

AET FACTS AND FIGURES

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INVESTMENT IN RESEARCH & INNOVATION

Research Revenue Attracted by Alberta Universities

Total sponsored research revenue attracted by Alberta universities is an indicator of the value and importance of research at Alberta universities. The funding sources include the provincial government, industry, non-profit organizations and the federal government. Sponsored research revenues are those received outside of the university base operating grant and include both research grants and research contracts. This performance measure reflects research capability in Alberta through the success of its major universities in attracting sponsored research funding from several sources.

The data is provided to Advanced Education and Technology by the University of Alberta, University of Calgary, University of Lethbridge and Athabasca University. The universities submit the data using a template and guidelines, which outline the information required and specific instructions about how the revenue should be reported. This ensures the data submitted are comparable across universities. The universities derive the data from audited financial statements and supplementary schedules.

The reported data is compiled and analyzed by Advanced Education and Technology in the *Research Funding at Alberta Universities Report* published by the University Research and Strategic Investments branch of Advanced Education and Technology. The 2006-07 report is available online at http://www.technology.gov.ab.ca/kr/one.cfm?workspace_id=128427&object_id=130539&tab=object_view.

Research Revenue Attracted by Alberta Colleges and Technical Institutes

Total sponsored research revenue attracted by Alberta technical institutes and colleges measures the growth of the research capacity and capability of technical institutes and colleges in the province.

The data reported is based on standardized sponsored research reporting templates submitted by each institution to the Ministry of Advanced Education and Technology. Questions from the institutions about the guidelines, reporting of data and the final data collection are directed to a representative of Advanced Education and Technology. The data are compiled by the department representative and verified by a manager before it is audited by the Office of the Auditor General and reported in the Advanced Education and Technology 2007-08 annual report.

Alberta Business Expenditures on Research and Development

Business expenditure on research and development data comes from Statistics Canada's report, *Scientific Statistics*, published in December 2007. Catalogue 88-001-X at <http://www.statcan.ca/english/freepub/88-001-XIE/88-001-XIE2007008.pdf>

Statistics Canada obtains R&D data from research performers. The data is gathered annually by Statistics Canada using surveys of businesses. The funding data reported here is the amount of research and development funding provided by businesses. Provincial level data, including Alberta's data, lags by two years due to the information gathering and analysis process. The data is collected annually by Statistics Canada. As funding is a dynamic process, Statistics Canada updates its data as information becomes available.

The Government of Alberta accepts Statistics Canada's quality assurance and data accuracy. Additional information on Statistics Canada's methodology can be found at: <http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=4201&lang=en&db=IMDB&dbg=f&adm=8&dis=2>

Number of Graduate Students

Alberta Advanced Education and Technology recognizes the importance of participating in graduate level post-secondary programs. Having people with the right skills and knowledge is what will drive Alberta's economy and position Alberta for success.

A graduate student is defined as a person enrolled in a program leading towards a master or doctoral level degree as well as those enrolled in post degree certificate and diploma programs containing courses that are equivalent to those offered in masters or doctoral programs. This measure presents a headcount of graduate students studying in Alberta. The measure does not differentiate between part-time and full-time students or between masters, PhD and post doctorate students. A student participating in a graduate level course counts as one student. Data comes from the Learner Enrollment Reporting System (LERS) (See Databases for more information on LERS).

Graduate students studying in the priority areas are those that are registered in graduate programs most directly related to energy, life sciences, nanotechnology and information and communications technology. Programs were analyzed for fit by an internal working group. Graduate programs such as Medicine M.D. and dentistry that are not graduate programs but first professional degree programs were omitted from the count.

Government of Alberta Expenditures on Scientific and Innovative Activities

Innovation comprises science and technology (S&T) and other sources of new ideas that lead to new and improved products and services. S&T comprises of research and development and related science activities, which are reported annually by all Government of Alberta (GOA) ministries in a Statistics Canada report. The most recent report is *Scientific Activities of the Government of Alberta 2006-07 and 2007-08 Estimates Survey Results*, May 2008.

