Goal	*Percent Surveyed*
Arts	17.6%	13.0%
Business	21.3%	20.3%
General St.	7.6%	4.7%
Health/Med. Sc.	8.9%	14.6%
Life Sc.	5.0%	4.9%
Math/Nat. Sc.	24.5%	22.6%
Social Sc.	15.1%	19.8%
Total	100%	100%

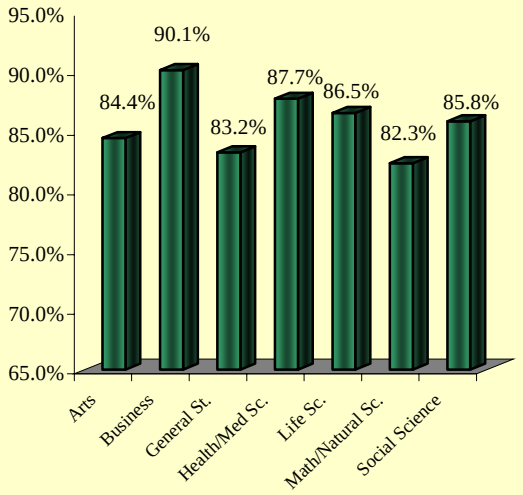
Satisfaction

Would graduates recommend their program of studies to others?

85.9% (13,080) of the graduates would recommend the program of studies they graduated from to others. This figure is fairly uniform across all fields of study.

- The highest percentage who would recommend their program of studies to others was in Business and Related Studies (90.1%; n = 2,818).
- The lowest percentage was in Math and Natural Sciences (82.3%; n = 2,826).

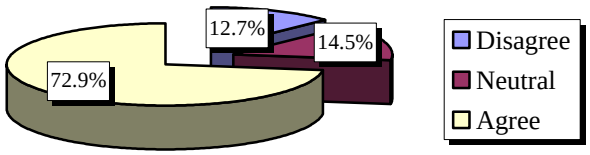
Graph S11
Percent That Would Recommend Program of Study to Someone Else, by Field of Study



Did graduates feel the benefits of their education outweighed the costs?

Graduates were asked, whether given the benefits of post-secondary education, it was worth the financial cost to themselves and their families. 72.9% (11,292) agreed that it was worth the cost, 14.5% (2,241) neither agreed nor disagreed, and 12.7% (1,962) disagreed.

Graph S12
Education Worth the Financial Cost



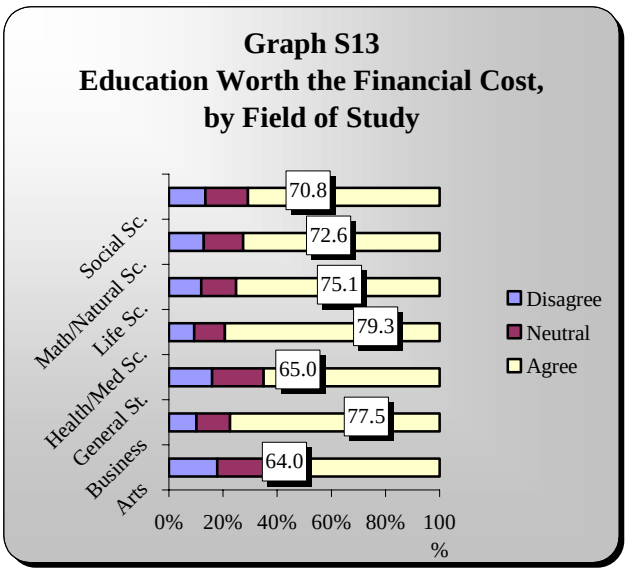
- There were no apparent differences between males and females regarding the benefits of their educations compared to the costs.
- A slight difference existed between urban and rural graduates as 73.7% (3,294) of rural graduates agreed that their education was worth the financial costs compared to 71.1% (4,828) of urban graduates
- By qualification type, the percentage who felt the benefits of post-secondary education were worth the cost was highest for Master's graduates (81.5%; n = 967) and lowest for three or four-year degree/diploma graduates (69.4%; n = 4,811).

Table S6
Education Worth the Financial Cost, by Qualification Type

	Disagree	Neutral	Agree
1 year certificate	11.9%	12.6%	75.5%
1 or 2 year Diploma	12.4%	13.3%	74.3%
3 or 4 year Degree/Diploma	14.0%	16.6%	69.4%
Master's	7.3%	11.1%	81.5%
PhD	13.5%	12.9%	73.5%

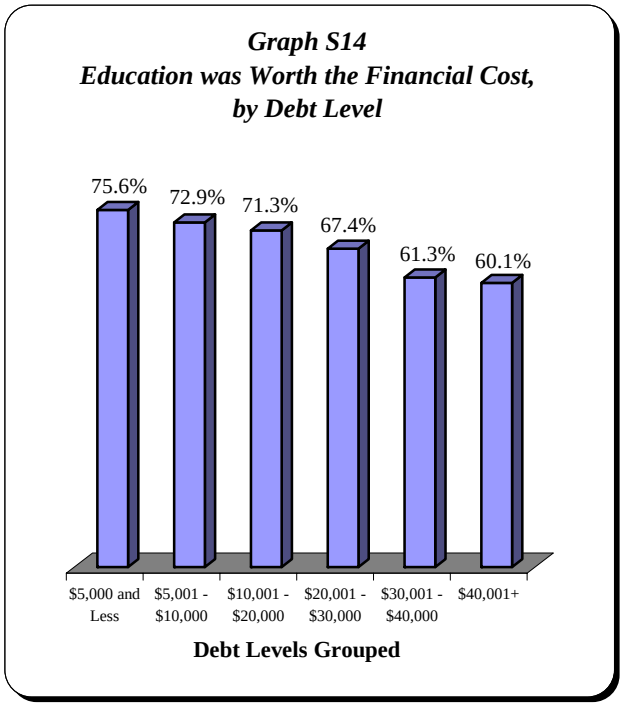
Analysis was conducted by field of study in order to determine if graduates of dissimilar fields perceived the financial value of their education differently.

- The highest percentage to agree that benefits were worth the cost were graduates of Health and Medical Science programs (79.3%; n = 1,792) while the lowest percentage in agreement were Arts graduates (64.0%; n = 1,285).



Because the question asked specifically about the financial costs, the variable was crosstabulated with the amount owing from all student loans (government sponsored and private combined), and re-grouped into categories based on the amount owing.

Intuitively, as graduates' debt levels increased, their agreement that their education was worth the financial costs decreased. However, even in the group with the highest debt levels, a high percentage of them still agree that their education was worth the costs (60.1%; n = 255). Additionally, the variable was analyzed controlling for graduates who were at the time of the survey, unemployed (not working, but looking for work). As might be expected, their level of agreement was less than that of the general survey population. Nonetheless, 58.1% (462) still agreed that given the benefits of their education, it was worth the financial costs, 19.2% (153) were neutral, and 22.6% (180) disagreed.



Discussion/Areas for Further Analysis

Graduates from the class of 2001/02 were generally satisfied with their post-secondary outcomes. 79.1% were satisfied overall with their educational experience, while 74.4% were satisfied with the quality of teaching in their program. 98.8% reported that they had a primary goal when they entered post-secondary, and of these 91.1% achieved their goal. 85.9% agreed that they would recommend their program to someone else and 72.9% felt that the benefits of post-secondary education were worth the financial cost to themselves and their families.

The "opportunity to improve oneself" was ranked by the largest number of respondents (84.4%) as a benefit of post-secondary studies. The skill ranked by the largest number was "learn independently" (r 75.9%).

Satisfaction

Although generally graduates were satisfied, there were interesting differences by institution type and by field of study, as shown in Table S7:

Table S7
Differences In Satisfaction Indicators, by Institution Type and Field of Study

Area of Enquiry	*Institution Type*		*Field of Study*	
	Low	High	Low	High
Overall satisfaction rate	76.2% Univ	90.7% PUC	65.5% Gen Studies	89.2% Health/Med
Studies added to skills, knowledge, abilities	51.7% Tech Inst	78.7% PUC	57.3% Math/Nat.Sci	67.4% Arts
Satisfied with the quality of teaching	69.9% Univ	90.5% PUC	67.5% Math/Nat.Sci	78.9% Business
Achieved primary goal	89.0% Public Col	92.7% Univ	85.2% Gen Studies	94.6% Health/Med
The program was beneficial	77.0% Univ	82.4% Public Col	65.5% Gen Studies	89.2% Health/Med
Would recommend program to others	83.0% Tech Inst	91.6% PUC	82.3% Math/Nat.Sci	90.1% Business
Benefits were worth the cost	71.3% Univ	75.8% Public Col	64.0% Arts	79.3% Health/Med

Areas for possible further study are the following:

- Although the university sector had the highest percentage of graduates who stated that they had achieved their primary goal (92.7%), they were the lowest rated in terms of overall graduate satisfaction (76.2%) and satisfaction with the quality of teaching (69.9%). The relationship between size and focus (ex. research oriented vs. teaching oriented) of institutions and satisfaction levels may be worthy of further study.
- Technical institute graduates' ratings of the skills, knowledge and/or abilities acquired were the lowest of the four sectors (51.7%). The reasons for this should be more fully explored. A possible explanation may be that the skills presented are generic in nature (ex. develop awareness of ethical issues) whereas the technical institutions may be more focused on job-specific skills.
- Math and Natural Sciences was the field of study with the lowest ratings in terms of skills, knowledge and/or ability acquisition (57.3%); satisfaction with the quality of teaching (67.5%); and the percentage that would recommend their program to others (82.3%). An analysis of this field of study at the program level could throw further light on reasons for these comparatively lower ratings.
- Arts was rated as the field of study in which the highest percentage of graduates felt their program had helped them acquire skills, knowledge and abilities (67.4%); however, it was the lowest rated in terms of benefits given the cost (64.0%). Analysis at a program level may help explain these apparently contradictory findings.

Awareness and Transitions

Objectives

The survey sought to determine how prepared graduates were to enter post-secondary studies, including their awareness of personal options and financial assistance, and to determine the extent to which students make successful transitions. The survey included questions on awareness of programs such as student finance, the role of guidance counselors, and the importance of other information sources in deciding whether or not to attend a particular program or institution. Additionally, the survey examined transitions such as the one from secondary to post-secondary, and from school to work and/or post-graduate studies.

What resources did graduates use to help them decide on a program and institution?

Graduates were asked (using a 5-point scale where 1 means not useful and 5 means very useful) how useful the following sources of information were in helping them decide which program and institution to attend:

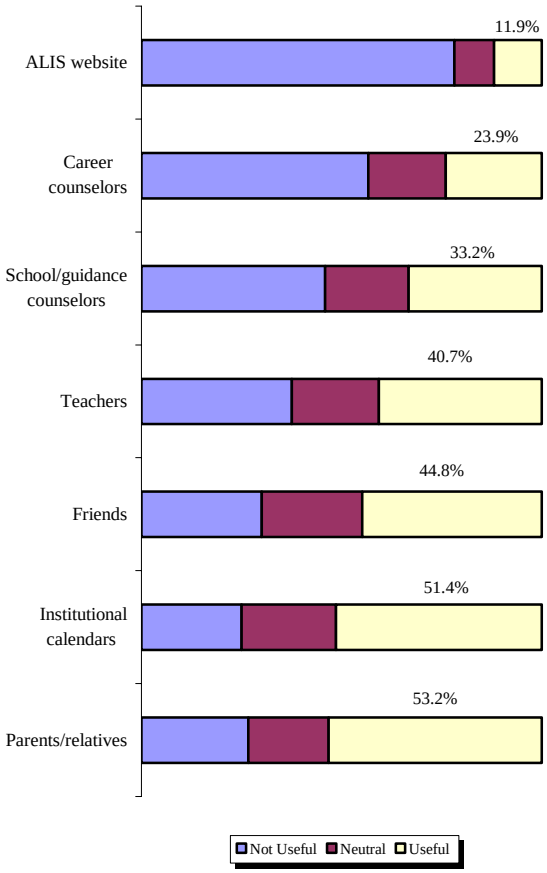
1. Institutional calendars (online or print)
2. Alberta Learning Information Service (ALIS) website
3. School or guidance counselors
4. Teachers
5. Career counselors
6. Parents or other relatives
7. Friends
8. Other

These were recoded into not useful, neutral and useful categories for the purpose of analysis.

The main findings were as follows:

- The sources of information selected as most useful for deciding which program or institution to attend were parents/relatives (53.2%; n = 7,534) and institutional calendars (51.4%; n = 7,522). These were viewed as most useful overall, and also when analyzed by field of study and by institution type.

Graph AT1 - Percentage Rating Information Sources as Useful



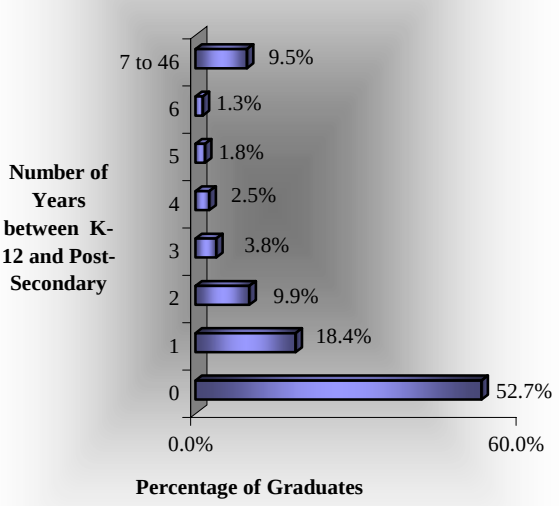
- The importance of parents/relatives increased as the graduates' parental level of education increased. 43.2% (2,463) of graduates whose parent(s) had completed a university degree reported that their parent's input was useful in helping them to make their decision, whereas 37.6% (207) of graduates whose parents had completed elementary or junior high reported that their parent's input was useful.

What was the transition between K-12 and post-secondary like in terms of time?

Graduates were asked what year they last attended school in the K-12 system, and what year they first began post-secondary (not including adult upgrading). From these two questions, the number of years between K-12

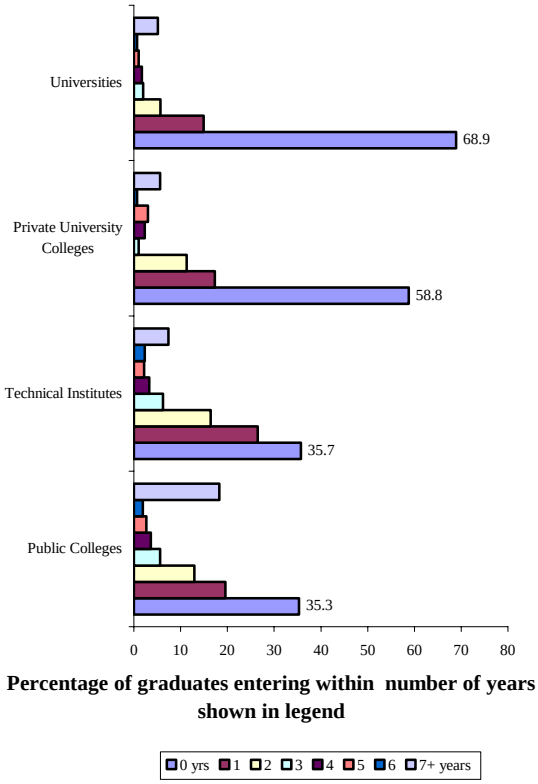
and post-secondary was calculated for graduates of the Alberta K-12 system.

Graph AT2
Years between K-12 and Post-Secondary
(Alberta K-12 Graduates Only)



- 52.7% (5,879) of the graduates entered their post-secondary studies immediately after graduating from K-12. 84.8% (9,469) began their post-secondary studies within three years of completing their K-12 studies.
- 68.9% (3,829) of university graduates began their post-secondary studies immediately after graduating from K-12, almost doubling the figures for public colleges (35.3%; n = 1,183) and technical institutions (35.7%; n = 695) graduates.
- 91.5% (5,087) of university graduates began their post-secondary studies within three years of graduating from the K-12 system, compared to 84.8% (1,653) of technical institute graduates, and 73.4% (2,463) of public college graduates.
- There were no major differences when the years between K-12 and post-secondary were analyzed by field of study, gender, or urban and rural origins of graduates.

Graph AT3
Years Between K-12 and Post-Secondary of Alberta Graduates, by Sector



When the number of years between K-12 and post-secondary was analyzed by parents' highest level of education, definite trends emerged. As parent(s) level of education increased, the period of time (in years) between K-12 and post-secondary was found to be shorter.

- For graduates who reported their parent(s) highest level of education was elementary or junior high, 33.2% (112) entered post-secondary immediately after graduating from K-12. By three years after K-12 for this group, 55.8% (188) had begun their post-secondary studies.
- Comparatively, 62.3% (2,629) of graduates whose parent(s) had completed a university degree started their post-secondary studies

immediately (0 years in between), and 92.3% (3,890) had enter post-secondary within 3 years of completing K-12.

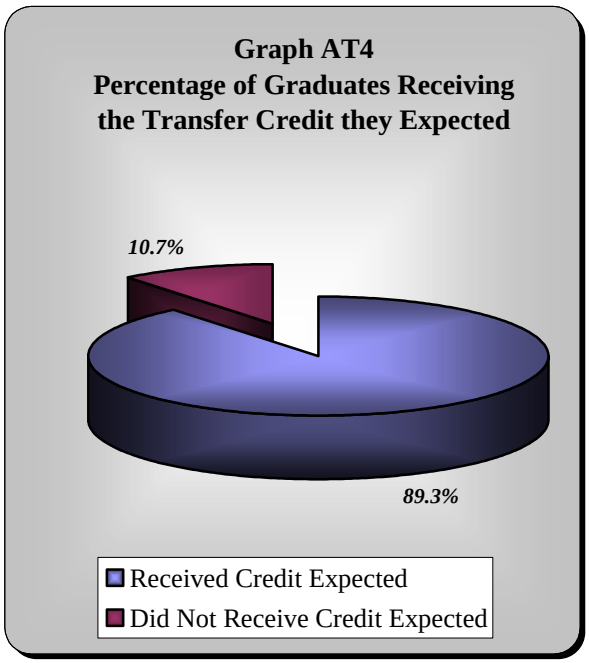
How Seamless Were the Transitions Between Post-Secondary Institutions?

