

Inventory of Industry- Post-Secondary Partnerships

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Introduction

Recent changes in government advanced education policy have encouraged post secondary institutions to become more entrepreneurial. Increasingly, post secondary institutions are seeking to partner with the private sector to attract and support students, to assist students in gaining work experience and finding jobs upon graduation, and to help defray the costs of educational facilities and programs. Post secondary institutions are also looking to industry partnerships as a means to expand the market for post secondary training.

An industry - post secondary partnership refers to a relationship between a business or industry association and a post secondary institution, which directly helps the institution in furthering its educational mandate. Usually the industry partner voluntarily gives something significant (money, goods, time) to the educational institution and receives some direct or indirect benefit in return. Members of the community may also receive direct or indirect benefits as a result of the partnership.

This report describes and provides examples of industry - post secondary partnerships. A chart summarizing the current involvement of each of the colleges and technical institutes in different partnership categories appears at the end, in Appendix A. (Note: Universities and private and religious colleges are not included in this report.)

Among institutions studied, the province's technical institutes have the most extensive involvement in all areas of industry - post secondary partnerships, followed by closely by the public colleges. The provincially administered Alberta Vocational Colleges (AVCs) currently have less extensive partnerships with industry. This may be attributable to the AVCs' direct ties to Alberta Advanced Education & Career Development. However, the situation is likely to change as the AVCs complete the transition to independent, board governed status over the next two years.

Method

The information contained in this report came from a variety of sources including recent institutional annual reports housed in the Alberta Advanced Education and Career Development Library, articles in College Canada magazine, information posted by post secondary institutions on their Internet sites, and telephone conversations with officials at the institutions where contact with an individual familiar with the institution's partnership activity was successfully established.

This investigation of sources revealed that the amount and quality of available information on industry - post secondary partnerships varies considerably from institution to institution. Information is not currently maintained in any central location or in any standard way by any of the institutions, although information posted on the Internet site of Grande Prairie Regional College indicated that GPRC intends to start assembling a partnership database. Also, major partnerships are often characterized by multiple activities that may defy simple categorization. Because of time constraints, issues related to information availability and quality and categorization difficulties, the partnership examples presented in this report should be viewed as illustrative rather than a comprehensive listing.

Major Categories and Examples of Partnerships

The major categories of industry - post secondary partnerships include: accreditation or certification of programs; advisory committees; applied research and consulting; apprenticeship, co-operative education and other practicums; awards, contests, and recognition; community and charitable activities; training centres and curriculum development; and donations of equipment and facilities. Many partnerships have aspects of more than one of these categories but are listed where they are most appropriate.

Accreditation or Certification of Programs -- Institutions (particularly the province's two technical institutes) actively seek to enhance the status of their certificates and diplomas through obtaining program accreditation by industry. In some programs, industry accepts the successful completion of an accredited post secondary program as proof of the student's job related competencies. In other cases, the course work in the program prepares the student to write accreditation examinations set by the relevant industry or professional body. In addition to improving students' employment prospects, the process of program accreditation helps to ensure that program content meets industry's skill needs.

Some post secondary officials contacted in the course of compiling this report commented that they tended to have more difficulty in getting Alberta Advanced Education and Career Development approval and funding for new programs (and permission for students to access Student Finance Board support) than they have in obtaining industry backing.

- AVC - Edmonton delivers a forklift operation course certified by the Alberta Safety Council.
- Keyano College's Institute for Business and Professional Development is a Drake Authorized Testing Centre and, as such, can certify computer students.
- AVC - Lac la Biche and Grande Prairie Regional College offer chainsaw operation courses certified by the Alberta Forest Products Association and the Canadian Association of Geophysical Councils.
- Students can become Certified Financial Planners by taking courses at Grant MacEwan Community College. The college's golf operation management program is accredited by the Canadian Professional Golfers' Association and is accepted as part of "Class A" certification for golf professionals

Advisory Committees -- It is standard operating practice for colleges and technical institutes to form program advisory committees for all programs which do not involve transfer to university programs. These committees meet to review program curriculum one to three times annually. Industry advisory committee representatives identify emerging trends and advise the institutions regarding industry needs. They help the institutions find work experience, apprenticeship or co-operative education placements for their students and can be extremely useful contacts when it comes to obtaining corporate donations for programs.

- To improve the business-related skills of its art graduates, the Alberta College of Art and Design has set up a one year business training program for its graduates. Unlike ACAD's regular programs, the business training centre has an advisory committee with external industry representatives.
- Grande Prairie Regional College has established a goal to change at least 10% of the curriculum in each of its programs every year. This ensures that program content is always up-to-date and encourages the active involvement of external advisory committee members.