The information is reported annually by all Government of Alberta departments. Statistics Canada, under contract with Advanced Education and Technology, collects the research and development and related scientific activity data from GOA departments following internationally accepted guidelines and definitions, documented in the Frascati manual by the Organization for Economic Co-operation and Development.

iCORE Awards

The measure is a summary of the data from contracts iCORE has with the universities to fund Major Awards and Graduate Student Awards. An electronic database of contract information is maintained which generates reports on counts of contracts and individuals.

Major Awards include: research chairs, research professors and industry research chairs. In the case of a co-award, where two people share a major award, this is counted as two awards as there are two people who receive the title and funding. In 2007-08, there was one co-award. In instances where one person

received two awards (a research chair and an industry chair), each award is counted separately. In 2007-08, there were two people who each received two awards for a total of four awards.

iCORE has board-approved criteria and processes for granting graduate student awards. For each graduate student, the criteria are checked and the award is made.

Technology Commercialization

Canadian Venture Capital Invested in Alberta

Venture capital is a measure of the capacity available to support an innovative and globally competitive economy. The ministry's ability to impact venture capital investment is limited; however, the ministry is taking action to increase venture capital investment in the province.

Data on Canadian venture capital comes from the VCAlyst system provided by Thomson Financial, the premiere source of venture capital information in Canada, at <http://www.canadavc.com>. The amount of VC funds invested in Canada and the provinces is collected within the following parameters:

- Data are collected for Quarters 1, 2, 3 and 4 of Year One.
- Data are collected for both new funding and follow-on funding.
- Data are collected for the life sciences, information and communications, and other technology (energy and environmental).
- Data are not collected for traditional industries (i.e. retail and manufacturing).
- Data are collected for early stage deals (seed and start-up) and expansion stage deals.
- Data are not collected for later stage deals (mezzanine, turnaround, etc.).
- Data are collected for all size deals (i.e. \$500,000 through \$5 million).

The data is stored in a dynamic database, which can have data added to earlier periods at a later date. Thus, data can be more accurate at later dates when additional information becomes available. Data for 2007 was retrieved from the system on June 20, 2008.

Knowledge-Intensive Companies

The number and proportion of knowledge-intensive companies in Alberta is an indicator of the scope of the knowledge-intensive sector. Data on knowledge-intensive companies comes from Statistics Canada's *Canadian Business Patterns*.

Knowledge-intensive companies are those that develop products or services from advanced technological research or base their activities on the application of advanced knowledge. Knowledge-intensive companies were defined here using the North American Industry Classification System (NAICS) codes for the sectors of interest.

The following NAICS codes comprise the High-Technology Sector:

- 3254 Pharmaceutical and Medicine Manufacturing
- 334 Computer and Electronic Manufacturing
- 3353 Electrical Equipment Manufacturing
- 3359 Other Electrical Equipment and Component Manufacturing

- 3364 Aerospace Product and Parts Manufacturing
- 5112 Software Publishers
- 5152 Pay and Specialty Television
- 516 Internet Publishing and Broadcasting
- 517 Telecommunications
- 5182 Data Processing, Hosting and Related Services
- 5191 Other Information Services
- 5413 Architectural, Engineering and Related Services
- 5415 Computer Systems Design and Related Services
- 5416 Management, Scientific and Technical Consulting Services
- 5417 Scientific Research and Development Services
- 6215 Medical and Diagnostic Laboratories
- 8112 Electronic and Precision Equipment Repair and Maintenance

Only active companies were used in the analysis. Businesses are assigned an inactive status on the Business Registry when neither a GST or payroll remittance has been made by these businesses for 12 consecutive months (24 months for GST quarterly and annual remitters).

Albertans Employed in Knowledge-Intensive Companies

The number and percentage of employees in knowledge-based (high-tech) companies is a measure of Alberta's research and innovation capability. Alberta knowledge-intensive (high-tech) company employment information comes from Statistics Canada. Results are based on the Labour Force Survey.

Knowledge-intensive companies are those that develop products or services from advanced technological research or base their activities on the application of advanced knowledge. Knowledge-intensive companies were defined here by the North American Industry Classification System (NAICS).