Not including graduate degree graduates, 5948 (41.8%) of the remaining graduates surveyed completed post-secondary courses prior to enrolling in the program they were surveyed about.

In all (including graduate degree graduates) 2,843 graduates received transfer credits or advanced standing for courses taken at other institutions. 71.8% (2,041) received full credit, while 28.2% (7,802) received partial credit. Overall, 89.3% (2,539) reported that they received the credit they expected, while 10.7% (304) said they did not.

The highest percentage of graduates reporting that they received the transfer credit they expected was from technical institutes (94.2%; n = 247) and the lowest was from universities (88.4%; n = 1,641).

Graph AT4
Percentage of Graduates Receiving the Transfer Credit they Expected



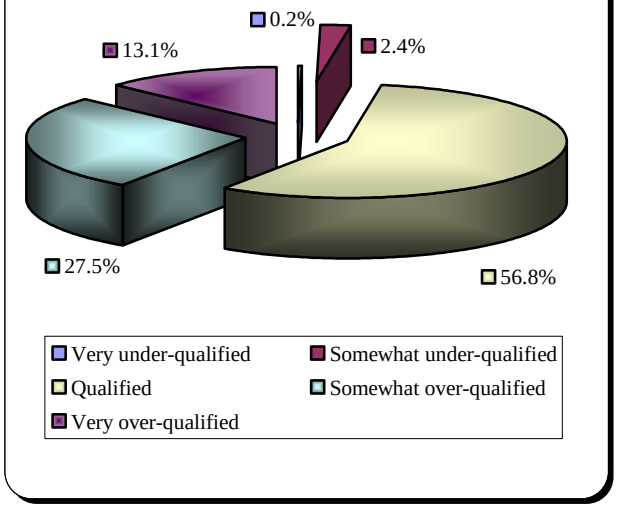
How Were Graduates Transitions From Post-Secondary to Work?

97.5% (13,107) of the graduates reported being either qualified, somewhat over-qualified, or over-qualified for their main job.

As noted earlier, 78.7% (10,609) of the graduates interviewed felt that their employment was related or very related to the program they graduated from.

When only those graduates who reported their main job as being either related or very related to their studies were selected, only .1% (14) felt very under-qualified and 2.2% (229) reported feeling somewhat under-qualified. On the other hand, 63.4% (6,709) felt qualified, 26.6% (2,815) felt somewhat over-qualified and 7.8% (821) reported feeling very over-qualified.

Graph AT5
Percentage of Graduates Feeling Qualified for Their Main Job



The graduates' perception of their level of preparedness was also analyzed by field of study, selecting only graduates employed in jobs related to their studies.

- A low percentage of graduates reported feeling under-qualified for their main jobs (2.3%).
- The majority (97.8%) felt qualified to somewhat over-qualified.

Table AT1
Percentage Feeling Qualified by Field of Study*

Field of Study (n)	Very Under Qualified	Somewhat Under Qualified	Qualified	Somewhat Over Qualified	Very Over Qualified
Arts (982)	0	2.2	54.3	31.6	11.9
Business (2,282)	.1	1.8	54.8	34.0	9.3
General St. (354)	0	1.4	56.8	30.8	11.0
Health/Med. Sc. (1,923)	.1	1.5	73.9	19.3	5.2
Life Sc. (479)	0	2.1	59.3	29.9	8.8
Math/Nat. Sc. (2,271)	.2	2.7	64.7	25.7	6.6
Social Sc. (2,282)	.2	2.6	67.4	22.7	7.0
Total	.1	2.2	63.4	26.6	7.8

**** Graduates Employed in Jobs Related to Their Studies Only***

Geographic Transitions of Graduates

Graduates were asked the following questions pertaining to their geographic location at given points in their educational careers:

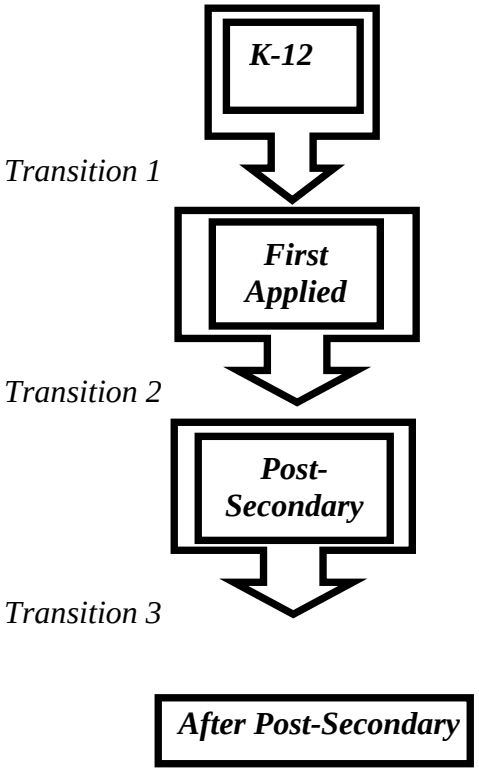
1. "Where were you living when you last attended high school or another grade in the K-12 system, not including adult upgrading?"
2. "Where were you living when you first applied for post-secondary studies, not including adult upgrading?"
3. "Have you permanently relocated to a different community since the time of your graduation from (name of institution)?"
4. "Where did you relocate to?"

Using these questions and the institutions the graduates attended, it was possible to determine their general geographic location at four separate points in their educational careers:

- Where graduates attended K-12 in Alberta,
- Where they were when they first applied to post-secondary (Alberta only),
- Where they attended post-secondary, and
- Where they ended-up in Alberta after graduation.

The chronological flow of the variables is as follows:

Graph AT6
Transition Flow Chart



For ease of analysis, the graduates' exact locations were re-coded into the following larger areas, using Adult Learning's colleges, technical institutes, and university region boundaries[11] as a template (see Appendix Seven for details of the recode).

- Edmonton and catchment area
- Calgary and catchment area
- Lethbridge and catchment area
- Red Deer and catchment area

[11] http://www.learning.gov.ab.ca/ei/profiles/Regions.aspx

- Grande Prairie
- Medicine Hat and catchment area
- Fort McMurray
- Calgary to Red Deer rural
- Edmonton to Red Deer rural
- Eastern Alberta
- West of Edmonton rural
- Northwest
- Northeast
- Elsewhere in Canada
- Outside of Canada

The following key findings resulted:

- 92.8% (10,260) of graduates who were living in Alberta when they last attended K-12, applied for post-secondary studies *from the same area they were in for K-12* (Transition 1).
- 64.3% (7,726) of graduates attended school in the area they first applied from. However, of these 3.5% (382) moved after K-12, before applying for post-secondary.
- 60.8% (6,721) first applied to and attended post-secondary institution in the same area where they last attended K-12.
- 84.7% (11,604) of the graduates *remained in the same geographic area as the institution they graduated from*.

Table AT2
Location of Graduates at Key Transition Points

Where was the student?	*Same Location (number & %)*	*Different Location (number & %)*
K-12 compared to when they first applied to post-secondary	10,260 (92.8%)	799 (7.2%)
Where they were when they first applied compared to where they went to post-secondary	7,726 (64.4%)	4,269 (35.6%)
Where they were after graduation compared to where they graduated from	11,604 (84.7%)	2,097 (15.3%)

It was noted earlier that roughly 60% (6,844) of the graduates lived in urban centers when last attending K-12 in Alberta, and 40% (4,505) in rural areas. However, 86.4% (11,851) reported living in urban centers after graduation.

In order to separate the ability of institutions to attract students to an area (and students staying there after graduation) from the larger pattern of urban migration, institutions in rural areas were selected (these were Portage College, Olds College, Fairview College, Canadian University College, and Lakeland College) and the geographic transitions of their graduates who had lived in urban areas when they first applied were tracked. This analysis revealed that 70.8% of graduates (n=96) from rural institutions that were living in urban centers when they first applied for post-secondary remained in the area of the rural institution they graduated from.

Discussion/Areas for Further Analysis

Typically, graduates began their post-secondary studies within three years of completing K-12 studies (84.8%), attended a post-secondary institution in the same geographic area where he/she last attended K-12 (60.8%); remained in the geographic area where he/she graduated (84.7%); and felt qualified or very qualified for the main job he/she held at the time of the survey (97.8%).

Graduates from universities tended to enroll immediately after completing K-12 studies (68.9%). This was also true, but to a somewhat lesser extent for graduates from university colleges (58.8%), but not for graduates from technical institutes and public colleges, where only 35.7% and 35.3% respectively attended right after completing K-12.

Graduates with prior post-secondary education generally reported receiving the transfer credits they expected to get (89.3%). This percentage varied by sector, from a high of 94.2% for

technical institutes to a low of 88.4% for the universities. An analysis of transfer credits by institution and field of study may be useful areas for future research.

An area for further study may be how best to inform students of educational opportunities. The information sources cited as being useful by a majority of the respondents were parents & relatives (53.2%) and institutional calendars (51.4%). The low percentage of respondents rating the ALIS website as useful and also the relatively low usefulness ratings for career counselors and school/guidance counselors would suggest the need for additional research to determine how these information sources could be positioned to better serve the information needs of prospective post-secondary students.

It should be noted that this survey only enquired about the usefulness of the various information sources to graduates in making decisions about *program or institution choice*. ALIS, school/guidance counselors and career counselors provide a range of other information services, such as availability of financial assistance. Any further investigation should consider the range of information made available to prospective students and how this information might be most usefully communicated.

Financing of Post-secondary Studies

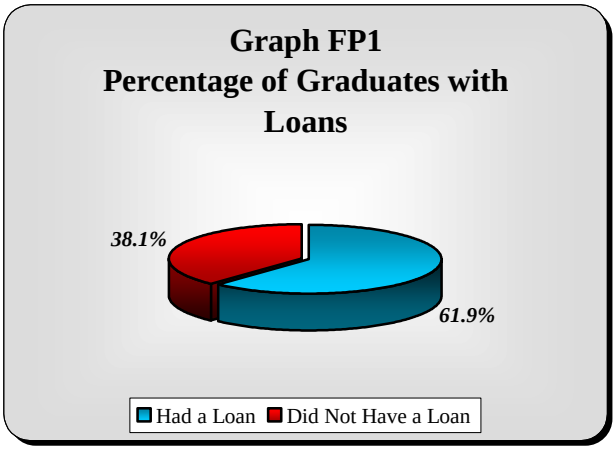
Objectives

The survey sought to determine graduates' primary financial resources, inclusive of student debt levels, required to complete post-secondary studies in relation to program type. Questions regarding student loans and other sources of funding used to complete studies were included.

Percentage of Graduates with Loans

Graduates were asked whether or not they had government sponsored and/or non-government sponsored loans while attending the institution they graduated from. If they answered yes to either of these questions, they were subsequently asked about the dollar amount of those loans.

9,626 graduates (61.9%) reported having a student loan of some type. This percentage was true across gender, and urban/rural origins of graduates, while 38.1% of graduates had no loans whatsoever.



Further analysis of this variable revealed the following:

- 49.4% (7,692) of the graduates reported that they had received only government sponsored student loans, 27.9% (4,331) received only non-government sources of financing (bank loans, credit cards etc.) for education related expenses, and 24.6% (2,369) received both.
- 62.5% (3,761) of males, and 61.5% (5,865) of females had loans.
- The highest percentages of graduates with loans by field of study were graduates in the Arts (66.8%; n = 1,341), Social Sciences (66.1%; n = 2,039) , and Life Sciences (66.0%; n = 509). The lowest percentages were Business (57.9%; n = 1,834) and Health Science graduates (59.1%; n = 1,342).
- 75.5% (2,408) of graduates aged 26-29 had a loan, as did 68.5% (1,743) of 30-39 year olds. The lowest percentage of students with a loan by age were those over 40 years (46.9%, or 946 respondents, had a loan).
- The highest percentage of graduates with a loan by sector type were from private university colleges (73.2%), and the lowest percentage were from public colleges (59.2%).

Table FP1
Percentage of Respondents With & Without Loans, by Sector

Sector	*Had a loan*	*Did not have a loan*	*n*
Public Colleges	59.2%	40.8%	4979
Technical Institutes	60.8%	39.2%	2499
Private University Colleges	73.2%	26.8%	395
Universities	63.5%	36.5%	7673

- The highest percentage of graduates with loans by qualification type were those with a 3 or 4-year degree/diploma (65.7%; n = 4,561). The lowest percentage was 1-year certificate program graduates at 53.1% (1,636), followed by PhD graduates at 54.7% (93).

- The percentage of graduates with a loan increased as the number of years between post-secondary and K-12 increased up to 5 years. After 5 years between K-12 and post-secondary, the percentage of graduates with loans begins to decrease.

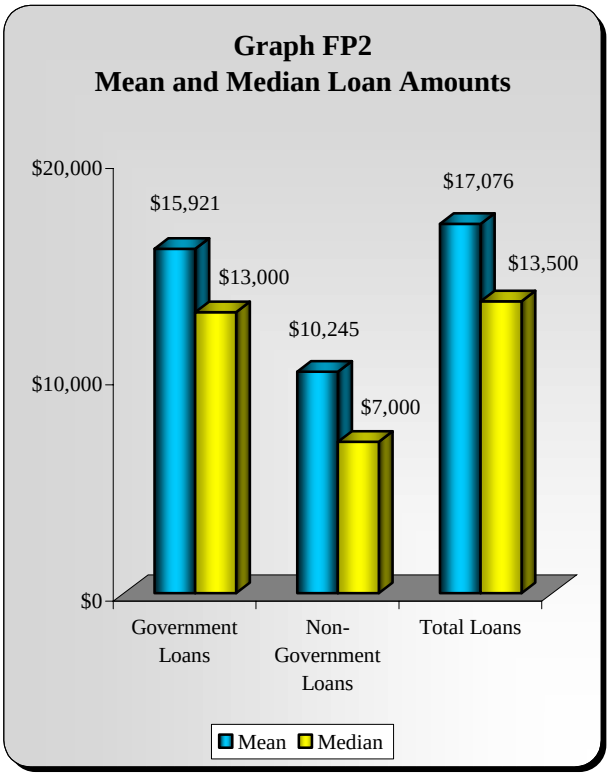
Table FP2
Percentage of Respondents With and Without Loans, by Years Since K-12

Years between K-12 and Post Secondary	*Had a loan*	*Did not have a loan*	*n*
0	60.6%	39.4%	7737
1	63.9%	36.1%	2709
2	67.0%	33.0%	1418
3	70.2%	29.8%	591
4	72.5%	27.5%	407
5	77.2%	22.8%	294
6	66.5%	33.5%	215
7 to 46	54.9%	45.1%	1834

Mean and Median Loan Amounts

Graduates who received government sponsored student loans and/or who borrowed for education-related expenses from non-government sources of funding were asked how much they owed at the time of graduation.

Graph FP2
Mean and Median Loan Amounts



Of the total loan amount still outstanding at the time of graduation, 76.4% was in the form of government loans and 23.6% in the form of non-government loans.

The mean amount owing on government student loans was $15,921 while the mean amount owing on education related non-government loans was $10,245. The average (mean) total loan amount owed by graduates was $17,076.

Table FP3
Government and Non-Government Loans, Mean and Median, By Field of Study

	Government Loans		Non Government		Total Loans	
	Mean	Median	Mean	Median	Mean	Median
Arts	**$17,813**	**$16,000**	**$9,244**	**$6,000**	**$18,269**	**$15,000**
Business	$12,407	$10,000	$8,863	$6,500	$13,418	$11,000
General St.	**$15,727**	**$12,000**	**$9,050**	**$6,000**	**$16,370**	**$12,000**
Health /Med. Sc.	$17,052	$14,000	$13,727	$8,000	$19,551	$14,000
Life Sc.	**$14,793**	**$12,000**	**$9,167**	**$8,000**	**$15,612**	**$13,000**
Math /Nat. Sc.	$15,029	$12,000	$10,115	$7,000	$16,111	$13,000
Social Sc.	**$18,073**	**$15,000**	**$10,685**	**$8,000**	**$19,370**	**$16,000**
Total	***$15,921***	***$13,000***	***$10,245***	***$7,000***	***$17,076***	***$13,500***

When analyzed by program type, further analysis revealed that:

- Social Science graduates had the largest mean amount ($18,073) in government student loans.
- Health/Medical Science graduates had a substantially higher mean loan amount owing in education related non-government loans ($13,727) than graduates of other programs.
- Social Science and Health/Medical Science graduates owed the most in mean total loans ($19,370 and $19,551 respectively).
- Business graduates owed the least in mean government student loans ($12,407), mean education related non-government loans ($8,863) and mean total loans ($13,418).

Table FP4
Government and Non-Government Loans, Mean and Median by Sector

	Government Loans		Non-Government Loans		Total Loans	
	Mean	Median	Mean	Median	Mean	Median
Public Colleges	$11,694	$10,000	$7,744	$6,000	$12,250	$10,000
Technical Institutes	$11,269	$10,000	$9,029	$6,000	$12,277	$10,000
Private University Colleges	$21,005	$20,000	$10,259	$6,500	$21,977	$20,000
Universities	$19,331	$18,000	$11,976	$9,000	$21,093	$19,000

When analyzed by sector, further analysis revealed that, on average:

- Private university college graduates have the highest mean in government student loans ($21,005) and mean total loans ($21,977) owing.
- Technical institute graduates have the lowest mean in government student loans ($11,269) and mean total loans ($12,277) owing.
- University graduates have the highest mean ($11,976), and public college graduates have the lowest mean ($7,744) in education related non-government loans owing.