Applied Research and Consulting -- Increasingly, colleges and technical institutes are engaging in applied research on behalf of industry, such as product development and testing and other projects that emphasize practical solutions to industry problems. Applied research is most commonly found at technical institutions and agricultural colleges although a trend appears to be emerging toward more colleges getting involved in this type of partnership.

- The Alberta College of Art and Design has provided consulting assistance to London Drugs in the area of imaging technology.
- AVC - Lesser Slave Lake has engaged in consulting work related to the preparation of forestry plans and the production of digitized maps.
- A donation from Suncor has enabled Mount Royal College to set up a Centre for Applied Science. The Centre takes on applied research projects of a practical, problem-solving nature. Students assist in conducting these projects as part of their program of studies.
- NAIT's Office of Applied Research and Product Development assists local businesses solve technical or business problems, develop new products and conduct applied research. Some services are provided under the National Research Council's Industrial Research Assistance Program for small and medium-sized incorporated businesses.
- Olds College is heavily involved in applied research work. For example, its Composting Technology Centre was built with funds from Proctor and Gamble and the provincial and federal governments. The Centre's scientists undertake applied research related to the composting of a variety of unusual organic materials, from creosote-treated railway ties to tallow to pulp sludge. Other private sector research partnerships have included beef herd feed trials, the introduction of Boer goats to Alberta, development of a process to compress Timothy hay, mushroom research and research into the development of improved varieties of turf grass and environmentally-friendly methods of fertilization, pest management and disease control. Some of the research and facilities have led to successful commercial enterprises (e.g., a compost bagging operation by Greenleaf Products; the international marketing of compressed hay by the Forage Centre). The college has benefited financially as a result of research contracts and donations, as well as from the practical experience and employment opportunities that these arrangements provide for students.

- Red Deer College recently reinstated its Automotive Service Technician Program based on the findings of a cooperative study of employer needs in Central Alberta conducted by Red Deer College, industry, and the provincial and federal governments.
- SAIT has conducted research for INSOIL Canada. The research investigated how to maintain electrical insulating oils in high voltage transformers at a high level of purity, in order to prevent failure of electrical equipment.

Apprenticeship, Cooperative Education and Other Practicums -- Many programs offered by post secondary institutions now include a practical, work experience component. Advantages to the student include the exposure to program-related careers and the demands of real work environments, the ability to earn course credit for work experience, and the opportunity to make an impression on potential employers. Some students are also able to reduce their dependence on loans because they are earning while learning. Businesses who accept students on practicums can take advantage of their up-to-date training and enthusiasm at low or no cost. They are also able to size up the employment-related skills of potential workers while they are still in school.

- Alberta College of Art and Design has a popular work experience program where students can gain course credit while doing a field placement in an art, craft or design-related business.
- AVC Lesser Slave Lake and Grande Prairie Regional College jointly offer an accelerated business work experience program.
- In partnership with local industry, Fairview College delivers a cooperative trades orientation which is focused on increasing the number of apprentices. Students are allowed to sample a number of apprenticeship trades to help them make an informed program choice.
- Keyano College coordinates a cooperative apprenticeship program which enables students to get experience with several different employers over their apprenticeship period. A number of local businesses are involved, the largest being Syncrude Canada.

Awards, Contests, and Recognition -- The most common form of this partnership is corporate financial support of student awards and scholarships. Most post secondary institutions are interested in recruiting students of above-average academic potential and motivation and a scholarship program facilitates this. Highly capable students help the institution to build its reputation for excellence. The benefits to the industry donors are primarily intangible. However, most institutions formally recognize major industry donors or leaders.

Some industry partners also support awards for faculty, and sponsor competitions for students, particularly in art and design, technical and business programs.

- A number of post secondary institutions participate in and have won industry-sponsored

contests. For example, Lethbridge Community College cooking students have participated as part of Team Alberta in the World Culinary Olympics. NAIT instrumentation students participate in a student competitions sponsored by the International Society of Measurement and Control.