The following NAICS codes comprise the High-Technology Sector:

- 3254 Pharmaceutical and Medicine Manufacturing
- 334 Computer and Electronic Manufacturing
- 3353 Electrical Equipment Manufacturing
- 3359 Other Electrical Equipment and Component Manufacturing
- 3364 Aerospace Product and Parts Manufacturing
- 5112 Software Publishers
- 5152 Pay and Specialty Television
- 516 Internet Publishing and Broadcasting
- 517 Telecommunications
- 5182 Data Processing, Hosting and Related Services
- 5191 Other Information Services
- 5413 Architectural, Engineering and Related Services
- 5415 Computer Systems Design and Related Services
- 5416 Management, Scientific and Technical Consulting Services
- 5417 Scientific Research and Development Services
- 6215 Medical and Diagnostic Laboratories
- 8112 Electronic and Precision Equipment Repair and Maintenance

AFFORDABILITY OF THE LEARNING SYSTEM

Average Undergraduate Tuition Fees

Tuition fees are an indicator of affordability of the post-secondary system. Tuition fees are only a portion of all costs incurred by learners; the data does not account for student financial assistance. Fees reported represent the average undergraduate tuition fees for full-time students in current dollars for the 2007-08 academic year.

Data comes from Statistics Canada's *Survey of Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree-granting Institutions*. For more information, see Statistics Canada's *The Daily's University Tuition Fees, Thursday, October 18, 2007* at <http://www.statcan.ca/Daily/English/071018/d071018b.htm>.

Average Net Debt of Alberta Graduates

Data reported is the average net debt of Alberta learners with Canada and Alberta student loans (after loan relief is applied) six months after graduation, as reported on October 31, 2007. The data reflects a change in reporting methodology (previously the average net debt of learners, as reported on March 31) and may not be comparable to other data reported by Advanced Education and Technology. Private loan debt is not captured in this data.

Data are based on Advanced Education and Technology administrative records.

Graduates Reporting that their Program was Worth the Financial Cost

The percentage of post-secondary graduates who agree that the program they graduated from was worth the financial cost is an indicator of the ability of the system to help students achieve desired outcomes.

Data comes from the *Alberta Post-Secondary Graduate Outcomes Survey, Class of 2005-06*. (See Graduate Outcomes Survey). Graduates surveyed two years after graduation were asked if they considered the program they graduated from to be worth the financial cost to themselves and/or their family. Responses for those who *agree* or *strongly agree* were combined to obtain the percentage of graduates who agree that the program they graduated from was worth the financial cost.

Number of Full-Time Students Receiving Financial Assistance

This is the number of full-time Alberta learners receiving Government of Alberta student loans. This does not include learners receiving scholarships or bursaries. This is a unique student count; a learner may receive multiple awards but he/she is being counted only once.

Data are based on Advanced Education and Technology administrative records. Data comes from the Awards Authorized – Full-Time Post-Secondary Students report, from the Student Finance database.

Number of Scholarship Recipients

Scholarships are awarded to students for academic excellence or in recognition of other achievements, such as leadership or athletic ability. Reported here is the number of Alberta learners receiving Alberta Heritage Scholarship Fund, and Achievement scholarships in the fiscal year (April 1 to March 31). Scholarship recipients and dollars awarded do not include French Fellowship awards, which are Federal scholarship dollars administered by the Alberta government.

Alberta Scholarship Programs currently administers over 50 different scholarships funded through the Alberta Heritage Scholarship Fund and the Achievement Scholarship Program. All awards are merit based, including academic, artistic, athletic, and community service scholarships.

Data comes from Advanced Education and Technology administrative records.

AET Scholarship Dollars per Full-Time Student Studying in Alberta

Scholarship dollars per full-time student provides a snapshot of the ministry's ability to fulfill one of its strategic priorities to ensure quality and innovation in the advanced learning system.

The scholarship dollars per full-time student is determined by the total scholarship expenditures divided by the total number of full-time students in Alberta's post-secondary institutions. Scholarship expenditure data comes from Alberta Advanced Education and Technology's Learner Assistance sector. Department expenditures on Achievement Scholarships, as well as the French Fellowship. Enrolment data comes from the Learner Enrollment Reporting System (LERS) (See LERS Endnote).

Access & Participation in learning

Total Number of Learners in Publicly Funded Post-Secondary Programs

Learner headcount is a measure of the number of learners participating in the advanced education system. Each learner, part-time or full-time, is counted as one. The total number of learners participating in the system is the total unduplicated headcount. The system total may not equal the sum of the institutional totals as a learner can attend more than one institution and would be counted in the institutional totals of each institution attended.