Table FP5
Government and Non-Government Loans, Mean and Median, By Qualification Type

	Government Loans		Non-Government Loans		Total Loans	
	Mean	Median	Mean	Median	Mean	Median
1 yr cert.	$8,668	$6,000	$6,779	$5,000	$9,232	$6,850
1-2 yr Dip.	$12,790	$11,000	$8,977	$7,000	$13,647	$12,000
3-4 yr Deg/Dip.	$19,580	$19,000	$11,455	$8,000	$21,229	$20,000
Master's	$17,290	$14,000	$13,156	$10,000	$19,265	$15,000
PhD	$18,814	$13,000	$16,557	$15,000	$21,619	$16,000

When analyzed by qualification type, further analysis revealed that, on average:

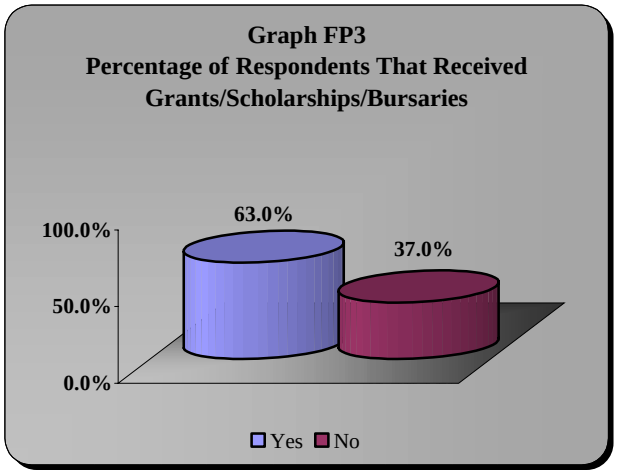
- 3-4 year Degree/Diploma graduates had the highest mean ($19,580) government student loans owing and PhD graduates had the highest mean in education related non-government loans ($16,557) and total loans ($21,619) owing.
- 1-year certificate graduates had the lowest mean in total loans ($9,231), government student loans ($8,668), and education related non-government loans ($6,779).

Grants Scholarships and Bursaries

Graduates were asked if they received grants, scholarships or bursaries. If they answered yes, they were then asked how much they received.

Key findings were as follows:

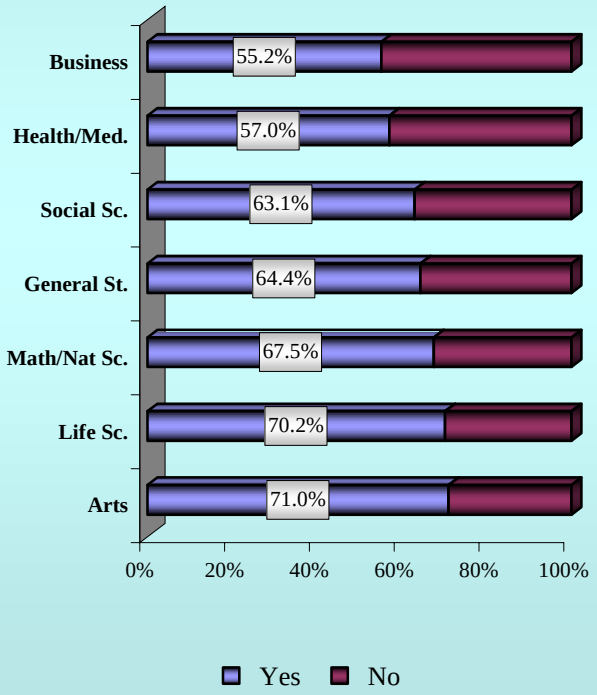
- 63% (9,816) of graduates reported receiving grants, scholarships or bursaries.



Grants, scholarships and bursaries were also analyzed by field of study. As indicated in Graph FP4:

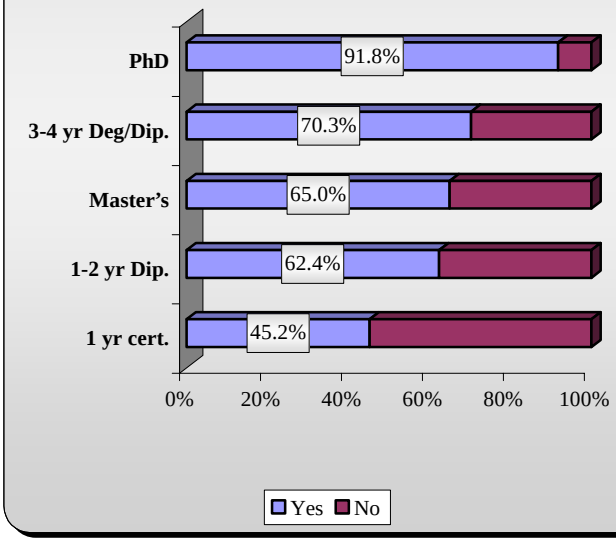
- 71.0% (1,433) of Arts graduates and 70.2% (542) of Life Science graduates reported receiving grants, scholarships and bursaries.
- The lowest percentage of recipients of grants, scholarships and bursaries were graduates from Business (55.2%; n = 1,752).

Graph FP4
Percentage Receiving Grants/Scholarships/Bursaries, by Field of Study



When analyzed by qualification type it was found that 91.8% (157) of PhD graduates received grants, scholarships or bursaries, followed by 70.3% (4,890) of 3-4 year degree/diploma graduates, 65.0%(779) of Master's degree graduates, 62.4% (2,595) of 1-2 year diploma graduates and 45.2% (1,395) of 1-year certificate graduates.

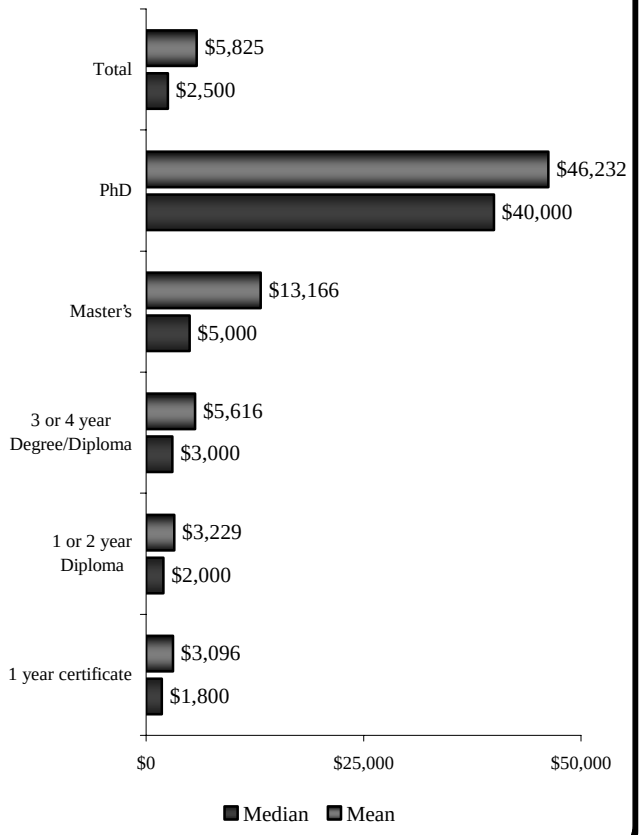
Graph FP5
Percentage Receiving Grants/Scholarships/Bursaries, by Qualification Type



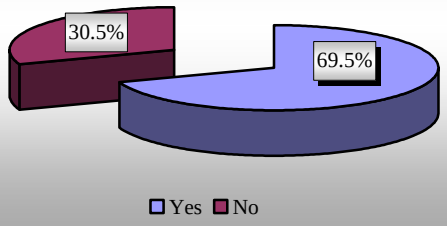
There was considerable variation in the amounts of grants, scholarships and bursaries, as reported by qualification type. For those who received such assistance, on average:

- PhD graduates received a mean average of $46,232 in grants, scholarships and bursaries
- Master's Degree graduates received $13,166
- 3 or 4 year Degree/Diploma graduates received $5,616
- 1 or 2 year diploma graduates received $3,229 and
- 1 year Certificate graduates received $3,096.

Graph FP6
Mean and Median Amount of Grants/Scholarships/Bursaries, for Recipients, by Field of Study



Graph FP7
Percentage of Graduates that Worked While Attending Post-Secondary



- There is little difference between the total mean loan amount (government and non-government loans combined) for graduates who worked while they were students ($17,055) and graduates who did not work ($17,218).
- Based on the mean, graduates who worked while in school had larger government loans ($16,185) than those who did not work ($15,298). However, the graduates who worked had a lower non-government loan amount ($9,540) than those who did not work ($11,844).

Employment While Attending Post-Secondary

Graduates were asked if they worked while taking classes at their post-secondary institution.

- 69.5% (10,849) of graduates reported working while attending their post-secondary institution.

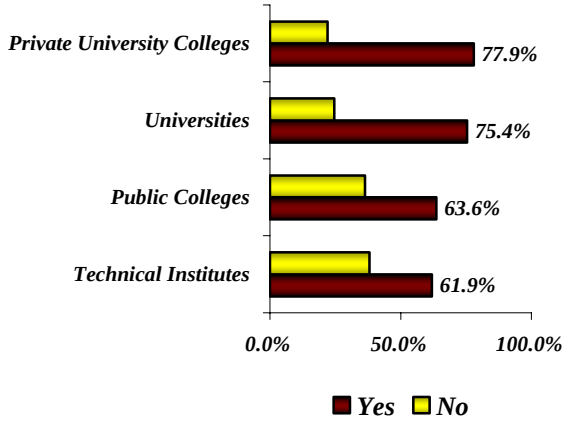
Table FP6
Mean or Median Loans, Those who Worked While in School vs. Those Who Did Not Work

Student worked while at School?		Government Loans	Non-Government Loans	Total Loans
Yes	Mean	$16,185	$9,540	$17,055
	Median	$13,000	$6,500	$14,000
No	Mean	$15,298	$11,844	$17,218
	Median	$12,000	$8,000	$13,000

Financing of Post-secondary Studies

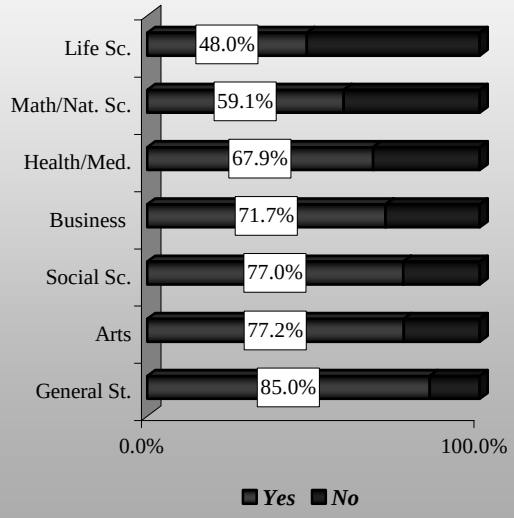
- Over three-quarters of private university college graduates (311) and university graduates (5,804) worked while attending post-secondary.
- 63.6% (3,181) of public college graduates and 61.9% (1,553) of technical institute graduates reported working while attending post-secondary.

Graph FP8
Percentage of Graduates Who Worked While Attending Post-Secondary, by Sector



- General Studies graduates (85.0%; n = 627) were more likely to have worked while they were students than graduates of the other fields of study.
- Life Science graduates were the least likely to have worked while they were students (48.0%; n = 371).

Graph FP9
Percentage of Graduates Who Worked While Attending Post-Secondary, by Field of Study



- The percentage of respondents by age group who worked while attending post-secondary varies between a high of 73.4% for 26-29 year olds and a low of 67.3% for respondents under the age of 26.

Table FP7
Percentage Working While in School, By Age

		Did Graduate Work While Attending Post-Secondary?	
Age Group	***n***	***Yes***	***No***
<26	7,694	67.3%	32.7%
26-29	3,197	73.4%	26.6%
30-39	2,555	69.4%	30.6%
40+	2,027	72.4%	27.6%

Discussion/Areas for Further Analysis

The typical 2001/02 graduate had secured a loan to finance their post-secondary studies (61.9%) with the amount owing at the time of graduation being $14,000. Most of these funds were borrowed from government (76.4%). The typical student also likely had received a government grant or scholarship of $2,500. In addition he or she also worked while attending school (69.5%).

It is noted that the mean loan ($17,133) was significantly higher than the median ($14,000), implying that there were some graduates with significantly higher loans than the majority, pulling the average up. Graduates at the PhD level, who had the highest mean loan amounts ($21,789), had a significantly lower median loan level ($16,500). The spread was much smaller for 3-4 year Degree graduates (mean of $21,324 and mean of $20,000).

By field of study, graduates from Arts had among the highest median loans ($15,000) but also had the greatest percentage reporting that they had received grants or scholarships (71.0%). By qualification type, the vast majority of PhD level graduates (91.8%) reported having received a grant or scholarship, and the median amount received, at $40,000, was significantly higher than the overall median amount ($2,500).

Most graduates did report having worked while attending school (69.5%); however, this would be a fruitful area for more in-depth study. For example, it would be informative to know what percentage of those who had worked were full-time as opposed to part-time students. In addition, it would be useful to know to what extent the work was a requirement for graduation, such as a practicum or co-op work placement.

Life-Long Learning

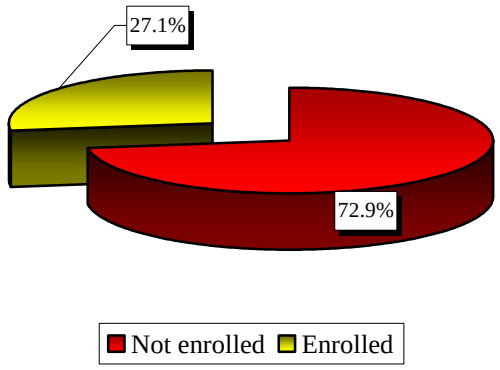
Objectives

The survey examined the extent to which lifelong learning is incorporated into the lives of graduates. These questions sought to determine if the respondents were pursuing another credential, or any other further education.

Percentage of Respondents Enrolled as Students

At the time of the survey administration, 27.1% (4,233) of the graduates reported that they were enrolled as students. Of those, 18.2% (2,819) were enrolled full-time, and 8.9% (1,383) were enrolled part-time.

Graph LL1
Percentage of Respondents Enrolled as Students

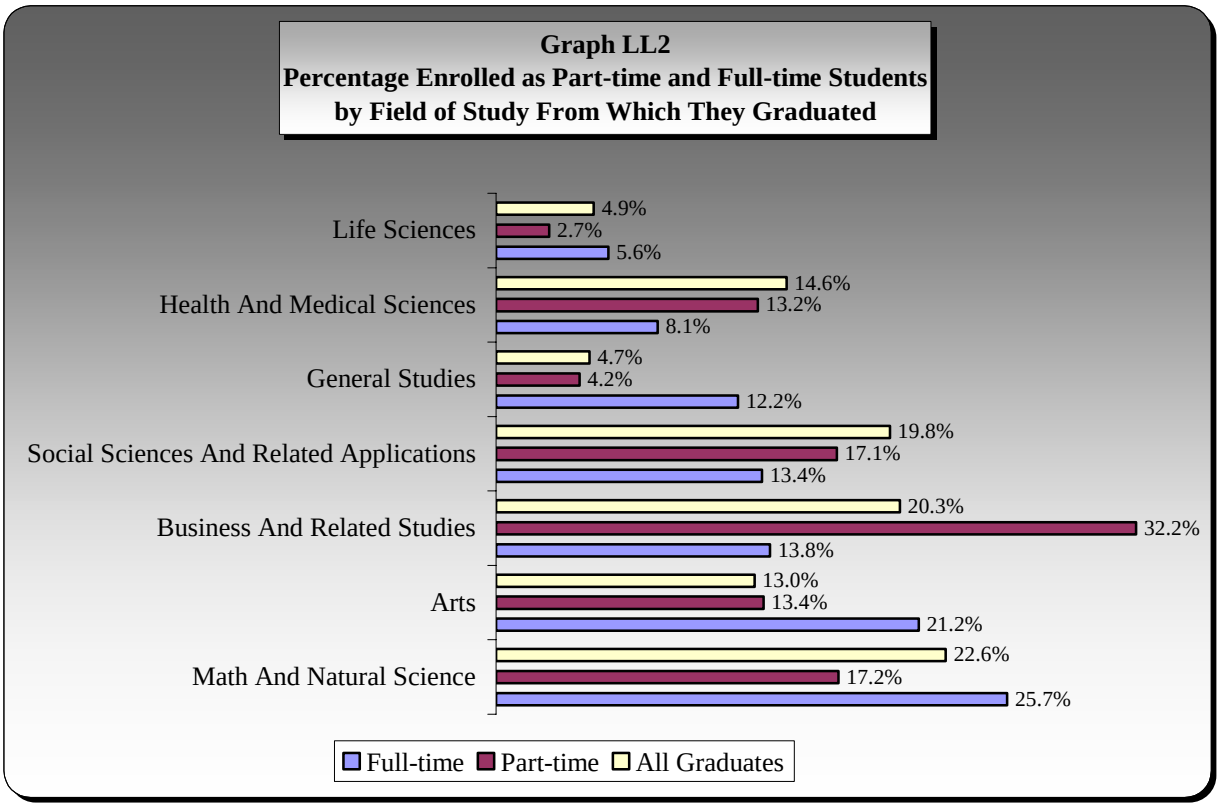


- The percentage of respondents reporting they were full or part-time students at the time of the survey was proportional to the percentage interviewed for universities and colleges.
- The percentage of respondents reporting they were full students who had graduated from technical institutes was lower than the percentage of such graduates in the overall sample, and somewhat higher for private university colleges.