- The business leader awarded Grant MacEwan's Allard Chair in Business serves a brief period as executive-in-residence at the college, sharing his or her knowledge and techniques with faculty and students. Alberta College of Art and Design has a guest artist program, with similar aims.
- NAIT instructors have received awards from industry associations including the Canadian Dental Association and the Certified General Accountants of Canada.
- Corporations such as Chevron Canada Resources and Red Deer Industrial Metals help to sponsor Student Achievers' Breakfasts at Red Deer College. These breakfasts recognize students for their academic achievement, diligence in studies, positive influence on the learning environment and involvement in campus and community groups.
- Olds College is setting up recognition boards on campus, which list the names of all businesses and individuals who donate more than \$25. The college has newsletters for each program which recognize donors and provide information on how the college is putting their donations to use.

Community and Charitable Activities -- Most partnerships provide benefits to the post secondary institution and the industry partners. However, some industry - post-secondary partnerships also benefit the community.

- In partnership with AVC - Calgary, the Calgary Herald has set up a 24 hour computer-based learning centre at its site, to enable Herald employees and other shift workers to benefit from accessible continuing education.
- Fairview College teams with corporate sponsors such as Pepsi Cola to raise funds for northern literacy projects and sponsor regional high school fairs.
- A donation by the Suncor Oil Sands Group combined with provincial access funding has enabled Keyano College to establish Program Logic for Automatic Teaching Orientation (PLATO) stations for computer-managed learning at its main campus and in Ft. Mackay, Conklin and Janvier.
- Suncor also donates to the WISEST program at AVC - Calgary. The WISEST program encourages women to pursue careers in science and technology, and encompasses mentoring and job shadowing activities.
- The Lethbridge Community College Electronics program has teamed up with the Lethbridge Chamber of Commerce to recycle computers for re-use in the community. Local schools, community groups and non-profit agencies benefit from receiving the

computers, which are repaired and refurbished by Lethbridge Community College students.

- The Canadian Youth Foundation, the Royal Bank, the Canadian Imperial Bank of Commerce and other private sector donors have set up a Canadian Youth Business Foundation (CYBF) western office in Mount Royal College's Small Business Training Centre. The CYBF is a non-profit and private sector initiative aimed at responding to the issue of high youth unemployment by providing mentoring, business support and micro-lending services to young Canadian entrepreneurs.
- Shaw Cable provides work experience and exposure for SAIT Cinema, Television, Stage and Radio students as well as employing program graduates. The partnership between Shaw Cable and SAIT has also helped to enhance the quality and variety of local community cable television programming.
- Distance education and open learning at SAIT serves 7,000 Alberta and out-of-province learners each year. Esso Resources Canada and a number of other businesses have supported the development of SAIT's Open Learning Instructional System.

Training Centres and Curriculum Development -- Many companies are working with post-secondary institutions to establish programs and facilities designed to fill specific industry needs. Some institutions are also entering into partnerships with the private sector to develop curriculum and educational technologies for wider commercialization.

- AVC - Calgary is part of a consortium of 18 companies, universities, schools and other organizations involved in the Adaptive Multimedia Education Enabler (AMEE) project. AMEE is producing, pilot testing and evaluating a group of computer products designed to provide universal access to distance learning opportunities. Major corporate partners include Telus and TR Labs.
- Fairview College has joined forces with Kaufman Pacific Wood Products and Manning Diversified Forest Products to operate a Boreal Wood Centre located in Manning. The Boreal Wood Centre is staffed by Fairview College. The Centre facilities are used to conduct research and provide a high technology learning centre for workers in the wood processing industry. The Centre also has a public awareness mandate.
- Fairview College is also involved in three seedling nursery projects. Two of these projects -- partnerships with Woodmere Nursery and Canfor/Manning Diversified Forest Products -- are on the Fairview College campus, while a third -- a partnership with Pineridge Nursery in Smoky Lake -- is located southwest of Grande Prairie. These nurseries are used for applied research projects and provide living laboratories and work experience opportunities for students.
- Specialty mechanics training has proven to be a popular area for industry - post-secondary partnerships. Olds College provides training on John Deere agricultural equipment. Fairview College is a Canadian corporate/dealer technical training site for

Bombardier, Mercury Marine and Harley-Davidson. The Fairview - Harley-Davidson/Fred Deeley Importers partnership has recently received national recognition from the Conference Board of Canada.