This data comes from the Learner Enrolment Reporting System (LERS) (See Databases for more information on LERS).

Apprenticeship Registrations

Apprenticeship registrations are a key factor in addressing critical skill shortages. The ability to attract learners into the apprenticeship system is influenced by economic circumstances, employer willingness to

hire and train more apprentices, and the capacity to accommodate apprentices at the institutions for their in-school technical training.

This is the number of apprentices registered in the system as of December 31, 2007 for the 2007 calendar year. Apprentices who are registered in more than one trade or branch of a trade are counted only once. It includes those returning to do an additional apprenticeship after completing one or more apprenticeships in previous years or continuing an apprenticeship in another trade for which they registered in a previous year. Apprentices who registered in more than one trade or branch of a trade within the year are counted only once. The number does not include re-instated apprentices (unless re-instated in the same year). The source for these data is Advanced Education and Technology's Skilled Trades Information System.

This data comes from the Skilled Trades Information System (STIS) (See Databases for more information on STIS).

Aboriginal Learners in Publicly Funded Post-Secondary Programs

Aboriginal participation at post-secondary institutions is a measure of the system's ability to attract diverse learners.

Aboriginal participation in post-secondary education is measured by the total unduplicated headcount of Aboriginal learners who have registered at publicly funded post-secondary institutions. This includes Aboriginal learners from outside of Alberta who are attending Alberta publicly funded institutions. Learners who self-identified as *Status Indian/First Nations*, *Non-Status Indian/First Nations*, *Métis* or *Inuit* were included in the count. Aboriginal status is self-disclosed; therefore the count of registrations may be lower than the actual number of Aboriginal learners participating in the system.

Data is collected from the institutions and entered into the Learner Enrollment Reporting System (See Databases for more information on LERS).

Aboriginal Learners Participating in Apprenticeship

Apprenticeship registrations are a key factor in addressing critical skill shortages. Participation in apprenticeship training is increasing as a result of the very busy economy and initiatives aimed at increasing the number of Aboriginal learners in the trades.

This measure is based on the number of registrations of Aboriginal learners at year end (December 31). Aboriginal status is self-disclosed, so the count of registrations may be lower than the actual number of Aboriginal persons participating in apprenticeship. Aboriginal apprentices who registered in more than one trade or branch of a trade within the year are counted only once.

This measure includes Aboriginal apprentices registered in Alberta's apprenticeship and industry training system, but who reside in other Canadian jurisdictions. Alberta provides technical training for apprentices from other provinces and territories where the trade is designated, but the jurisdictions are unable to provide the training due to small apprentice registration numbers. Alberta does not issue these individuals a certificate (in 2007 there were three such individuals).

This data comes from the Skilled Trades Information System (STIS) (See Databases for more information on STIS).

International Visa Learners Studying in Alberta

International student participation is a measure of the quality of the advanced learning system. Change in enrolment over time is an indicator of the department's success in achieving international recognition and increasing international visa student participation. The total number of international students has been defined as the total unduplicated headcount of students who require a visa to study in Canada and are physically attending a publicly-funded post-secondary institution in Alberta at some point during the academic year. Learners taking online classes from their home country are not included in this measure.

Data is provided by institutions and stored in the Learner Enrollment Reporting System (LERS) (See Databases for more information on LERS).

Transition Rate of Learners from High School to Post-Secondary

The high school to post-secondary transition rate reports the percentages of Alberta students in public, separate, francophone, charter and private schools that within four and six years of starting Grade 10 in 2001-02 have:

- Enrolled in a credit program, part-time or full-time, in an Alberta post-secondary institution.
- Registered in an apprenticeship program other than the Registered Apprenticeship Program for high school students.