Table LL1
Respondents Enrolled as Students, By Sector

	All Graduates		*Full-Time*		*Part-Time*	
Public Colleges	5008	32.1%	958	34.0%	411	29.7%
Technical Institutes	2510	16.1%	313	11.1%	234	16.9%
Private University Colleges	399	2.6%	126	4.5%	42	3.0%
Universities	7705	49.3%	1422	50.4%	696	50.3%
Total	15622	100.0%	2819	100.0%	1383	100.0%

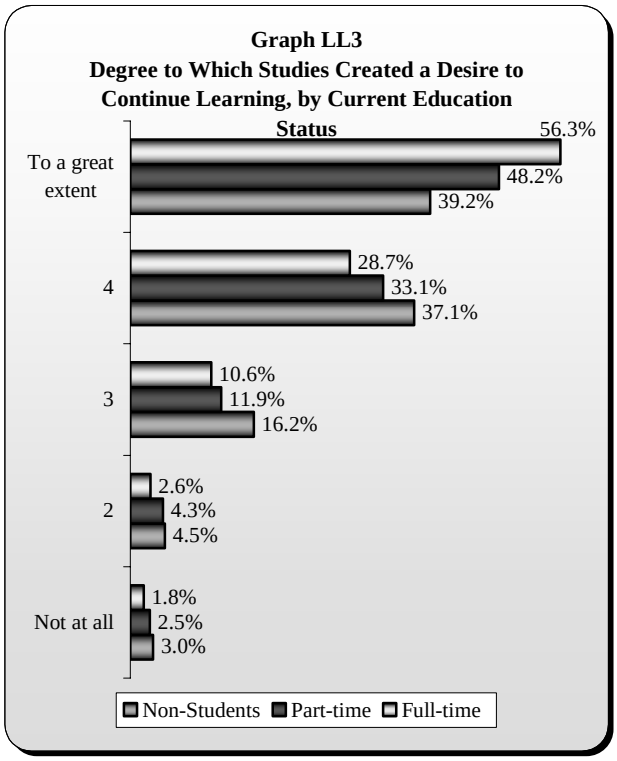
- 50.4% of the graduates enrolled as full-time students had graduated from university programs, and 50.3% enrolled as part-time students had similarly graduated from university programs.
- 70.6% of the graduates enrolled full-time were under 26 years of age, as were 46.9% of the graduates enrolled as part-time students. Only 3.9% of the graduates enrolled as full-time students were 40 years or older, however, 14.6% of the graduates enrolled as part-time students were 40+ years of age.
- At the time the survey was conducted, Arts and General Studies each had a higher proportion of graduates studying full-time (21.2% & 12.2% respectively) than the proportion of graduates from these fields of study in the total number of graduates surveyed (13.0% & 4.7% respectively).
- Business had a higher percentage of graduates studying part-time (32.2%) than the proportion of graduates from this field of study in the total number of graduates surveyed (20.3%).



The Desire to Learn More

Graduates were asked to respond using a 5-point scale where 1 meant not at all, and 5 meant to a great extent, the degree to which the program they graduated from provided them with a desire to continue to learn more about [the subject they had studied] or other subjects.

- 56.3% (1,584) of the graduates who were still full-time students at the time of the survey and 48.2% (666) of the graduates enrolled as part-time students reported that their program instilled, to a great extent, the desire to learn more about this or other subjects.



- The percentage of graduates reporting that their program instilled, to a great extent, the desire to learn more about this or other subjects was higher for those who had earned higher credentials.

Table LL2
Desire to Learn More, by Qualification Type

Studies created a desire to continue learning	*1 year certificate*		*1 or 2 year Diploma*		*3 or 4 year Degree/Diploma*		*Master's*		*PhD*	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Not at all	2.3%	2.4%	2.6%	3.3%	1.3%	1.7%	0.7%	5.2%	Insufficient Data	
2	2.0%	3.2%	2.1%	2.6%	2.9%	6.1%	4.3%	2.1%		
3	10.5%	10.5%	12.7%	11.8%	9.9%	12.5%	6.5%	11.5%		
4	27.9%	30.0%	29.1%	32.3%	29.5%	36.0%	22.5%	25.0%		
To a great extent	57.3%	53.8%	53.4%	50.0%	56.4%	43.8%	65.9%	56.3%		

- By sector, the percentage of graduates reporting that their program instilled, to a great extent, the desire to learn more about this or other subjects was lowest amongst technical institute graduates.

Table LL3
Desire to Learn More, by Sector

Studies created a desire to continue learning	*Public Colleges*		*Technical Institutes*		*Private University Colleges*		*Universities*	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Not at all	1.8%	2.7%	4.8%	3.0%	0.0%	0.0%	1.3%	2.4%
2	1.5%	3.2%	3.8%	3.4%	1.6%	9.5%	3.2%	4.9%
3	10.1%	10.2%	17.0%	13.2%	7.1%	4.8%	9.8%	12.8%
4	28.8%	30.2%	27.6%	34.2%	26.2%	31.0%	29.2%	34.6%
To a great extent	57.8%	53.8%	46.8%	46.2%	65.1%	54.8%	56.5%	45.2%

Discussion/Areas for Further Analysis

27.1% of the graduates were enrolled in further studies at the time the survey was conducted, 18.2% as full-time students and 8.9% as part-time students.

Technical institute graduates reported a lower percentage pursuing full-time studies (11.1%) compared to their numbers in the total graduates surveyed (16.1%) and fewer of these graduates reported that the program they had graduated from had instilled to a great extent a desire to learn more about this or other subjects.

Less than one-third of the graduates reported that they were enrolled in full-time or part-time studies at the time of the survey. The attitudes towards further studies of those not enrolled may be a fruitful area for further study to gain a better understanding of the commitment of graduates to life-long learning.

APPENDICES

Appendix One: Participating Institutions

Graduate Outcomes Survey
Participating Institutions

SECTOR	INSTITUTION
Universities	➢ Athabasca University
	➢ University of Alberta
	➢ University of Calgary
	➢ University of Lethbridge
Publicly Funded Private University Colleges	➢ Augustana University College
	➢ Canadian University College
	➢ Concordia University College
	➢ King's University College
Colleges	➢ Alberta College of Art and Design
	➢ Bow Valley College
	➢ Fairview College
	➢ Grande Prairie Regional College
	➢ Grant MacEwan College
	➢ Keyano College
	➢ Lakeland College
	➢ Lethbridge Community College
	➢ Medicine Hat College
	➢ Mount Royal College
	➢ NorQuest College
	➢ Northern Lakes College
	➢ Olds College
	➢ Portage College
	➢ Red Deer College
Technical Institutes	➢ Northern Alberta Institute of Technology (NAIT)
	➢ Southern Alberta Institute of Technology (SAIT)

Appendix Two: Survey Instrument

2004 Alberta Post-Secondary Institution Graduate Outcomes Survey
December 15, 2003

Introduction

Hello, may I please speak to _____ (name of graduate)?

[If the individual is not available, try to find out when they might be available. Explain purpose of study (see below) if requested. Thank the person providing the information. Do not collect survey information from parents, roommates or others.]

[If the individual does not live in this household, try to obtain a new telephone number. Explain purpose of study (see below) if requested. Thank the person providing the information.]

Hi, my name is _____ and I'm with (name of consulting firm). I'm calling on behalf of Alberta Learning and _____ (name of institution). We are doing a study of the people who completed programs of study in the fall of 2001 or the spring of 2002 at _____ (name of institution). The purpose of the study is to provide summary information for Alberta Learning about graduates' satisfaction and about their employment and educational experiences, and to provide detailed information to _____ (name of institution) with ideas about how to improve their programs.

Before we start, I'd like to assure you that your participation is voluntary and that any information you give us will be kept completely confidential. Your responses will only be shared with the institution you graduated from and will not be attributable on an individual basis. When results are published, only summary or aggregated information will be provided, and no individuals will be identified. Your personal information is protected by the Freedom of Information and Protection of Privacy Act.

[If the student questions the validity of the study, or has any questions about the Freedom of Information and Protection of Privacy Act, please tell them they can contact the persons listed below for verification.]

Institution	Survey Contact	Telephone Number
The CATI system will generate the name and telephone number for the institutional Contact, as appropriate, given the institution the respondent graduated from.		

The study should only take about 12 to 15 minutes. Would you have time to speak to me now?
[If the individual is unwilling to be interviewed at this time, try to arrange another more convenient time.]
I would like to start by asking some general background questions.

Appendix Two: Survey Instrument

1.	What was the highest grade level you completed in the K-12 system? _____ **[NOT INCLUDING ADULT UPGRADING]** 1. Grade 1 2. Grade 2 3. Grade 3 4. Grade 4 5. Grade 5 6. Grade 6 7. Grade 7 8. Grade 8 9. Grade 9 10. Grade 10 11. Grade 11 12. Grade 12 13. Grade 13 14. Kindergarten 88. Don't know 99. No response
2.	Where were you living when you last attended high school or another grade in the K-12 system, not including adult upgrading? **[DO NOT READ]** 1. Edmonton 2. Calgary 3. Lethbridge 4. Red Deer 5. Grande Prairie 6. Medicine Hat 7. Fort McMurray 8. Elsewhere in Alberta **[please specify]** _____ 9. Elsewhere in Canada **[specify province/territory]** _____ 10. Outside Canada 88. Don't know 99. No response
3.	What year did you last attend school in the K-12 system, not including adult upgrading? _____ **[NOTE: ENTER FOUR DIGIT YEAR]** 8888. Don't know 9999. No response

4.	Where were you living when you first applied for post-secondary studies, not including adult upgrading? _____ **[DO NOT READ]** 1. Edmonton 2. Calgary 3. Lethbridge 4. Red Deer 5. Grande Prairie 6. Medicine Hat 7. Fort McMurray 8. Elsewhere in Alberta **[please specify]** _____ 9. Elsewhere in Canada **[specify province/territory]** _____ 10. Outside Canada 88. Don't know 99. No response
5.	In what year did you begin post-secondary studies, not including adult upgrading? _____ **[NOTE: ENTER FOUR DIGIT YEAR]** 8888. Don't know 9999. No response
6.	Have you permanently relocated to a different community since the time of your graduation from _____ (name of institution)? 1. Yes 2. No → **GO TO Q10** 8. Don't know→ **GO TO Q10** 9. No response → **GO TO Q10**
7.	What was your **primary** reason for moving? **[DO NOT READ] [SELECT ONLY ONE OPTION]** 1. To attain employment 2. Improve employment situation 3. Family move/obligations (including children, extended family, etc) 4. Health problems 5. To acquire further education 6. Improve social life 7. Other **[SPECIFY]** _____ 88. Don't know 99. No response
8.	Where did you relocate to? **[DO NOT READ]** 1. Edmonton 2. Calgary 3. Lethbridge 4. Red Deer 5. Grande Prairie 6. Medicine Hat

	7. Fort McMurray 8. Elsewhere in Alberta **[please specify]** _____ 9. Elsewhere in Canada **[specify province/territory]** _____ 10. Outside Canada 88. Don't know 99. No response
9.	Was this your hometown? 1. Yes 2. No 8. Don't know 9. No response
10.	Using a 5-point scale where 1 means "*not useful*" and 5 means "*very useful*", how useful were each of the following sources of information in helping you decide which program and institution to attend? (READ) **Not Useful** **Very Useful** **Not relevant** **Don't Know/No Response** a) Institutional calendars (online or print) 1 2 3 4 5 7 8 b) Alberta Learning Information Service (ALIS) website [SURVEYOR NOTE:WWW.ALIS.GOV.AB.CA] 1 2 3 4 5 7 8 c) School or guidance counselors 1 2 3 4 5 7 8 d) Teachers 1 2 3 4 5 7 8 e) Career counselors 1 2 3 4 5 7 8 f) Parents or other relatives 1 2 3 4 5 7 8 g) Friends 1 2 3 4 5 7 8 h) Other_____ 1 2 3 4 5 7 8
11.	What was your primary goal upon entering _____ (name of institution)? **(L) [DO NOT READ]** 1. Preparation for a specific degree or diploma 2. Completion of a specific degree or diploma 3. Expanded knowledge in a particular subject area 4. Employment 5. Improve skills required for the job you had at the time 6. Obtain high school equivalency 7. Other_____ 8. Did not set a goal → **GO TO Q14** 88. Don't know → **GO TO Q14** 99. No response → **GO TO Q14**
12.	Did you achieve your primary goal? **(L)** 1. Yes → **GO TO Q14** 2. No → **GO TO Q13** 8. Don't know → **GO TO Q14** 9. No response → **GO TO Q14**

13.	Why not? _____ (S) **[DO NOT READ]** 1. Personal illness or disability 2. Family responsibilities 3. Moved 4. Financial Reasons 5. Still in school/pursuing further education 6. Other **[SPECIFY]**_____ 88. Don't know 99. No response

The following questions relate to the _____ program you graduated from.

	Please rate these statements using a 5-point scale where 1 means "*not at all*" and 5 means "*to a great extent*".
14.	To what extent did the program from which you graduated at _____ (institution name) provide you with the following benefits: **[RANDOMIZE AND READ]**

	Not at all (DO NOT READ)				To a great extent	Don't know	No Response
The skills needed for a particular job	1	2	3	4	5	8	9
Knowledge of a particular field of study	1	2	3	4	5	8	9
An opportunity to improve yourself	1	2	3	4	5	8	9
Chances of improved income	1	2	3	4	5	8	9
A desire to continue learning more, about this or other subjects	1	2	3	4	5	8	9
Improved employment opportunities	1	2	3	4	5	8	9

15.	The following questions examine the degree to which your post-secondary education has added to your skills, knowledge and abilities. Please rate these statements using a 5-point scale where 1 means "*not at all*" and 5 means "*to a great extent*".

Appendix Two: Survey Instrument

Reflecting on your educational experience at _____ (name of institution), do you feel that it has helped you to effectively: **[READ]**

	Not at all				To a great extent	Don't know	No Response
	Do Not Read						
Solve problems	1	2	3	4	5	8	9
Speak in public	1	2	3	4	5	8	9
Write	1	2	3	4	5	8	9
Resolve conflicts	1	2	3	4	5	8	9
Learn independently	1	2	3	4	5	8	9
Become self-confident	1	2	3	4	5	8	9
Develop leadership skills	1	2	3	4	5	8	9
Think creatively	1	2	3	4	5	8	9
Develop awareness of ethical issues	1	2	3	4	5	8	9
Develop awareness of political and social issues	1	2	3	4	5	8	9
Appreciate other cultures	1	2	3	4	5	8	9
Develop computer skills	1	2	3	4	5	8	9
Develop research skills	1	2	3	4	5	8	9
Develop mathematical skills	1	2	3	4	5	8	9
Develop interpersonal skills	1	2	3	4	5	8	9
Work independently	1	2	3	4	5	8	9
Work well with others	1	2	3	4	5	8	9
Manage information	1	2	3	4	5	8	9

16.	The following question examines how satisfied you are with your educational experience in _____ (name of program) at_____(name of institution). I would like you to answer using a 5-point scale, where 1 means "*very dissatisfied*," 2 means "dissatisfied", 3 means "neither satisfied nor dissatisfied", 4 means "satisfied" and 5 means "*very satisfied"*. **[READ]** a) How satisfied are you with the quality of teaching in your program? Would you say...? 1. Very dissatisfied 2. Dissatisfied 3. Neither satisfied or dissatisfied 4. Satisfied 5. Very satisfied 8. Don't know 9. No response b) How satisfied are you with the overall quality of your educational experience? Would you say…? 1. Very dissatisfied 2. Dissatisfied 3. Neither satisfied or dissatisfied 4. Satisfied 5. Very satisfied 8. Don't know 9. No response
17.	Would you recommend the same program of study to someone else? Yes or No? 1. Yes 2. No 8. Don't know 9. No response
18.	Would you recommend to someone that they should attend _____ (name of institution)? Yes or No? 1. Yes 2. No 8. Don't know 9. No response
19.	Did you complete any post-secondary courses, not including adult upgrading, prior to enrolling in _____ (program name) at _____ (name of institution)? 1. Yes 2. No → **GO TO Q25** 8. Don't know → **GO TO Q25** 9. No response → **GO TO Q25**

20.	In completing requirements for _____(program name), did you receive transfer credit or advanced standing for courses taken at any other Alberta institution? 1. Yes 2. No → **GO TO Q25** 8. Don't know→ **GO TO Q25** 9. No response → **GO TO Q25**
21.	From which Alberta institution(s) did you transfer credits? _____ 1. Athabasca University 2. University of Alberta 3. University of Calgary 4. University of Lethbridge 5. Augustana University College 6. Canadian University College 7. Concordia University College 8. King's University College 9. Alberta College of Art and Design 10. Bow Valley College 11. Fairview College 12. Grande Prairie Regional College 13. Grant MacEwan College 14. Keyano College 15. Lakeland College 16. Lethbridge Community College 17. Medicine Hat College 18. Mount Royal College 19. NorQuest College 20. Northern Lakes College 21. Olds College 22. Portage College 23. Red Deer College 24. NAIT 25. SAIT 26. Other **[SPECIFY]** _____ 88. Don't know 99. No response
22.	Did you receive full or partial credit? 1. Full 2. Partial 8. Don't know → **GO TO Q25** 9. No response → **GO TO Q25**

23.	Did you receive the transfer credit you expected? 1. Yes → **GO TO Q25** 2. No 8. Don't know → **GO TO Q25** 9. No response → **GO TO Q25**
24.	What were the reasons that you *did n*ot receive the credit you expected? **[SURVEYOR NOTE: More than one response is possible – DO NOT READ]** 1. I did not originally plan to transfer. 2. I completed more credits than were allowed for transfer to (i.e. most programs require that 50% of the program has to be completed at the institution offering the credential). 3. My marks weren't high enough to receive transfer credit. 4. I misunderstood or found the transfer requirements to be unclear. I received unclear advice on what courses would transfer from: 5. The sending institution. 6. The receiving institution. 7. Other source(s). 8. I received unassigned (general) credit when I expected to receive specific credit (i.e. I got credit for English 1XX rather than English 110). 9. My courses were too old to transfer as I took them too long ago. 10. All my courses were transferable but some weren't required for graduation. 11. Other (please specify) _____. 88. Don't know 99. No response
25.	Given the benefits of post-secondary education, I consider the _____ program to be worth the financial cost to me and/or my family? Do you…? **[SURVEYOR NOTE: READ LIST]** 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 8. Don't know 9. No response

26.	How much of your course-load for the program you graduated from did you take through correspondence or another type of distance education like Internet, television or video? Is that...? **[SURVEYOR NOTE: DOES NOT INCLUDE CREDIT TRANSFERS]** 1. None 2. Less than half 3. About half 4. More than half 5. All of it 8. Don't know 9. No response
27.	Did you work while taking classes at _____(name of institution)? 1. Yes 2. No 8. Don't know 9. No response

The following questions relate to your employment outcomes since graduating.