- Keyano College has established a program to train heavy equipment students on site at Syncrude Canada. Known as “Greener Pastures, Golden Opportunities”, this partnership has also received national recognition from the Conference Board of Canada. This is one of several partnership arrangements between Keyano College and Syncrude in an ongoing relationship which has received national recognition for excellence in industry - educational partnerships.
- Mount Royal College is developing educational materials and support for small businesses with funding donated by the Royal Bank. The idea is to create a virtual school on the World Wide Web.
- SAIT has constructed custom-designed oil field training equipment for Mobil Corporation, including a distillery trainer and a heat exchange trainer. In return, Mobil has purchased training packages for oil field operator trainees. SAIT is also Northern Telecom's western Canadian training centre.
- Alberta educational institutions figure prominently in numerous international educational projects and consortia. AVC - Calgary's expertise in teaching English as a second language has seen it become involved in educational partnerships in China and South Africa.
- SAIT and the Box Hill Institute of Technology (Australia) have teamed up to provide customized training programs to clients employees of an Indonesian mining company in southeast Asia.
- NAIT is involved in providing assistance to Pakistan's Oil and Gas Training Institute, and has partnered with AVC Edmonton and Olds College to deliver training in the Philippines.

Donations of Equipment and Facilities -- Post-secondary institutions which deliver technical programs face major expenses in keeping the laboratories and computer programs used by students up-to-date. With the pace of technological change increasing and support from government declining, many are grateful to receive donations from industry. Businesses who make such donations receive a number of benefits. These include increased sales, as program graduates are familiar with their latest equipment or software. They also include access to potential employees from the pool of program graduates, businesses who make the donation gains access to a state-of-the-art facility for training existing employees. In some cases, industry donors are able to carry out research or product promotion in the facility.

- AVC - Lesser Slave Lake has received donations of equipment for programs from Mac Trucks and Pardee Equipment.

- Fairview College receives donations of equipment for use in its programs (e.g., the Harley-Davidson motorcycle mechanic program) as well as for fund raisers (e.g., a motorcycle donated for a college raffle). Major Fairview donors include Nova Corporation, Norcen Energy, Oak Creek Golf & Turf and the Harley-Davidson Motor Company.
- Grande Prairie Regional College has set up a model office for use by its office administration students. The office was equipped with donations from Menzies Printers and Stationery and Northern Telecom.
- Keyano College has built an Industry Education Centre in partnership with Syncrude Canada. The Centre houses Syncrude's corporate training and development facility as well as computer labs and classroom space for students in Keyano's office administration program.
- Mannesmann Demag of Dusseldorf, Germany has donated equipment to Keyano College's heavy duty technician and millwright programs.
- Much of the farm equipment used by Olds College students is donated and updated annually by agricultural implement manufacturers like John Deere.
- Private sector donations of capital, design expertise and equipment are enabling SAIT to set up centres of advanced technology, for example, the Control Engineering Technology Centre (major industry partner AMOCO) and the Business Technology Centre (major industry partner CIBC). SAIT also receives many donations of equipment for its programs, for example, welding equipment (Esab Group), telephone switching equipment (Northern Telecom) and diagnostic and analytical equipment (Snap-on Tools).

Contacts

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Note: Appropriate officials in some colleges had not been located or successfully contacted by the deadline for this report: Red Deer College (RDC), and the Southern Alberta Institute for Technology (SAIT). However, published information on these institutions (e.g., Annual Reports, Internet sites) has been included where available.

Appendix A: Involvement of Colleges and Technical Institutes in Industry - Post-secondary Partnerships

	AVC-C	AVC-E	AVC-LLB	AVC-LSL	ACAD	FC	GPRC	GMCC	KC
PARTNERSHIP CATEGORY									
Accreditation or Certification of Programs	X	X	X	X		X	X	X	X
Advisory Committees	X	X	X	X		X	X	X	X
Applied Research and Consulting				X	X	X			
Apprenticeship, Cooperative Education and other Practicums	X	X	X	X	X	X	X	X	X
Awards, Contests and Recognition			X	X	X	X	X	X	X
Community and Charitable Activities						X	X		X
Training Centres and Curriculum Development	X	X	X	X		X	X	X	X
Donations of Equipment and Facilities	X		X	X	X	X	X	X	X

	LC	LCC	MHC	MRC	OC	RDC	NAIT	SAIT
PARTNERSHIP CATEGORY								
Accreditation or Certification of Programs	X	X	X	X	X	X	X	X
Advisory Committees	X	X	X	X	X	X	X	X
Applied Research and Consulting				X	X	X	X	X
Apprenticeship, Cooperative Education and other Practicums	X	X	X	X	X	X	X	X
Awards, Contests and Recognition	X	X	X	X	X	X	X	X
Community and Charitable Activities	X	X					X	
Training Centres and Curriculum Development	X	X	X	X	X	X	X	X
Donations of Equipment and Facilities		X	X	X	X	X	X	X