Students are tracked using data from Alberta Education and Alberta Advanced Education and Technology systems. The high school to post-secondary transition rate includes adjustments for attrition and for attendance at post-secondary institutions out of province. Attrition adjustments are based on estimates from Statistics Canada's Annual Demographic Statistics 2006® (CD-ROM). The estimate of Alberta students attending post-secondary institutions out of province uses aggregate student counts from Alberta Advanced Education and Technology's enrolment and Students Finance systems. Students whose education is not the responsibility of the provincial government, as well as students who are identified as having cognitive disabilities or a severe multiple disability are not included in the high school to post-secondary transition rates. A more detailed description of the methodology, along with post-secondary transition rates for Alberta school jurisdictions, is available online at:

<http://www.education.alberta.ca/department/ipr/studentoutcomes/transition.aspx>

Adult ESL Program Registrants

English as a Second Language (ESL) programming supports the use and study of English by speakers with different native languages. In 2007, 468 ESL courses were offered to 5,346 registrants. Data reported is for the 2007 calendar year.

For more information see the *Community Adult Learning Program 2007 Annual Report*, September 2008, available online at http://www.advancededucation.gov.ab.ca/other/CALP_Annual_Report_2007.pdf.

Literacy Programs

Adult Basic Literacy programs support adults in the community by helping them acquire foundational skills in literacy. In 2007, 5,470 registrants participated in 566 adult basic literacy courses supported by

base grants and Rural Innovation and Access grants. Adult basic literacy courses are offered by Community Adult Learning Councils across Alberta.

Volunteer tutor adult literacy services provide basic literacy tutoring to adults who want individual or small group assistance to improve their literacy or numeracy skills. In 2007, 765 adults were assisted.

Data reported is for the 2007 calendar year.

For more information, see the *Community Adult Learning Program 2007 Annual Report*, September 2008 available online at http://www.advancededucation.gov.ab.ca/other/CALP_Annual_Report_2007.pdf.

Family Literacy Programs

Family literacy programs support basic skill and confidence development for both parents/caregivers and children. The Parent-Child Literacy Strategy, initiated in late 2000, focuses on intergenerational educational approaches that integrate adult literacy instruction and early oral language development for children from birth to age six for economically and socially disadvantaged families (e.g., where parents have low literacy, English as a second language, low income, low educational levels, unemployment, under-employment or Aboriginal status).

Data reported is for the 2006-07 fiscal year (April 1 to March 31).

For more information, see the *Parent-Child Literacy Strategy 2006-07 Progress Report* that will be available online in Fall 2008 at <http://www.advancededucation.gov.ab.ca/other>.

QUALITY & LEARNING OUTCOMES

Graduate Satisfaction with the Overall Quality of their Educational Experience

Data comes from the post-secondary Graduate Outcomes Survey conducted by Advanced Education and Technology (See Surveys for more information on the Graduate Outcomes Survey). Question 16 from the survey asked respondents to rate their satisfaction with the overall quality of their educational experience on a four point scale (very satisfied, satisfied, dissatisfied and very dissatisfied). Those satisfied include those who are very satisfied and satisfied with the overall quality of their educational experience.

Employer Satisfaction with the Skills and Quality of Work of Graduates

Employers' satisfaction with the skills and quality of graduates is a measure of the quality of graduates from the post-secondary system. Employers were asked to rate their overall level of satisfaction with the post-secondary graduates employed with them (very satisfied, satisfied, dissatisfied, or very dissatisfied). The very satisfied and satisfied responses were aggregated.

Data comes from the Employer Satisfaction Survey (See Surveys for more information on the Employer Survey).

Population Aged 25-64 with Post-Secondary Credentials (Canada and Alberta)

The population with a post-secondary credential is the proportion who reported having earned a post-secondary certificate, diploma or degree. Results are presented for Alberta and the Canadian average. “Albertans aged 25-64” have been selected as they are the group most likely to reflect the recent effects of Alberta’s advanced education system.

Data comes from Statistics Canada’s Labour Force Survey (See Surveys for more information on the Labour Force Survey).

Credentials Awarded by Publicly Funded Post-Secondary Institutions

The number of credentials awarded is an indicator of the system’s ability to produce qualified graduates. This is the number of credentials awarded by publicly funded institutions for parchment programs (certificate, diploma and degree programs) during the 2006-07 academic year. The number of credentials awarded may not be equal to the number of graduates as a graduate can earn more than one credential.

Data comes from the Learner Enrolment Reporting System (See Databases for more information on LERS).

Employment Rate of Graduates within Two Years of Graduation

Employment rates of system graduates provide a measure of advanced learning system outcomes. The employment rate is based on those employed as a percentage of those employed and those not employed, but looking for work. Respondents are categorized by the credential type awarded (university graduates, certificate and diploma graduates and journeypersons).