28.	Do you currently have one or more paying jobs, including self-employment and seasonal positions? 1. Yes 2. No → **GO TO Q31** 8. Don't know → **GO TO Q31** 9. No response → **GO TO Q31**
29.	How many paying jobs do you have? _____ 88. Don't know 99. No response
30.	Are you self-employed (*in your main job*)? **(The main job refers to the job that has the most hours.)** 1. Yes 2. No 8. Don't know 9. No response **[SKIP AHEAD TO Q33]**
31.	Are you currently looking for a job? 1. Yes → **GO TO Q50** 2. No 8. Don't know → **GO TO Q50** 9. No response → **GO TO Q50**

32.	What is the main reason you are not looking for a job? **[DO NOT READ]** 1. Own illness or disability 2. Personal or family responsibilities 3. Going to school 4. No longer interested in finding a job 5. Waiting for recall (to former or seasonal job) 6. Waiting for replies from employer 7. Could not find the kind of job wanted 8. Discouraged with looking 9. Travelling/taking time off 10. Other (please specify) _____ 88. Don't know 99. No response **[SKIP AHEAD TO Q50]**
33.	Is your (main) job permanent, temporary or seasonal? **[SURVEYOR NOTE: READ ONLY IF RESPONDENT REQUIRES CLARIFICATION]** *Permanent means there is no indication when the job will end. Temporary means the job will terminate at some specified time and is not seasonal. Seasonal means the job is permanent, but cyclical with the change of the season.* 1. Permanent 2. Temporary (includes contract, term-certain, etc.) 3. Seasonal 8. Don't know 9. No response
34.	What is your job title? **(If you held more than one job, choose the one with the most hours.)** _____ 88. Don't know 99. No response
35.	What are your main work duties? **[PROBE IF NECESSARY]** _____ 88. Don't know 99. No response
36.	What kind of business, industry or service is this? _____ 88. Don't know 99. No response

37.	What is the total number of hours you usually work per week in your (*main*) job? (*The main job refers to the one with the most hours worked in a week*.) _____ (total work hours per week) 888. Don't know 999. No response
38.	Working your usual hours at your current (*main*) job, approximately what is your gross salary or earnings, before taxes and deductions? *(including gratuities, commission and other earnings)* **$_____ [SURVEYOR NOTE: DO NOT USE DECIMALS]** 888888. Don't know 999999. No response
39.	Is that figure …….? **[READ]** *(The gross salary from the previous question.)* 1. Yearly 2. Hourly 3. Daily 4. Weekly 5. Bi-weekly 6. Monthly 7. Other **[SPECIFY]** _____ 88. Don't know 99. No response
40.	Based on what you have told me, your total expected annual income from your main/most recent job before deductions is calculated to be $ _____. Does that sound about right? 1. Yes → **GO TO Q42** 2. No → **GO TO Q41** 88. Don't know → **GO TO Q41** 99. No response → **GO TO Q41**
41.	What is your approximate annual income from your main/most recent job before deductions including ANY tips OR commissions? $_____ **[annual]** 888888. Don't know 999999. No response

42.	Please rate these statements using a 3-point scale where 1 means "not related", 2 means "somewhat related" and 3 means "very related". How related is your current job to: **Not related Somewhat related Very related** **a)** The general skills and abilities you acquired (e.g., communication skills, critical thinking, problem solving) 1 2 3 8 9 **b)** The subject-area knowledge you acquired 1 2 3 8 9 **c)** Overall, how related is your current (main) job to the program from which you graduated in 2001-02? 1 2 3 8 9
	IF THE RESPONDENT HAS ONLY ONE JOB, (based on response to #29) SKIP TO Q47
43.	What is the total number of hours you usually work per week in all other jobs combined? **(E)** _____ (total work hours per week) 888. Don't know 999. No response
44.	Approximately what is your gross salary or earnings in your other job(s), before taxes and deductions, working your usual hours? **[SURVEYOR NOTE: DO NOT USE DECIMALS] (E)** $_____ 888888. Don't know 999999. No response
45.	Is that figure ……? **[READ]** (The gross salary from the previous question.) **(E)** 1. Yearly 2. Hourly 3. Daily 4. Weekly 5. Bi-weekly 6. Monthly 7. Other **[SPECIFY]** _____ 88. Don't know 99. No response

46.	Please rate these statements using a 3-point scale where 1 means, "*not related*", 2 means "*somewhat related*" and 3 means "*very related*". How related are <u>your other jobs</u> to: **Not related Somewhat related Very related** **a)** The general skills and abilities you acquired (e.g., communication skills, critical thinking, problem solving) 1 2 3 8 9 **b)** The subject-area knowledge you acquired 1 2 3 8 9 **c)** Overall, how related is your current (main) job to the program from which you graduated in 2001-02? 1 2 3 8 9
47.	When you were selected for your main job, what was the highest level of education needed to get the job? **[SURVEYOR NOTE: DO NOT READ LIST. ACCEPT ONE ANSWER ONLY]** 1. Less than high school 2. Some high school 3. High school diploma 4. Some non-University post secondary (college/technical/vocational) 5. Completed non-University post-secondary (college/technical/vocational) 6. Some university 7. Completed university (bachelors degree) 8. Completed graduate studies 9. Other **[SPECIFY]** _____ 88. Don't know 99. No response
48.	Given your education, training and experience, how qualified do you feel you are for your (**main**) job? **[READ]** 1. Very under-qualified 2. Somewhat under-qualified 3. Qualified 4. Somewhat overqualified 5. Very overqualified 8. Don't know 9. No response

49.	All things considered, how satisfied are you with your current (**main**) job? Would you say**…[READ]** 1. Very Dissatisfied 2. Dissatisfied 3. Neither Dissatisfied Nor Satisfied 4. Satisfied 5. Very Satisfied 8. Don't know 9. No response

I would now like to ask you about further studies you may have undertaken since graduating.

50.	Are you currently enrolled as a student? 1. Yes 2. No → **GO TO Q54** 8. Don't know → **GO TO Q54** 9. No response → **GO TO Q54**
51.	What post-secondary institution *are* you enrolled in? _____ 1. Athabasca University 2. University of Alberta 3. University of Calgary 4. University of Lethbridge 5. Augustana University College 6. Canadian University College 7. Concordia University College 8. King's University College 9. Alberta College of Art and Design 10. Bow Valley College 11. Fairview College 12. Grande Prairie Regional College 13. Grant MacEwan College 14. Keyano College 15. Lakeland College 16. Lethbridge Community College 17. Medicine Hat College 18. Mount Royal College 19. NorQuest College 20. Northern Lakes College 21. Olds College 22. Portage College 23. Red Deer College 24. NAIT 25. SAIT 26. Other **[SPECIFY]** _____ 88. Don't know 99. No response

52.	Are you currently a part-time or full-time student? 1. Full-time 2. Part-time 8. Don't know 9. No response
53.	Will these studies lead to a…? **[READ]** 1. Diploma 2. Full time certificate 3. Part time/extension certificate 4. Applied degree 5. Undergraduate degree 6. Graduate degree 7. Professional School (e.g. Law, Dentistry, Medicine) 8. Professional designation (e.g. CMA – Certified Management Accounting designation) 9. Other **[SPECIFY]** _____ 88. Don't know 99. No response

The next questions ask about financial assistance you may have accessed as a student.

54.	Have you ever received government-sponsored student loans? 1. Yes 2. No → **GO TO Q56** 8. Don't know → **GO TO Q56** 9. No response → **GO TO Q56**
55.	At the time of your graduation, approximately how much did you owe from all government sponsored student loans accumulated during your entire post-secondary education? _____ **[$ Amount owed]** 888888. Don't know 999999. No response
56.	Have you ever received scholarships, grants or bursaries? 1. Yes 2. No → **GO TO Q58** 8. Don't know → **GO TO Q58** 9. No response → **GO TO Q58**
57.	How much did you receive in scholarships, grants and/or bursaries during your post-secondary studies? $_____ 888888. Don't know 999999. No response

58.	Have you ever received non-government sources of financing for education-related expenses? **[SURVEYOR NOTE: READ ONLY IF RESPONDENT REQUIRES CLARIFICATION]** (i.e. bank loans, credit cards, credit lines, loans from relatives, etc)? 1. Yes 2. No → **GO TO Q60** 8. Don't know → **GO TO Q60** 9. No response → **GO TO Q60**
59.	At the time of your graduation, approximately what did you owe as a result of education-related borrowing from *all non-government* sources? This amount does **NOT** include what you owe for government sponsored student loans. _____ **[$ Amount]** 888888. Don't know 999999. No response

These final questions will give us a better picture of graduates who took part in this study.

60.	What is your gender? **[DO NOT ASK]** 1. Male 2. Female 8. Don't know 9. No response
61.	What is your current age? _____ years 888. Don't know 999. No response
62.	What was your marital status when you started _____ (program name)? Were you …? 1. Single (never married) 2. Married or living with partner 3. Divorced/Separated/Widowed 88. Don't know 99. No response
63.	When you started _____(program name) for how many dependents (including dependent adults) were you responsible? _____ 88. Don't know 99. No response

64.	Do you consider yourself to be an Aboriginal person? 1. Yes 2. No → **GO TO Q66** 8. Don't know → **GO TO Q66** 9. No response → **GO TO Q66**
65.	Are you? **[READ]** 1. Status Indian 2. Non-status Indian 3. Inuit 4. Métis 5. Other _____ 88. Don't know 99. No response
66.	Do you consider yourself to be a person with a disability (that is, someone with a long-term physical or mental condition that limits the kind or amount of paid work that they can do)? 1. Yes 2. No → **GO TO Q68** 8. Don't know→ **GO TO Q68** 9. No response → **GO TO Q68**
67.	What is the nature of your disability? _____ 88. Don't know 99. No response
68.	What is/was the highest level of education attained by your parents or guardians? **[DO NOT READ CATEGORIES]** 1. Elementary or junior high school 2. Some high school 3. Completed high school 4. Some post-secondary 5. Completed college, technical institute or apprenticeship program 6. Completed university degree 7. Other **[SPECIFY]** _____ 88. Don't know 99. No response
69.	Is there anything about your education or work experience that you would like to add, for example, any information about your experience that has not been covered in this interview? _____ 888. Don't know 999. No response

70.	To thank you for participating in this survey we would like to enter your name into a draw for the chance to win a Palm Pilot. Would you like your name to be entered at this time? 1. Yes →**GO TO Q71** 2. No → **END SURVEY**
71.	What is the best method for us to reach you if your name is drawn? Please note your information will **ONLY** be used to contact you if you are the winner. *Phone Number:*_____ *Address:* _____ *City:* _____ *Province/State:* _____ *Country:* _____ *Postal Code/ZIP Code:* _____

WE'VE REACHED THE END OF OUR QUESTIONS AND I WOULD LIKE TO THANK YOU VERY MUCH FOR YOUR TIME AND INTEREST.

Appendix Three: Methodology Report

Methodology Report
2004 Alberta Graduates Outcomes Survey

Prepared for
ALBERTA LEARNING

Prepared by:
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Date: June 11, 2004

Appendix Three: Methodology Report

SECTION 1: BACKGROUND AND RESEARCH OVERVIEW

The purpose of Alberta Learning's *2004 Alberta Graduate Outcomes Study* was to collect outcome information from graduates approximately two years after they completed their program of study. The survey was developed to obtain information from graduates regarding their employment, further education, and level of satisfaction with their university, university college, college, or technical institute experience, among other issues.

R.A. Malatest & Associates Ltd. was contracted to administer a telephone and on-line survey to a cohort of graduates of the fall of 2001 and the spring of 2002. Graduates were sampled from the following institutions:

- Athabasca University
- University of Alberta
- University of Calgary
- University of Lethbridge
- Augustana University College
- Canadian University College
- Concordia University College
- King's University College
- Alberta College of Art and Design
- Bow Valley College
- Fairview College
- Grande Prairie Regional College
- Grant MacEwan College
- Keyano College
- Lakeland College
- Lethbridge Community College
- Medicine Hat College
- Mount Royal College
- NorQuest College
- Northern Lakes College
- Olds College
- Portage College
- Red Deer College
- Northern Alberta Institute of Technology (NAIT)
- Southern Alberta Institute of Technology (SAIT)

Research activities completed for this project included modification of the survey instrument, field-testing of the survey, administration of the survey to the full sample of graduates, extensive tracking and tracing activities, as well as cleaning and coding of the raw data files for delivery to the Client. Overall, the Consultant completed 15,622 surveys.

SECTION 2: CONSULTANT ACTIVITIES

The Consultant completed the following specific research activities for this project:

- **Modifications to the survey instrument.** The Consultant developed a report suggesting revisions to the provided survey questions. The Consultant, in discussions with Alberta Learning, modified the survey to explore the issue of student mobility and to enhance the clarity of income related questions. The survey modifications were programmed into the CATI system and further tested to ensure that a general level of comprehension by respondents was achieved.

- **Consolidation of a survey sample.** To facilitate the sampling process, institutions were sent a file structure outlining the order of key variables to be sent to the Consultant. Upon collection of the data sets from the institutions, the Consultant created a randomized sample file and uploaded the information into CATI software. Completion targets were then set at the institutional and field of study levels for the pre-determined level of statistical confidence.

- **Review and field-testing of the survey instrument.** A total of 53 graduates were interviewed from December 17 to December 19, 2003 for the survey field test. This total included at least 10 completions from five different institutions including the University of Alberta, the University of Lethbridge, the Southern Alberta Institute of Technology, Red Deer College, and Keyano College. The field test provided an opportunity to test the timing, clarity, and comprehension of the questions. Minor changes to the survey response options were made as a result of the feedback from the field test. As the changes to the survey as a result of the field test were minor, data collected from the field test was incorporated into the final data set.

- **Development of a web-based survey instrument.** After finalization of the survey instrument, the Consultant programmed the survey questions into Callweb to facilitate on-line completions. In cases where an academic institution supplied the e-mail address of a graduate, the Consultant sent an introductory letter explaining the nature of the survey and the contact information necessary to complete the survey on-line or by telephone. In total there were 1,325 survey completions from the on-line survey.

- **Administration of the telephone survey to the full sample.** Full survey administration commenced on January 15 and concluded on April 19, 2004. Using an advanced CATI program (DASH), the Consultant administered the telephone survey to 14,297 graduates from the 25 various academic institutions in the school year of 2001/2002. Each respondent was contacted a minimum of 5 times, when necessary, to obtain a completion. For those individuals who remained in the callback queue due to non-response, the majority had a minimum of 12 contact attempts over a staggered period.

- **Completion of response tracking/enhancement activities.** As the sample file provided by the 25 institutions was up to two and a half years old and graduates are characterized by high mobility, response tracking/enhancement activities were an integral component of this project. Therefore, R.A. Malatest & Associates Ltd. made use of several strategies to ensure that a high number of completions were obtained. These activities included the following:

- provided a toll-free (1-800) number to enable survey participants to complete the survey when convenient for them, as well as to obtain additional information about the survey without incurring any long distance charges;
- utilized directory assistance and the Internet to obtain the latest information about the locations/telephone numbers for those individuals who had moved since the last contact was made. One or two specified surveyors continually accessed Internet databases such as Canada 411 in order to locate "missing" individuals and telephone numbers;
- utilized institutional alumni services lists to update respondents' location/telephone numbers. By obtaining alumni updated information from several institutions, R.A. Malatest & Associates Ltd. was able to locate individuals who may not have been able to be located by other search methods. In addition, the Consultant worked in collaboration with other contacts at the academic institutions to attempt to arrive at new contact information;
- staggered calling patterns (daytime, evenings, weekends) were used to attempt to reach respondents at various times, thereby increasing the probability of contacting, and potentially completing a survey with them;
- well-developed respondent tracing/tracking procedures through DASH software, as well as in-house protocols, were utilized on a consistent basis for contacting graduates. Call tracing procedures such as surveyor identification, lists of dates/times of previous contact attempts, as well as scheduling specific call-back times allowed for surveyors, supervisors, and researchers to identify the various activities used to track respondents;
- utilization of telephone survey staff with multiple language abilities to survey and track respondents through relatives who speak languages other than English;
- incentives were used to encourage response rates and to promote the on-line survey;
- where appropriate, relatives and/or friends/roommates of respondents were asked if they could provide the latest contact information for respondents who were no longer at the available telephone number; and
- the Consultant maximized the efficiency of obtaining survey completions by using surveyors to complete both the survey and tracking activities. Consequently, when a tracking surveyor reached a respondent via tracing methods, the surveyor was able to conduct the survey immediately. By utilizing this form of tracking/surveying, many graduates completed the survey immediately after being traced by the surveyor.

✦ **Monitoring of Targets by Institution, Field of Study and Program.** The Consultant regularly checked its response targets at the institutional, field of study for the four institution types (University, Private College, Public College, Technical Institute) and for the program level. The Consultant placed particular tracing and surveying staffing resources where particular targets were proving more difficult to reach.

✦ **Coding of NAICS/NOC codes and development of raw data files.** Throughout the survey administration, four-digit NAICS/NOC codes were entered in all records that provided valid occupation and industry information. The raw data was cleaned to ensure respondents had answered the questions appropriately and that the skip patterns programmed had worked correctly, as well as to ensure that accurate NAICS and NOC codes were assigned.

- **Accounting for brokered program arrangements.** Brokered arrangements existed between certain institutions whereby a graduate may have taken a program at one institution, although the program was attributable and credited to another institution. These relationships were accounted for in the survey sample by attributing graduate responses to the credentialing institution rather than the host institution.

- **Preparation of final data set for Alberta Learning.** Following the necessary cleaning and coding of the collected data, the Consultant prepared a data set for Alberta Learning in MS Excel and SPSS formats. The database included the data collected for all participating institutions with personal identifiers removed.

- **Preparation of Data Deliverables for all participating institutions.** The Consultant prepared electronic data packages for each institution with the individual institution's data, a copy of the questionnaire/data key, income calculations, descriptions of the file structure, and a codebook describing the coding of open-ended responses. The institutional data only contained information for each specific institution rather than all institutions. All personal identifiers were removed prior to the data being sent to the institutions.

- **Development of a methodology report.** Finally, the Consultant prepared this methodology report highlighting the processes involved in completing the project.

SECTION 3: SURVEY RESULTS AND RESPONSE RATES

In total 15,622 respondents completed the survey (14,297 via telephone and 1,325 on-line). Overall call dispositions and response rates are provided in Table A. Response rates per institution are provided in Table B. The last table (Table C) provides a summary of the completions by field of study by institution type.

Table A

Overall Call Status Dispositions

Gross Sample	Moved Out of North America	Non-qualified*	Valid Sample	Language/ Communication Problem	NIS/Wrong#/ Business/ Fax/Modem	Call backs (busy, no answer, appointment, etc.)	Refusal, Incomplete Survey	Valid Completions and Response Rate
28,025 (100%)	986 (3.5%)	259 (0.9%)	**26,780 (100%)**	42 (0.2%)	6,584 (24.6%)	2,691 (10.0%)	1,841 (6.9%)	**15,622 (58.3%)**

* Non-Qualified = those respondents who stated that they did not attend the institution, and those who are deceased.

Appendix Three: Methodology Report

Table B

Response Rates by Institution

Post-Secondary Institution	Gross Sample	Valid Sample	Overall Completions	Valid Response Rate	Margin of Error *
Universities					
Athabasca University	735	681	412	60%	±3.0%
University of Alberta	6,700	6,336	3,859	61%	±1.0%
University of Calgary	5,158	4,849	2,669	55%	±1.3%
University of Lethbridge	1,409	1,324	765	58%	±2.3%
Private Colleges					
Augustana University College	130	122	93	76%	±5.0%
Canadian University College	58	52	37	71%	±8.7%
Concordia University College	268	261	188	72%	±3.8%
King's University College	112	105	81	77%	±5.2%
Public Colleges					
Alberta College of Art and Design	199	186	122	66%	±5.2%
Bow Valley College	472	468	298 (253)**	64%	±3.4%
Fairview College	205	202	140 (134)**	69%	±4.6%
Grande Prairie Regional College	245	238	153	64%	±4.7%
Grant MacEwan College	1,746	1,653	974 (959)**	59%	±2.0%
Keyano College	387	370	219	59%	±4.2%
Lakeland College	490	469	291	62%	±3.5%
Lethbridge Community College	980	952	578	61%	±2.6%
Medicine Hat College	340	330	208 (231)**	63%	±4.1%
Mount Royal College	1,475	1,414	712 (704)**	50%	±2.6%
NorQuest College	1,007	992	559 (557)**	56%	±2.7%
Northern Lakes College	103	103	62	60%	±7.9%
Olds College	481	473	291	62%	±3.6%
Portage College	188	187	122 (130)**	65%	±5.2%
Red Deer College	518	504	279 (324)**	55%	±3.9%
Technical Institutes					
NAIT	2,851	2,781	1,556	56%	±1.6%
SAIT	1,768	1,728	954	55%	±2.1%
Total	***28,025***	***26,780***	***15,622***	***58%***	***±0.5%***

* At the 95% confidence level, based on valid frame by institution.

** The number in parenthesis reflects the number of graduate completions attributable to each institution before correcting for brokered programs.

Table C

Field of Study by Institution Type Response

Post-Secondary Institution	Gross Sample	Valid Sample	Overall Completions	Valid Response Rate	Margin of Error*
Universities					
Math and Natural Science	3,222	3,037	1,806	59%	±1.5%
Life Sciences	279	266	184	69%	±4.0%
Health and Medical Sciences	1,646	1,586	911	57%	±2.1%
Social Sciences and Related Applications	3,695	3,500	2,117	60%	±1.3%
Arts	1,939	1,791	1,043	58%	±2.0%
Business and Related Studies	2,400	2,248	1,244	55%	±1.9%
General Studies	821	762	400	52%	±3.4%
Private Colleges					
Math and Natural Science	75	70	53	76%	±6.7%
Health and Medical Sciences	19	19	14	74%	±13.8%
Social Sciences and Related Applications	105	100	71	71%	±6.3%
Arts	360	343	256	75%	±3.1%
Business and Related Studies	9	8	5	63%	±28.7%
Public Colleges					
Math and Natural Science	777	761	425	56%	±3.2%
Life Sciences	813	795	494	62%	±2.7%
Health and Medical Sciences	1,871	1,846	1,101	60%	±1.9%
Social Sciences and Related Applications	1,513	1,458	861	59%	±2.1%
Arts	961	919	537	58%	±2.7%
Business and Related Studies	2,260	2,151	1,251	58%	±1.8%
General Studies	641	611	339	55%	±3.6%
Technical Institutes					
Math and Natural Science	2,311	2,269	1,234	54%	±1.9%
Life Sciences	155	154	95	62%	±6.2%
Health and Medical Sciences	461	447	259	58%	±4.0%
Social Sciences and Related Applications	77	76	48	63%	±8.6%
Arts	337	329	189	57%	±4.7%
Business and Related Studies	1,278	1,234	685	56%	±2.5%
Total	***28,025***	***26,780***	***15,622***	***58%***	***±0.5%***

* At the 95% confidence level, based on valid frame by institution.

SECTION 4: RECOMMENDATIONS

The following identifies several methodological challenges, and includes recommendations for handling these challenges in future waves of the survey:

- Smaller institutions were often found to have high rates of student mobility, which compromised response rates. The information provided to the Consultant was collected two years previous, therefore, many cases were found to have out-of-date contact information. To compensate for this, the Consultant would recommend that small institutions undertaken a consistent system of follow-up with graduates at six month or one year intervals to obtain updated contact information. This follow-up process may be facilitated with greater numbers of student e-mail addresses.
- Prior to the commencement of the project, Alberta Learning requested the number of graduates eligible for the study from each participating institution. The number of graduates expected in the data files from the institutions differed from the number obtained by the Consultant. In future waves of the project, it would be beneficial to have greater institutional controls to protect against such variances.
- Brokered arrangements were found to exist between institutions, which led to complications in setting institutional quotas. It would be beneficial to identify brokered programs, and their impact on quotas, during the initial creation of the survey sample files.
- The departmental contact information provided in the student survey sample did not prove to be useful and led to confusion on the part of the institutions. The utility of the information was limited and the field was not employed to track graduates. The Consultant suggests removing these fields from the information requested of the institutions.
- Due to the popularity of the on-line survey, the Consultant recommends obtaining the e-mail addresses of graduates to facilitate the distribution of email cover letters promoting the on-line survey. Through an on-line survey, the respondents were able to access the questionnaire at a time convenient for them. The survey was password protected, however, graduates were allowed to access their survey multiple times in order to complete their questionnaire starting where they left off in their last log-in.
- It was found that certain institutions had independent offices for registrar and alumni graduate information. Where available, alumni contact information could be made more readily available through greater coordination between institutional departments.

Appendix Four: Composition of Fields of Study

Composition of Fields of Study

Fields of study used for analysis are based on the Alberta Learning Program Registry System (PRS). PRS categorizes programs as follows:

Program Class (pgmclass)	Program Class Name (pgm_classname)
000000	Not Assigned
100000	**MATH AND NATURAL SCIENCE**
110000	PURE SCIENCE
111000	Math Disciplines
112000	Physical Science Disciplines
113000	Computing Science
115000	Geology/Earth Sciences
116000	Chemistry
117000	Physics
120000	CIVIL ENGINEERING, CONSTRUCTION, DESIGN RELATED TECHNOLOGY
121000	Architecture and Environmental Design
122000	Drafting
123000	Surveying
124000	Construction
125000	Civil Engineering
126000	Geography and Regional Planning
127000	Environmental Engineering
130000	CHEMICAL ENGINEERING AND RESOURCE RELATED TECHNOLOGY
131000	Chemical and Industrial Process
132000	Mineral Resources
133000	Petroleum Resources
134000	Natural Resources Related Management
140000	ELECTRICAL ENGINEERING AND RELATED TECHNOLOGY
141000	Electrical Engineering Related
142000	Electronics and Microelectronics Related
143000	Electrician
144000	Electrical Maintenance and Repair
145000	Computer Engineering
150000	MECHANICAL ENGINEERING AND RELATED TECHNOLOGY
151000	Aircraft Related
152000	Automotive Related
153000	Piping and Related
154000	Mechanical Engineering
155000	Transport Related
156000	Flight Training
160000	OTHER ENGINEERING AND RELATED
161000	General Engineering
162000	Meteorological Studies
163000	Trade Related Upgrading
200000	**LIFE SCIENCES**
210000	RENEWABLE RESOURCES
211000	Environmental Science
212000	Forest Related
213000	Water Related

Appendix Four: Composition of Fields of Study

214000	General Resources Management
220000	BIOLOGICAL SCIENCES AND RELATED TECHNOLOGY
221000	Traditional Biological Disciplines
222000	Marine Sciences
223000	Biological Technologies
224000	Biology/Microbiology
225000	Genetics
226000	Ecology/Environmental Biology
227000	Biochemistry
228000	Botany
229000	Zoology
230000	AGRICULTURE
231000	Business
232000	Technology
233000	Animals
234000	Plants
235000	General Agriculture
236000	Food Processing
237000	Food Science
240000	HOME ECONOMICS AND RELATED
241000	Home Economics General
242000	Food Related
243000	Clothing and Textiles
300000	**HEALTH AND MEDICAL SCIENCES**
310000	PHYSICAL EDUCATION AND RECREATION RELATED
311000	Physical Education General
312000	Sports Instruction/Training
313000	Recreation Administration
314000	Sports Health and Safety
320000	MEDICINE
321000	Basic Medical Practice
322000	Medical Science Disciplines
323000	Medical Technology
324000	Physiology
325000	Anatomy and Cell Biotechnology
326000	Neuroscience
327000	Pharmaceutical Science
328000	Psychiatry
330000	REHABILITATION
331000	Physical Therapy
332000	Occupational Therapy
333000	Speech Therapy
334000	Alternative Therapy
335000	Respiratory Therapy
336000	Health Technology
340000	NURSING
341000	Basic Nursing
342000	Psychological Nursing
343000	Speciality Nursing and Upgrading

Appendix Four: Composition of Fields of Study

344000	Home/Residential Care
350000	DENTAL RELATED
351000	Dentistry
352000	Hygiene
353000	Dental Assisting
354000	Dental Technology
360000	COMMUNITY SERVICE RELATED
361000	Emergency Medical
362000	Pharmacy Related
363000	Public Health/Hygiene
400000	**SOCIAL SCIENCES AND RELATED APPLICATIONS**
410000	SOCIAL SCIENCE DISCIPLINES
411000	Anthropology
412000	Economics
413000	Psychology
414000	Political Science
415000	Sociology
416000	Other Social Science Disciplines
420000	EDUCATION AND PERSONAL DEVELOPMENT
421000	Teacher Training
422000	Administration
423000	Clinical/Psychological Related
424000	Other Education Specialities
425000	Child Care
426000	Other Instructor Training
430000	SOCIAL AND COMMUNITY SERVICES
431000	Individual Case Counselling, Social Welfare
432000	Social Service, Family/Community Support
433000	Services for the Disabled
434000	Other Community Services
440000	LAW AND RELATED
441000	Law
442000	Enforcement
443000	Corrections
444000	Legal Support
500000	**ARTS**
510000	COMMUNICATIONS
511000	Broadcasting
512000	Writing
513000	Printing Services
514000	Public Relations
515000	Library Related
516000	Communications, General
520000	FINE AND APPLIED ARTS
521000	Music
522000	Drama
523000	Art
524000	Dance
525000	Graphic Art/Visual Communication

Appendix Four: Composition of Fields of Study

526000	Other Arts Related
527000	Arts Administration
528000	Industrial Design
530000	HUMANITIES DISCIPLINES
531000	English
532000	Languages/Literature
533000	Area Studies
534000	History/Classics
535000	Philosophy/Religion
536000	French Related
537000	Linguistics
539000	Other Humanities Studies
600000	**BUSINESS AND RELATED STUDIES**
610000	MANAGEMENT
611000	Business Administration
612000	Marketing
613000	Personnel
614000	Finance/Accounting
615000	Hospitality
616000	Public Administration
617000	Other Management
620000	CLERICAL
621000	Bookkeeping/Accounting
622000	Secretary/Office Management
623000	Clerk Typist/Word Processor Operator
624000	Banking
625000	Warehousing
630000	SERVICES
631000	Food Services
632000	Public Transportation
633000	Personal Care
634000	Merchandising/Sales
635000	Travel
636000	Property Management
637000	Maintenance/Cleaning
640000	INFORMATION TECHNOLOGY
641000	Management Science
642000	PC User Training
700000	**GENERAL STUDIES**
711000	Job/Life Skills
712000	ESL
720000	INTERDISCIPLINARY STUDIES
721000	Native Studies
722000	General Studies/General Arts and Science
723000	Inter-disciplinary Studies
724000	Unclassified/No Program
725000	Women's Studies

Appendix Five: Analysis of "Very Satisfied" Responses

Satisfaction With the Overall Quality of Their Educational Experience

- Nearly 29 % of the graduates were very satisfied with the overall quality of their educational experience.
    - o 25.4% of the males and 31.1% of the females were very satisfied with the quality of their educational experience.

16b. How satisfied are you with the overall quality of your educational experience? Would you say...?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	209	1.3	1.3	1.3
	Dissatisfied	773	4.9	5.0	6.3
	Neither satisfied or dissatisfied	2279	14.6	14.6	20.9
	Satisfied	7833	50.1	50.2	71.1
	Very satisfied	4512	28.9	28.9	100.0
	Total	15606	99.9	100.0	
Missing	Don't Know	3	0.0		
	No response	13	0.1		
	Total	16	0.1		
Total		15622	100.0		

16b. How satisfied are you with the overall quality of your educational experience? Would you say...?

60. What is your gender? [DO NOT ASK]			Frequency	Percent	Valid Percent	Cumulative Percent
Male	Valid	Very dissatisfied	87	1.4	1.4	1.4
		Dissatisfied	340	5.6	5.6	7.1
		Neither satisfied or dissatisfied	965	16.0	16.0	23.1
		Satisfied	3113	51.5	51.5	74.6
		Very satisfied	1534	25.4	25.4	100.0
		Total	6039	100.0	100.0	
	Missing	Don't Know	1	0.0		
		No response	2	0.0		
		Total	3	0.0		
	Total		6042	100.0		
Female	Valid	Very dissatisfied	122	1.3	1.3	1.3
		Dissatisfied	433	4.5	4.5	5.8
		Neither satisfied or dissatisfied	1314	13.7	13.7	19.5
		Satisfied	4720	49.3	49.3	68.9
		Very satisfied	2978	31.1	31.1	100.0
		Total	9567	99.9	100.0	
	Missing	Don't Know	2	0.0		
		No response	11	0.1		
		Total	13	0.1		
	Total		9580	100.0		

- By sector, the private university colleges had the highest percentage very satisfied with the overall quality of their educational experience (45.4%); while the universities had the lowest percent very satisfied (22.2%).
- By qualification type, the percentage very satisfied with their overall educational experience was highest for 1 year certificate graduates (40.2%); lowest for 3 or 4 year degree or diploma graduates (21.4%).
- By field of study, General Studies had the highest percentage very satisfied with their overall educational experience (31.2%); Math and Natural Sciences had the lowest percentage (21.9%).

Appendix Five: Analysis of "Very Satisfied" Responses

16b. How satisfied are you with the overall quality of your educational experience? Would you say...?

Institution Type			Frequency	Percent	Valid Percent	Cumulative Percent
Public Colleges	Valid	Very dissatisfied	64	1.3	1.3	1.3
		Dissatisfied	183	3.7	3.7	4.9
		Neither satisfied or dissatisfied	602	12.0	12.0	17.0
		Satisfied	2271	45.3	45.4	62.4
		Very satisfied	1880	37.5	37.6	100.0
		Total	5000	99.8	100.0	
	Missing	No response	8	0.2		
	Total		5008	100.0		
Technical Institutes	Valid	Very dissatisfied	41	1.6	1.6	1.6
		Dissatisfied	140	5.6	5.6	7.2
		Neither satisfied or dissatisfied	364	14.5	14.5	21.7
		Satisfied	1220	48.6	48.7	70.4
		Very satisfied	741	29.5	29.6	100.0
		Total	2506	99.8	100.0	
	Missing	No response	2	0.1		
		Don't Know	2	0.1		
		Total	4	0.2		
	Total		2510	100.0		
Private University Colleges	Valid	Very dissatisfied	1	0.3	0.3	0.3
		Dissatisfied	5	1.3	1.3	1.5
		Neither satisfied or dissatisfied	31	7.8	7.8	9.3
		Satisfied	181	45.4	45.4	54.6
		Very satisfied	181	45.4	45.4	100.0
		Total	399	100.0	100.0	
Universities	Valid	Very dissatisfied	103	1.3	1.3	1.3
		Dissatisfied	445	5.8	5.8	7.1
		Neither satisfied or dissatisfied	1282	16.6	16.6	23.8
		Satisfied	4161	54.0	54.0	77.8
		Very satisfied	1710	22.2	22.2	100.0
		Total	7701	99.9	100.0	
	Missing	No response	3	0.0		
		Don't Know	1	0.0		
		Total	4	0.1		
	Total		7705	100.0		

16b. How satisfied are you with the overall quality of your educational experience? Would you say...?