These rates are measured through biennial surveys. Degree, certificate and diploma graduates were surveyed two years after graduation and journeypersons were surveyed approximately 8 to 20 months after graduation.

Data comes from the Graduate Outcomes Survey and the Survey of Apprenticeship Graduates (See Surveys for more information on the Graduate Outcomes Survey and Survey of Apprenticeship Graduates).

Median Annual Salary of 2003/04 Graduates

Data comes from the *Alberta Post-Secondary Graduate Outcomes Survey: Class of 2003-04* (See Graduate Outcomes Survey). Graduates from 2003/04 were surveyed two years after graduation. Respondents were asked to provide their approximate or gross salary from their main job before taxes and deductions. To calculate the total income from their main job, responses to question 39 and 41 were used. The median salary was used as it is a better indicator of salary in relation to credential type than the average, as the range in salary was broad and the outliers would have skewed the average.

DATABASES

Learner Enrolment Reporting System (LERS)

The Learner Enrollment Reporting System (LERS) is a database used by the department to track changes in learner demographics and characteristics in the advanced education system. Alberta's publicly funded institutions submit their enrolment data in credit programs to the department where it is reviewed.

Enrolment data are subject to a host of accountability constraints and are signed off by institutional and department officials as correct. Data for Alberta's publicly funded institutions is reported in LERS for the academic year (May to April for universities, July to June for colleges and technical institutes and May to April for private universities and colleges). Finalized data is available in the fall for the previous school year.

Skilled Trades Information System (STIS)

STUIS is a database used by the department to track demographics and characteristics of learners in the Apprenticeship and Industry Training system. STIS is a dynamic database system, which is updated constantly by field staff across the province. Therefore, the data generated is only as up-to-date as the last update provided from staff. The data is not frozen and results can vary if pulled at different points in time. As a result, this data will not be able to be replicated from STIS at a later date.

SURVEYS

Labour Force Survey

The Labour Force Survey (LFS) is a monthly Canada-wide survey, conducted by Statistics Canada, of a representative sample of households in the ten provinces and the three territories. Data are collected on all members of the household who are 15 years of age or older. Residents of the Yukon, Northwest Territories and Nunavut, persons living on Indian Reserves, inmates of institutions, and full-time members of the Canadian Armed Forces are excluded from the survey.

The Canadian sample size for the LFS averaged 53,372 households over the reporting period. Alberta's sample size corresponds to its share of the population. In 2007, between 5,133 and 5,307 Alberta households were surveyed each month (an average of 5,244 per month), with information provided on 10,307 to 10,668 individuals per month.

The coefficient of variation (the standard error as a percentage of the reported result), which measures the accuracy of the Labour Force Survey's estimates, varies and is proportional to the size of the age groups. In general, the larger the head count in each age group, the higher the accuracy. Below is a table showing the sizes of the age groups and the associated coefficients of variation.

Population	Age Group	Average Monthly Count of Persons*	Coefficient of Variation
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All Albertans	18-24	1,375	Under 2.5%
	25-34	1,947	Under 2.5%
	18-64	8,605	Under 1%
Aboriginal Albertans	25-64	7,230	Under 1%

*Approximate number

Additional information on the Labour Force Survey methodology and interpreting CVs is available on pages 19-31 of the Guide to Labour Force Survey, Catalogue no. 71-543-GIE (Revised April 2007), available online from Statistics Canada at <http://www.statcan.ca>.

Graduate Outcomes Survey

The Post-Secondary Graduate Outcomes Surveys are conducted every other year. Graduates of publicly funded post-secondary institutions are surveyed two years after graduation. The most recent survey was conducted in 2007-08, with 17,059 interviews being conducted for 2005-06 graduates from parchment programs at 28 Alberta publicly funded post-secondary institutions. The next survey will be conducted in 2009-10.

Graduates were surveyed by telephone about their employment outcomes upon graduating, further studies undertaken, and satisfaction with the overall quality of their educational experience. For smaller institutions, a census survey method, which attempts to obtain responses from all graduating students, was used. The larger institutions used a quota sampling method, which targeted achieving a response rate of 60%.