Type of Qualification			Frequency	Percent	Valid Percent	Cumulative Percent
1 year certificate	Valid	Very dissatisfied	54	1.7	1.7	1.7
		Dissatisfied	121	3.9	3.9	5.7
		Neither satisfied or dissatisfied	379	12.2	12.2	17.9
		Satisfied	1299	41.9	41.9	59.8
		Very satisfied	1244	40.1	40.2	100.0
		Total	3097	99.9	100.0	
	Missing	No response	4	0.1		
	Total		3101	100.0		
1 or 2 year Diploma	Valid	Very dissatisfied	46	1.1	1.1	1.1
		Dissatisfied	191	4.6	4.6	5.7
		Neither satisfied or dissatisfied	544	13.0	13.1	18.8
		Satisfied	2064	49.5	49.6	68.3
		Very satisfied	1318	31.6	31.7	100.0
		Total	4163	99.8	100.0	
	Missing	No response	6	0.1		
		Don't Know	2	0.0		
		Total	8	0.2		
	Total		4171	100.0		
3 or 4 year Degree/Diploma	Valid	Very dissatisfied	90	1.3	1.3	1.3
		Dissatisfied	410	5.9	5.9	7.2

Appendix Five: Analysis of "Very Satisfied" Responses

		Neither satisfied or dissatisfied	1204	17.3	17.3	24.4
		Satisfied	3777	54.1	54.2	78.6
		Very satisfied	1492	21.4	21.4	100.0
		Total	6973	100.0	100.0	
	Missing	No response	2	0.0		
		Don't Know	1	0.0		
		Total	3	0.0		
	Total		6976	100.0		
Master's	Valid	Very dissatisfied	12	1.0	1.0	1.0
		Dissatisfied	47	3.9	3.9	4.9
		Neither satisfied or dissatisfied	129	10.7	10.7	15.6
		Satisfied	615	51.1	51.2	66.8
		Very satisfied	399	33.2	33.2	100.0
		Total	1202	99.9	100.0	
	Missing	No response	1	0.1		
	Total		1203	100.0		
PhD	Valid	Very dissatisfied	7	4.1	4.1	4.1
		Dissatisfied	4	2.3	2.3	6.4
		Neither satisfied or dissatisfied	23	13.5	13.5	19.9
		Satisfied	78	45.6	45.6	65.5
		Very satisfied	59	34.5	34.5	100.0
		Total	171	100.0	100.0	

16b. How satisfied are you with the overall quality of your educational experience? Would you say...?

surveysubj			Frequency	Percent	Valid Percent	Cumulative Percent
Math and Natural Sciences	Valid	Very dissatisfied	62	1.8	1.8	1.8
		Dissatisfied	218	6.2	6.2	8.0
		Neither satisfied or dissatisfied	577	16.4	16.4	24.3
		Satisfied	1892	53.7	53.7	78.1
		Very satisfied	773	21.9	21.9	100.0
		Total	3522	99.9	100.0	
	Missing	Don't Know	1	0.0		
		No response	1	0.0		
		Total	2	0.1		
	Total		3524	100.0		
Life Sciences	Valid	Very dissatisfied	6	0.8	0.8	0.8
		Dissatisfied	28	3.6	3.6	4.4
		Neither satisfied or dissatisfied	98	12.7	12.7	17.1
		Satisfied	411	53.2	53.2	70.2
		Very satisfied	230	29.8	29.8	100.0
		Total	773	100.0	100.0	
Health and Medical Sciences	Valid	Very dissatisfied	33	1.4	1.4	1.4
		Dissatisfied	103	4.5	4.5	6.0
		Neither satisfied or dissatisfied	305	13.3	13.4	19.3
		Satisfied	1045	45.7	45.8	65.1
		Very satisfied	796	34.8	34.9	100.0
		Total	2282	99.9	100.0	
	Missing	No response	3	0.1		
	Total		2285	100.0		
Social Sciences	Valid	Very dissatisfied	49	1.6	1.6	1.6
		Dissatisfied	169	5.5	5.5	7.0
		Neither satisfied or dissatisfied	500	16.1	16.2	23.2
		Satisfied	1501	48.5	48.5	71.7
		Very satisfied	875	28.3	28.3	100.0
		Total	3094	99.9	100.0	
	Missing	Don't Know	1	0.0		
		No response	2	0.1		
		Total	3	0.1		
	Total		3097	100.0		
Arts	Valid	Very dissatisfied	18	0.9	0.9	0.9
		Dissatisfied	113	5.6	5.6	6.5

Appendix Five: Analysis of "Very Satisfied" Responses

		Neither satisfied or dissatisfied	294	14.5	14.5	21.0
		Satisfied	1003	49.5	49.6	70.7
		Very satisfied	593	29.3	29.3	100.0
		Total	2021	99.8	100.0	
	Missing	No response	4	0.2		
	Total		2025	100.0		
Business	Valid	Very dissatisfied	29	0.9	0.9	0.9
		Dissatisfied	103	3.2	3.2	4.2
		Neither satisfied or dissatisfied	398	12.5	12.5	16.7
		Satisfied	1632	51.3	51.4	68.1
		Very satisfied	1015	31.9	31.9	100.0
		Total	3177	99.9	100.0	
	Missing	No response	2	0.1		
	Total		3179	100.0		
General Studies	Valid	Very dissatisfied	12	1.6	1.6	1.6
		Dissatisfied	39	5.3	5.3	6.9
		Neither satisfied or dissatisfied	107	14.5	14.5	21.4
		Satisfied	349	47.2	47.4	68.8
		Very satisfied	230	31.1	31.2	100.0
		Total	737	99.7	100.0	
	Missing	Don't Know	1	0.1		
		No response	1	0.1		
		Total	2	0.3		
	Total		739	100.0		

Appendix Six: Satisfaction Regression Model

Satisfaction With the Quality of Teaching

- 25.7% were very satisfied with the quality of teaching in their program.
    - o 23.2% of the males and 27.2 % of the females were fully satisfied with the quality of teaching in their program.

16a. How satisfied are you with the quality of teaching in your program? Would you say...?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	272	1.7	1.7	1.7
	Dissatisfied	976	6.2	6.3	8.0
	Neither satisfied or dissatisfied	2742	17.6	17.6	25.6
	Satisfied	7577	48.5	48.7	74.3
	Very satisfied	3992	25.6	25.7	100.0
	Total	15559	99.6	100.0	
Missing	Don't Know	20	0.1		
	No response	43	0.3		
	Total	63	0.4		
Total		15622	100.0		

16a. How satisfied are you with the quality of teaching in your program? Would you say...?

			Frequency	Percent	Valid Percent	Cumulative Percent
Male	Valid	Very dissatisfied	125.0	2.1	2.1	2.1
		Dissatisfied	406.0	6.7	6.7	8.8
		Neither satisfied or dissatisfied	1118.0	18.5	18.6	27.4
		Satisfied	2980.0	49.3	49.5	76.8
		Very satisfied	1396	23.1	23.2	100.0
		Total	6025	99.7	100.0	
	Missing	Don't Know	4	0.1		
		No response	13	0.2		
		Total	17	0.3		
	Total		6042	100.0		
Female	Valid	Very dissatisfied	147	1.5	1.5	1.5
		Dissatisfied	570	5.9	6.0	7.5
		Neither satisfied or dissatisfied	1624	17.0	17.0	24.6
		Satisfied	4597	48.0	48.2	72.8
		Very satisfied	2596	27.1	27.2	100.0
		Total	9534	99.5	100.0	
	Missing	Don't Know	16	0.2		
		No response	30	0.3		
		Total	46	0.5		
	Total		9580	100.0		

- By sector, the percentage of graduates very satisfied with the quality of teaching in their program was highest for the private university colleges (48.4%); lowest for the universities (17.2%)
- By qualification type, those who graduated with a one-year certificate had the highest percentage very satisfied with the quality of teaching (40.8%) while those graduating with a three or four year degree or diploma had the lowest percentage (17.5%).
- By field of study, those in General Studies had the highest percentage very satisfied with the quality of teaching (31.8%), while those in Math and Natural Sciences had the lowest percentage (18.1%).

Appendix Six: Satisfaction Regression Model

16a. How satisfied are you with the quality of teaching in your program? Would you say...?

Institution Type			Frequency	Percent	Valid Percent	Cumulative Percent
Public Colleges	Valid	Very dissatisfied	93	1.9	1.9	1.9
		Dissatisfied	222	4.4	4.5	6.3
		Neither satisfied or dissatisfied	661	13.2	13.3	19.6
		Satisfied	2158	43.1	43.3	62.9
		Very satisfied	1846	36.9	37.1	100.0
		Total	4980	99.4	100.0	
	Missing	Don't Know	5	0.1		
		No response	23	0.5		
		Total	28	0.6		
	Total		5008	100.0		
Technical Institutes	Valid	Very dissatisfied	51	2.0	2.0	2.0
		Dissatisfied	162	6.5	6.5	8.5
		Neither satisfied or dissatisfied	450	17.9	18.0	26.5
		Satisfied	1208	48.1	48.2	74.7
		Very satisfied	635	25.3	25.3	100.0
		Total	2506	99.8	100.0	
	Missing	Don't Know	3	0.1		
		No response	1	0.0		
		Total	4	0.2		
	Total		2510	100.0		
Private University Colleges	Valid	Very dissatisfied	1	0.3	0.3	0.3
		Dissatisfied	6	1.5	1.5	1.8
		Neither satisfied or dissatisfied	31	7.8	7.8	9.5
		Satisfied	168	42.1	42.1	51.6
		Very satisfied	193	48.4	48.4	100.0
		Total	399	100.0	100.0	
Universities	Valid	Very dissatisfied	127	1.6	1.7	1.7
		Dissatisfied	586	7.6	7.6	9.3
		Neither satisfied or dissatisfied	1600	20.8	20.8	30.1
		Satisfied	4043	52.5	52.7	82.8
		Very satisfied	1318	17.1	17.2	100.0
		Total	7674	99.6	100.0	
	Missing	Don't Know	12	0.2		
		No response	19	0.2		
		Total	31	0.4		
	Total		7705	100.0		

16a. How satisfied are you with the quality of teaching in your program? Would you say...?

Type of Qualification			Frequency	Percent	Valid Percent	Cumulative Percent
1 year certificate	Valid	Very dissatisfied	76	2.5	2.5	2.5
		Dissatisfied	137	4.4	4.5	6.9
		Neither satisfied or dissatisfied	387	12.5	12.6	19.5
		Satisfied	1220	39.3	39.7	59.2
		Very satisfied	1256	40.5	40.8	100.0
		Total	3076	99.2	100.0	
	Missing	Don't Know	5	0.2		
		No response	20	0.6		
		Total	25	0.8		
	Total		3101	100.0		
1 or 2 year Diploma	Valid	Very dissatisfied	62	1.5	1.5	1.5
		Dissatisfied	228	5.5	5.5	7.0
		Neither satisfied or dissatisfied	668	16.0	16.0	23.0
		Satisfied	2030	48.7	48.8	71.8
		Very satisfied	1175	28.2	28.2	100.0
		Total	4163	99.8	100.0	
	Missing	Don't Know	3	0.1		
		No response	5	0.1		
		Total	8	0.2		

Appendix Six: Satisfaction Regression Model

	Total		4171	100.0		
3 or 4 year Degree/Diploma	Valid	Very dissatisfied	117	1.7	1.7	1.7
		Dissatisfied	549	7.9	7.9	9.6
		Neither satisfied or dissatisfied	1449	20.8	20.8	30.4
		Satisfied	3618	51.9	52.1	82.5
		Very satisfied	1218	17.5	17.5	100.0
		Total	6951	99.6	100.0	
	Missing	Don't Know	11	0.2		
		No response	14	0.2		
		Total	25	0.4		
	Total		6976	100.0		
Master's	Valid	Very dissatisfied	13	1.1	1.1	1.1
		Dissatisfied	55	4.6	4.6	5.7
		Neither satisfied or dissatisfied	191	15.9	15.9	21.6
		Satisfied	631	52.5	52.6	74.2
		Very satisfied	309	25.7	25.8	100.0
		Total	1199	99.7	100.0	
	Missing	Don't Know	1	0.1		
		No response	3	0.2		
		Total	4	0.3		
	Total		1203	100.0		
PhD	Valid	Very dissatisfied	4	2.3	2.4	2.4
		Dissatisfied	7	4.1	4.1	6.5
		Neither satisfied or dissatisfied	47	27.5	27.6	34.1
		Satisfied	78	45.6	45.9	80.0
		Very satisfied	34	19.9	20.0	100.0
		Total	170	99.4	100.0	
	Missing	No response	1	0.6		
	Total		171	100.0		

16a. How satisfied are you with the quality of teaching in your program? Would you say...?

surveysubj			Frequency	Percent	Valid Percent	Cumulative Percent
Math and Natural Sciences	Valid	Very dissatisfied	80	2.3	2.3	2.3
		Dissatisfied	285	8.1	8.1	10.4
		Neither satisfied or dissatisfied	778	22.1	22.1	32.5
		Satisfied	1737	49.3	49.4	81.9
		Very satisfied	636	18.0	18.1	100.0
		Total	3516	99.8	100.0	
	Missing	Don't Know	2	0.1		
		No response	6	0.2		
		Total	8	0.2		
	Total		3524	100.0		
Life Sciences	Valid	Very dissatisfied	7	0.9	0.9	0.9
		Dissatisfied	43	5.6	5.6	6.5
		Neither satisfied or dissatisfied	120	15.5	15.5	22.0
		Satisfied	380	49.2	49.2	71.2
		Very satisfied	223	28.8	28.8	100.0
		Total	773	100.0	100.0	
Health and Medical Sciences	Valid	Very dissatisfied	54	2.4	2.4	2.4
		Dissatisfied	154	6.7	6.8	9.2
		Neither satisfied or dissatisfied	340	14.9	15.0	24.2
		Satisfied	1028	45.0	45.4	69.5
		Very satisfied	690	30.2	30.5	100.0
		Total	2266	99.2	100.0	
	Missing	Don't Know	4	0.2		
		No response	15	0.7		
		Total	19	0.8		
	Total		2285	100.0		
Social Sciences	Valid	Very dissatisfied	48	1.5	1.6	1.6
		Dissatisfied	216	7.0	7.0	8.5
		Neither satisfied or	550	17.8	17.8	26.3

Appendix Six: Satisfaction Regression Model

		dissatisfied				
		Satisfied	1509	48.7	48.8	75.2
		Very satisfied	768	24.8	24.8	100.0
		Total	3091	99.8	100.0	
	Missing	Don't Know	4	0.1		
		No response	2	0.1		
		Total	6	0.2		
	Total		3097	100.0		
Arts	Valid	Very dissatisfied	32	1.6	1.6	1.6
		Dissatisfied	127	6.3	6.3	7.9
		Neither satisfied or dissatisfied	330	16.3	16.3	24.2
		Satisfied	943	46.6	46.7	70.9
		Very satisfied	587	29.0	29.1	100.0
		Total	2019	99.7	100.0	
	Missing	Don't Know	3	0.1		
		No response	3	0.1		
		Total	6	0.3		
	Total		2025	100.0		
Business	Valid	Very dissatisfied	40	1.3	1.3	1.3
		Dissatisfied	126	4.0	4.0	5.3
		Neither satisfied or dissatisfied	500	15.7	15.8	21.1
		Satisfied	1639	51.6	51.9	73.0
		Very satisfied	854	26.9	27.0	100.0
		Total	3159	99.4	100.0	
	Missing	Don't Know	5	0.2		
		No response	15	0.5		
		Total	20	0.6		
	Total		3179	100.0		
General Studies	Valid	Very dissatisfied	11	1.5	1.5	1.5
		Dissatisfied	25	3.4	3.4	4.9
		Neither satisfied or dissatisfied	124	16.8	16.9	21.8
		Satisfied	341	46.1	46.4	68.2
		Very satisfied	234	31.7	31.8	100.0
		Total	735	99.5	100.0	
	Missing	Don't Know	2	0.3		
		No response	2	0.3		
		Total	4	0.5		
	Total		739	100.0		

Appendix Six: Satisfaction Regression Model

Ordinal Regression Model

In order to further examine what factors may help predict overall satisfaction with the graduates' post-secondary experiences, an ordinal regression model was developed using a methodology similar to Chau-Kuang and Hughes, 2004.[12]

The survey contained a number of questions pertaining to specific benefits of graduates' programs, and the degree to which their post-secondary experiences added to their skills knowledge and abilities. When these were loaded into the regression model, most of the questions pertaining to their skills knowledge and abilities were not found to be significantly related to overall satisfaction. The only four significant variables from that question set were "problem solving", "self-confidence", "awareness of political issues", and "information management".

As such, the model was revised and the following variables found to be significantly positively correlated with an overall r-square value for the model of .639 were:

1. "Extent to which the program provided you with the following benefits
   - Skills needed for a particular job
   - Knowledge of a particular field of study
   - An opportunity to improve yourself
   - A desire to continue learning more about [a particular] subject
   - Improved employment outcomes"

2. "…Degree to which post-secondary added to skills knowledge and abilities
   - Solve problems
   - Become self-confident
   - Develop an awareness of political and social issues
   - Manage information"

3. "Satisfaction with quality of teaching"
4. "Amount owing from all government debt"
5. "Satisfaction with main job"
6. "How qualified do you feel you are for your main job"
7. "How related is your main job"
8. "Current age"

The SPSS syntax for the model was:

```
PLUM
  q16b  WITH q14a q14b q14c q14e q14f q15a q15f q15j q15r q16a q55 q49 q48 q42c q61
  /CRITERIA = CIN(95) DELTA(0) LCONVERGE(0) MXITER(100) MXSTEP(5) PCONVERGE(1.0E-6)
SINGULAR(1.0E-8)
  /LINK = CLOGLOG
  /PRINT = FIT PARAMETER SUMMARY TPARALLEL
  /SAVE = ESTPROB PREDCAT .
```

[12] Chau-Kuang, C., and Hughes, J. "Using Ordinal Regression Model to Analyze Student Satisfaction Questionnaires". IR Applications, Volume 1, May 26, 2004. Association for Institutional Research. http://airweb.org/page.asp?page=566

Appendix Six: Satisfaction Regression Model

Using this model, various sub-groups of the population were probed, resulting in the following key findings.

- All of the variables remained significant for males, however "developing political awareness" and the relation of main job to program of studies were not significant predictors of overall satisfaction for females.
- All of the variables remained significant predictors of overall satisfaction for university graduates (r-square .679), however only three remained significant for private university college graduates. (The three remaining were "quality of teaching", "manage information", and "knowledge of a particular filed of study".)
- Age and the relation of main job to program of study were not factors in predicting satisfaction for technical school graduates, nor were debt levels, political awareness, or self-confidence.
- Political awareness, relation of studies to main job, and how qualified graduates felt for their main job, were not significantly related to overall satisfaction for graduates of public colleges.
- When the model was run comparing results by qualification type, the model was the strongest predictor for graduates of 3 or 4 year degree/diploma programs, and Master's program graduates. Ten of the variables were not significant for graduates of PhD programs, which is likely indicative of their differing expectations of the post-secondary system.
- Age and political awareness were not significant predictors of overall satisfaction for 1 year certificate and 1 or 2 year diploma graduates.

Appendix Seven: Geographic Transition of Graduates

Geographic Transitions of Graduates

Graduates exact Alberta locations (if they answered "other" to questions 2, 4, and 8) were re-coded into the larger areas reported in the body of the text using the following SPSS syntax:

```
If (q2<>8) URK12=q2.
If (q2=8) URK12= q2icode.
Execute.
VALUE LABELS
/URK12
1 "Edmonton"
2 "Calgary"
3 "Lethbridge"
4 "Red Deer"
5 "Grande Prairie"
6 "Medicine Hat"
7 "Fort McMurray"
8 "Elsewhere in Alberta (please specify)"
9 "Elsewhere in Canada (specify province/territory)"
10 "Outside Canada"
11 "Acadia Valley"
12 "Acme"
13 "Airdrie"
14 "Alberta Beach"
15 "Alcomdale"
16 "Alder Flats"
17 "Alhambra"
18 "Alix"
19 "Alliance"
20 "Altario"
21 "Andrew"
22 "Anzac"
23 "Ardrossan"
24 "Arrowwood"
25 "Ashmont"
26 "Assumption"
27 "Athabasca"
28 "Atmore"
29 "Balzac"
30 "Banff"
31 "Barnwell"
32 "Barons"
33 "Barrhead"
34 "Bashaw"
35 "Bassano"
36 "Bawlf"
37 "Bear Canyon"
38 "Beaumont"
39 "Beaverlodge"
40 "Beiseker"
41 "Bellevue"
42 "Bentley"
43 "Berwyn"
44 "Big Valley"
45 "Bindloss"
46 "Black Diamond"
47 "Blackfalds"
48 "Blackie"
49 "Blood Reserve"
50 "Blue Ridge"
51 "Bon Accord"
52 "Bonanza"
53 "Bonnyville"
54 "Bow Island"
55 "Bowden"
56 "Boyle"
57 "Bragg Creek"
58 "Brant"
59 "Breton"
60 "Brocket"
61 "Brooks"
62 "Brownfield"
63 "Brownvale"
64 "Bruderheim"
65 "Buck Lake"
66 "Burdett"
67 "Busby"
68 "Byemoor"
69 "Calahoo"
70 "Calling Lake"
71 "Calmar"
72 "Camrose"
73 "Cadomin"
74 "Canmore"
75 "Carbon"
76 "Cardston"
77 "Carmangay"
78 "Caroline"
79 "Carstairs"
80 "Carvel"
81 "Castor"
82 "Cayley"
83 "Cereal"
84 "Champion"
85 "Chauvin"
86 "Chestermere"
87 "Chipewyan Lake"
88 "Chipman"
89 "Clairmont"
90 "Claresholm"
91 "Clive"
92 "Clyde"
93 "Coaldale"
94 "Coalhurst"
95 "Cochrane"
96 "Cold Lake"
97 "College Heights"
98 "Condor"
99 "Conklin"
100 "Consort"
101 "Coronation"
102 "Coutts"
103 "Cowley"
104 "Craigmyle"
105 "Cranford"
106 "Cremona"
107 "Cressford"
108 "Crooked Creek"
109 "Crossfield"
110 "Crowsnest Pass"
111 "Czar"
112 "Daysland"
113 "De Winton"
114 "DeBolt"
115 "Del Bonita"
116 "Delburne"
117 "Delia"
118 "Derwent"
119 "Devon"
120 "Dewberry"
121 "Diamond City"
122 "Didsbury"
123 "Dixonville"
124 "Donalda"
125 "Donnelly"
126 "Drayton Valley"
127 "Driftpile"
128 "Drumheller"
129 "Duchess"
130 "Eaglesham"
131 "East Coulee"
132 "Eckville"
133 "Edberg"
134 "Edgerton"
135 "Edson"
136 "Elk Point"
137 "Elkwater"
138 "Elnora"
139 "Empress"
140 "Enchant"
141 "Entwistle"
142 "Erskine"
143 "Etzikom"
144 "Evansburg"
145 "Exshaw"
146 "Fairview"
147 "Falher"
148 "Falun"
149 "Faust"
```

Appendix Seven: Geographic Transition of Graduates

150 "Ferintosh"
151 "Flatbush"
152 "Foremost"
153 "Forestburg"
154 "Fort Assiniboine"
155 "Fort Chipewyan"
156 "Fort MacKay"
157 "Fort Macleod"
158 "Fort Saskatchewan"
159 "Fort Vermilion"
160 "Fox Creek"
161 "Fox Lake"
162 "Gadsby"
163 "Galahad"
164 "Gibbons"
165 "Gift Lake"
166 "Girouxville"
167 "Gleichen"
168 "Glendon"
169 "Glenwood"
170 "Goodfish Lake"
171 "Grand Centre"
172 "Grande Cache"
173 "Granum"
174 "Grassland"
175 "Grassy Lake"
176 "Grimshaw"
177 "Grouard"
178 "Hairy Hill"
179 "Halkirk"
180 "Hanna"
181 "Hardisty"
182 "Hay Lakes"
183 "Hays"
184 "Heinsburg"
185 "Heisler"
186 "High Level"
187 "High Prairie"
188 "High River"
189 "Hilda"
190 "Hill Spring"
191 "Hines Creek"
192 "Hinton"
193 "Hobbema"
194 "Holden"
195 "Hughenden"
196 "Hussar"
197 "Hythe"
198 "Innisfail"
199 "Innisfree"
200 "Irma"
201 "Iron Springs"
202 "Irricana"
203 "Irvine"
204 "Islay"
205 "Jarvie"
206 "Jasper"
207 "Jenner"
208 "Joussard"
209 "Kananaskis"
210 "Keephills"
211 "Keg River"
212 "Killam"
213 "Kinuso"
214 "Kitscoty"
215 "La Crete"
216 "La Glace"
217 "Lac La Biche"
218 "Lacombe"
219 "Lake Louise"
220 "Lamont"
221 "Langdon"
222 "Lavoy"
223 "Leduc"
224 "Legal"
225 "Leslieville"
226 "Linden"
227 "Lloydminster"
228 "Lodgepole"
229 "Lomond"
230 "Longview"
231 "Lougheed"
232 "Lundbreck"
233 "Madden"
234 "Magrath"
235 "Mallaig"
236 "Ma-Me-O Beach"
237 "Manning"
238 "Mannville"
239 "Manyberries"
240 "Marlboro"
241 "Marwayne"
242 "Mayerthorpe"
243 "McLennan"
244 "Meander River"
245 "Medicine Hat"
246 "Milk River"
247 "Millarville"
248 "Millet"
249 "Milo"
250 "Minburn"
251 "Mirror"
252 "Morinville"
253 "Morley"
254 "Morrin"
255 "Mountain View"
256 "Mulhurst"
257 "Mundare"
258 "Myrnam"
259 "Namao"
260 "Nampa"
261 "Nanton"
262 "Neerlandia"
263 "New Dayton"
264 "New Norway"
265 "New Sarepta"
266 "Newbrook"
267 "Nisku"
268 "Niton Junction"
269 "Nobleford"
270 "Nordegg"
271 "Okotoks"
272 "Olds"
273 "Onoway"
274 "Oyen"
275 "Paddle Prairie"
276 "Paradise Valley"
277 "Peace River"
278 "Peerless Lake"
279 "Peers"
280 "Penhold"
281 "Picture Butte"
282 "Pigeon Lake"
283 "Pincher Creek"
284 "Pine Lake"
285 "Plamondon"
286 "Ponoka"
287 "Priddis"
288 "Provost"
289 "Radway"
290 "Rainbow Lake"
291 "Ralston"
292 "Raymond"
293 "Redcliff"
294 "Redwater"
295 "Rimbey"
296 "Riviere Qui Barre"
297 "Robb"
298 "Rochester"
299 "Rocky Mountain House"
300 "Rocky View"
301 "Rockyford"
302 "Rolling Hills"
303 "Rolly View"
304 "Rosalind"
305 "Rosebud"
306 "Rosemary"
307 "Round Hill"
308 "Rumsey"
309 "Rycroft"
310 "Ryley"
311 "Saddle Lake"
312 "Sangudo"
313 "Saskatchewan River Crossing"
314 "Schuler"
315 "Seba Beach"
316 "Sedgewick"
317 "Seven Persons"
318 "Sexsmith"

Appendix Seven: Geographic Transition of Graduates

319 "Sherwood Park"
320 "Sibbald"
321 "Siksika Reserve"
322 "Silver Valley"
323 "Slave Lake"
324 "Smith"
325 "Smoky Lake"
326 "Spirit River"
327 "Springbank"
328 "Spruce Grove"
329 "Spruce View"
331 "St. Albert"
332 "St. Isidore"
333 "St. Michael"
334 "St. Paul"
335 "Stand Off"
336 "Standard"
337 "Stavely"
338 "Stettler"
339 "Stirling"
340 "Stony Plain"
341 "Strathmore"
342 "Strome"
343 "Sturgeon Lake Reserve"
344 "Sundre"
345 "Swan Hills"
346 "Sylvan Lake"
347 "Taber"
348 "Tangent"
349 "Thorhild"
350 "Thorsby"
351 "Three Hills"
352 "Tilley"
353 "Tofield"
354 "Tomahawk"
355 "Torrington"
356 "Trochu"
357 "Trout Lake"
358 "Turin"
359 "Turner Valley"
360 "Two Hills"
361 "Valleyview"
362 "Vauxhall"
363 "Vegreville"
364 "Vermilion"
365 "Veteran"
366 "Viking"
367 "Vilna"
368 "Vimy"
369 "Vulcan"
370 "Wabamun"
371 "Wabasca"
372 "Wainwright"
373 "Walsh"
374 "Wandering River"
375 "Wanham"
376 "Warburg"
377 "Warner"
378 "Warspite"
379 "Waskatenau"
380 "Water Valley"
381 "Welling"
382 "Wembley"
383 "Westlock"
384 "Wetaskiwin"
385 "Whitecourt"
386 "Whitelaw"
387 "Wildwater"
388 "Wildwood"
389 "Willingdon"
390 "Winfield"
391 "Woking"
392 "Worsley"
393 "Wrentham"
394 "Youngstown"
395 "OTHER – Elsewhere in Alberta"
396 "Ardmore"
397 "Armena"
398 "Arva"
399 "Beauvallon"
400 "Bittern Lake"
401 "Bluffton"
402 "Bodo"
403 "Borgendale"
404 "Buffalo Lake"
405 "Bull Island"
406 "Cameron"
407 "Camp Creek"
408 "Carlton"
409 "Caronport"
410 "Cessford"
411 "Chisholm"
412 "Clairview"
413 "Clandonald"
414 "County of Parkland"
415 "Crimean"
416 "Delmas"
417 "Deteram"
418 "Drewville"
419 "Esther"
420 "Finch Creek"
421 "Fishing Lake"
422 "Forestlan"
423 "Fort Kent"
424 "Frog Lake"
425 "Gem"
426 "Glenevis"
427 "Guswetter"
428 "Guy"
429 "Gwynne"
430 "Hamlin"
432 "Hondo"
433 "Iddesleigh"
434 "John D'or Prairie"
435 "Kehiwin Lake"
436 "Kirremuir"
437 "Lakeview"
438 "Leedale"
439 "Lestock"
440 "Lindale"
441 "Lone Pine"
442 "Loon River"
443 "McLaughlin"
444 "McLean"
445 "Meeting Creek"
446 "Metiskow"
447 "Miniota"
448 "Monarch"
449 "Loon River"
450 "Ogden"
451 "Onion Lake Reserve"
452 "Orion"
453 "Outlook"
455 "Parkland County"
456 "Peigan Reserve"
457 "Ranfurly"
458 "Rich Valley"
459 "Rivercourse"
460 "Riverside Bay"
461 "Rockland"
462 "St. Lina"
463 "St. Vincent"
464 "Star"
465 "Stauffer"
466 "Strathcona"
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Appendix Seven: Geographic Transition of Graduates

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Appendix Seven: Geographic Transition of Graduates

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EXECUTE.

VARIABLE LABELS URK12a
'Recoded "Where did student last
attend K-12?"'.
EXECUTE .
VALUE LABELS
/URK12a
1 "Edmonton"
2 "Calgary"
3 "Lethbridge"
4 "Red Deer"
5 "Grande Prairie"
6 "Medicine Hat  "
7 "Fort McMurray"
8 "Edmonton Fringe"
9 "Calgary Fringe"
10 "Edmonton Influenced Rural
Zone"
11 "Calgary Influenced Rural Zone"
12 "Red Deer Influenced Rural
Zone"
13 "Rural Calgary-Red Deer
Corridor"
14 "Rural Edmonton-Red Deer
Corridor"
15 "Rural South of Calgary"
16 "Lethbridge Influenced Rural
Zone"
17 "Medicine Hat Influenced Rural
Zone"
18 "Eastern Alberta"
19 "Jasper Mountain Zone"
20 "Lake Louise/Banff/Kananaskis
Mountain Zone"
21 "Crowsnest Mountain Zone"
22 "West of Edmonton Rural"
23 "Northwest"
24 "Northeast"
99990 "Elsewhere in Canada"
99910 "Outside Canada"
999 "Unknown".
Execute.

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Appendix Seven: Geographic Transition of Graduates

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VARIABLE LABELS URK12b
'Recoded "Where did the student
last attend K-12?"'.
EXECUTE .
VALUE LABELS
/URK12b
1 "Edmonton and Catchment Area"
2 "Calgary and Catchment Area"
3 "Lethbridge and Catchment Area"

4 "Red Deer and Catchment Area"
5 "Grande Prairie"
6 "Medicine Hat  and Catchment
Area"
7 "Fort McMurray"
13 "Calgary to Red Deer Rural"
14 "Edmonton to Red Deer Rural"
18 "Eastern Alberta"
19 "Jasper Mountain Zone"
22 "West of Edmonton Rural"
23 "Northwest"
24 "Northeast"
90 "Elsewhere in Canada"
100 "Outside of Canada"
999 "Unknown".
Execute.
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Appendix Eight: Data Tables

Urban Rural Origins by Sector

Where did respondents last attend K-12 (urban or rural Alberta only)?			Frequency	Percent	Valid Percent	Cumulative Percent
Urban	Valid	Public Colleges	1684	24.6	24.6	24.6
		Technical Institutes	1171	17.1	17.1	41.7
		Private University Colleges	133	1.9	1.9	43.7
		Universities	3856	56.3	56.3	100.0
		Total	6844	100.0	100.0	
Rural	Valid	Public Colleges	1768	39.2	39.2	39.2
		Technical Institutes	809	18.0	18.0	57.2
		Private University Colleges	168	3.7	3.7	60.9
		Universities	1760	39.1	39.1	100.0
		Total	4505	100.0	100.0	
999.00	Valid	Public Colleges	1556	36.4	36.4	36.4
		Technical Institutes	530	12.4	12.4	48.8
		Private University Colleges	98	2.3	2.3	51.1
		Universities	2089	48.9	48.9	100.0
		Total	4273	100.0	100.0	

Where did the graduates reside after graduation (urban or rural Alberta only)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	11851	75.9	86.4	86.4
	Rural	1867	12.0	13.6	100.0
	Total	13718	87.8	100.0	
Missing	Unknown	343	2.2		
	System	1561	10.0		
	Total	1904	12.2		
Total		15622	100.0		

Where did respondents last attend K-12 (urban or rural Alberta only)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	6844	43.8	60.3	60.3
	Rural	4505	28.8	39.7	100.0
	Total	11349	72.6	100.0	
Missing	999.00	4273	27.4		
Total		15622	100.0		

Appendix Eight: Data Tables

Institution Type by Gender Cross-tabulation

			60. What is your gender? [DO NOT ASK]		
			Male	Female	Total
Institution Type	Public Colleges	Count	1488	3520	5008
		%	29.7%	70.3%	100.0%
	Technical Institutes	Count	1461	1049	2510
		%	58.2%	41.8%	100.0%
	Private University Colleges	Count	135	264	399
		%	33.8%	66.2%	100.0%
	Universities	Count	2958	4747	7705
		%	38.4%	61.6%	100.0%
Total		Count	6042	9580	15622
		%	38.7%	61.3%	100.0%

Number of Jobs by Alberta Urban Rural Origins

Number of Jobs they have							
Where did the student end up after grad? (Urban rural Alberta only)			Frequency	Percent	Valid Percent	Cumulative Percent	
Missing/Not Alberta	Valid	One job	1058	82.14286	82.3	82.27061	
		More than one job	228	17.70186	17.7	100	
		Total	1286	99.84472	100.0		
	Missing	System	2	0.15528			
	Total		1288	100			
Urban	Valid	One job	8157	79.6582	79.7	79.74387	
		More than one job	2072	20.23438	20.3	100	
		Total	10229	99.89258	100.0		
	Missing	System	11	0.107422			
	Total		10240	100			
Rural	Valid	One job	1329	80.69217	80.8	80.79027	
		More than one job	316	19.1864	19.2	100	
		Total	1645	99.87857	100.0		
	Missing	System	2	0.121433			
	Total		1647	100			

Appendix Eight: Data Tables

Number of Jobs by Field of Study

FIELDOFSTUDY * Number of Jobs they have Crosstabulation					
			Number of Jobs they have		Total
			One job	More than one job	
FIELDOFSTUDY	Arts	Count	1187	457	1644
		%	72.2	27.8	100
	Business And Related Studies	Count	2356	453	2809
		%	83.8	16.1	100
	General Studies	Count	467	134	601
		%	77.7	22.3	100
	Health And Medical Sciences	Count	1610	521	2131
		%	75.5	24.4	100
	Life Sciences	Count	498	133	631
		%	78.9	21.0	100
	Math And Natural Science	Count	2542	385	2927
		%	86.8	13.1	100
	Social Sciences And Related Applications	Count	2146	595	2741
		%	78.2	21.7	100
Total		Count	10806	2678	13484
		%	80.1	19.8	100

Employment Rates, Unemployment Rates, Participation, and Labour Force by Sector

	LABOUR FORCE	Employment Rate	Unemployment Rate	PARTICIPATION
Public Colleges	4587	94.3%	5.7%	91.6%
Technical Institutes	2355	93.5%	6.5%	93.8%
Universities	7025	94.7%	5.3%	91.2%
Private University Colleges	339	94.4%	5.6%	85.0%