Only graduates of parchment programs (i.e. certificate, diploma and degree programs) were surveyed. The targeted number of responses was set to achieve a 95% confidence level, by institution, with a 5% confidence interval (or better). Results are reported across each of the following types of institutions: all universities combined, all university colleges combined, all colleges combined and all technical institutes combined. Results presented are the combined percentages of respondents who were very satisfied / satisfied, or who strongly agreed / agreed. No responses were excluded.

The results of surveys conducted prior to 2005-06 are not comparable to the survey results from the 2005-06 and 2007-08 surveys published by Advanced Education and Technology because of changes in survey methodology. The 2005-06 and 2007-08 surveys used a four-point scale for questions related to graduate satisfaction (very satisfied, satisfied, dissatisfied and very dissatisfied categories), whereas previous surveys used a five-point scale (including a middle neutral response category).

Sector	Completed Interviews	Confidence Interval
Universities	8,652	±0.8%
Public Colleges	5,191	±1.0%
Technical Institutes	2,802	±1.4%
Private University Colleges	414	±3.0%
System Total	17,059	±0.5%

The 2007-08 survey was coordinated by Alberta Advanced Education and Technology to ensure consistent implementation of the survey among all participating post-secondary institutions, using a common survey methodology and time frame. The survey was conducted between January and April of

2008 by an independent third-party contractor. The question set used will be in the next update of the Key Performance Indicators Reporting Manual for Alberta’s Post-Secondary Institutions, available online at: <http://www.advancededandtech.gov.ab.ca/software>.

Survey of Apprenticeship Graduates

Surveys of recent apprenticeship graduates are conducted every other year. The last survey was conducted in 2007, with 3,117 interviews of apprentices who had graduated between August 1, 2005 and July 31, 2006. Graduates were surveyed by telephone about their satisfaction with the apprenticeship and industry training system. Survey findings were published in the report *Survey of 2005/06 Graduates of the Apprenticeship and Industry Training System*, July 31, 2007.

To calculate the gross annual income of recent apprenticeship graduates, survey respondents were asked, “Since you became a certified journey person in the trade, what is your average gross monthly income before deductions? Gross income includes earnings plus holiday and vacation pay from all the jobs you hold including self-employment. Do not include investment income and the like.” The monthly median income was multiplied by 12 month to get the median annual salary.

Public and Employer Surveys

Alberta Advanced Education and Technology collaborated with Alberta Education to commission telephone surveys of random samples of the Alberta public and key client groups. The purpose of these surveys is to obtain perceptions of how the education system is performing in meeting learners’ and society’s needs and expectations. Professional survey research firms are contracted to conduct the surveys, using trained interviewers and the Computer-Assisted Telephone Interviewing (CATI) system. Survey results are compiled by the survey research firms and provided to the two ministries. Surveys of the public are conducted annually. The Employer Satisfaction Survey is conducted every second year.

The following table provides sampling information for the public and employer surveys. The information includes the respondent groups surveyed, sample sizes and the confidence intervals for results from the survey. Results are considered accurate within the confidence interval 19 times out of 20 (i.e. at a confidence level of 95%). Sampling variation can account for observed differences in results from year to year.

Survey	Public (re the adult learning system)		Adult Learners		Adults not participating in learning		Employers	
	Sample	C.I.	Sample	C.I.	Sample	C.I.	Sample	C.I.
2007-08	3,000	±2.2%	972	±3.1%	2,028	±2.2%	2,201	±2.1%

C.I. – Confidence Interval

The survey instruments for these surveys use four-point response scales (*very satisfied / satisfied / dissatisfied / very dissatisfied* or *strongly agree / agree / disagree / strongly disagree*), depending on the question. Although not asked, don’t know responses and refusals are recorded as well. Results presented are the combined percentages of respondents who were *very satisfied / satisfied*, or who *strongly agreed / agreed*.

The public survey results were published May 2008 in the report *Satisfaction with Education in Alberta, Survey of Public/Adult Learners/Adult Non-Learners 2007/08*. The last employer results were published February 2008, in the report *2007-08 Employer Satisfaction Survey*.

“DID YOU KNOW” DATA SOURCES

In the last 10 years Alberta has seen a 153% increase in the number of international Masters and PhD visa students studying at its universities, from 859 in 1996-97 to 2,185 in 2006-07.

Source: Advanced Education and Technology’s Learner Enrolment Reporting System. (See Databases for more information.)

The level of sponsored research funding provided to universities by non-government sources has more than doubled, from \$64.2 million in 1997-98 to \$152 million in 2006-07.

Source: *Research Funding at Alberta Universities Report* published by the University Research and Strategic Investments branch of Advanced Education and Technology. The 2006-07 report is available online at

http://www.technology.gov.ab.ca/kr/one.cfm?workspace_id=128427&object_id=130539&tab=object_view.

The Government of Alberta is investing \$178 million over the next three years to implement the Bringing Technology to Market action plan to encourage technology commercialization, support knowledge-based companies and grow venture capital in Alberta.

Source: Alberta’s action plan for Bringing Technology to Market. For more information on the plan visit the website at:

<http://www.advancededucation.gov.ab.ca/technology/wwwtechnology.asp/techprior/techcomm/ActionPlan/actionplan.asp>

The investment of \$178 million in the action plan includes a \$100 million investment in the Alberta Enterprise Corporation.

Source: Alberta’s action plan for Bringing Technology to Market. For more information on the plan visit the website at:

<http://www.advancededucation.gov.ab.ca/technology/wwwtechnology.asp/techprior/techcomm/ActionPlan/actionplan.asp>

In 2006-07, Alberta ranked third (behind Ontario & Quebec, but ahead of B.C.) in patent filing activities.

Source: Canadian Intellectual Property Office 2006-07 Annual Report.

In 2006-07, the Alberta government covered 67% of a student’s educational costs through grant support for the delivery of credit instruction, the student contributed 26% through tuition and institution fees, and 7% came from other sources.

Source: Advanced Education and Technology Administrative Records

Alberta's scholarship program is the most generous program per capita in Canada.

Source: Provincial scholarship funding data came from the Millennium Scholarship Foundation. The population data came from Statistics Canada.

Note: Data is for 2006-07.

In the last 6 years, the Government of Alberta's scholarship budget has more than doubled to \$77 million which is equivalent to \$22.50 for every Albertan.

Source: Advance Education and Technology Administrative Records.

In 2007-08, 79% of Albertans were satisfied that adult Albertans have access to the education or training they want.

Source: *Satisfaction with Education in Alberta, Survey of Public/Adult Learners/Adult Non-Learners 2007/08* report, May 2008. See Surveys for more information on the public survey.

Alberta has about 10% of Canada's labour force; however, it trains more than 20% of the country's apprentices.

Source: Provincial apprenticeship data comes from the Canadian Council of Directors of Apprenticeship. Labour force data comes from Statistics Canada.

Note: Data is for 2007.

Alberta offered more than 6,000 additional apprenticeship technical training seats in 2007-08.

Source: Advanced Education and Technology Administrative Records.

The proportion of Albertans aged 18-34 participating in post-secondary education has been declining from 19% in 2005 to 17% in 2007, whereas the proportion of Canadians participating in advanced learning is increasing.

Source: Statistic Canada's Labour Force Survey (see Surveys for more information).

3,615 qualified Alberta applicants were turned away from Alberta post-secondary programs in Fall 2007.

Source: Advanced Education and Technology Administrative Records

Note: Data has been revised based on additional data received from NAIT. Data reported in the pamphlet differs from that published in the Alberta Access Planning Framework.

In 2007, the average hourly earnings for a person with a university degree in Alberta was \$29 compared to \$19 per hour for someone with a high school diploma.

Source: Statistic Canada's Labour Force Survey (see Surveys for more information).

In 2007, the median gross annual income for recently certified journeypersons in Alberta was \$61,920.

Source: *Survey of 2005/06 Graduates of the Apprenticeship and Industry Training System*, July 31, 2007 (See Surveys for more information).

Note: The median gross annual income is an estimate as it is calculated by taking the median earnings per month of survey respondents and multiplying it by 12 months. The work schedules of tradespersons may vary throughout the year, along with their pay rate and hours of work.

Alberta has produced more trades people with an Interprovincial Standards Red Seal than any other jurisdiction in Canada.

Source: Canadian Council of Directors of Apprenticeship

Note: Data is for 2007.