Association of Canadian Community Colleges

The Association of Canadian Community Colleges (ACCC) is the national and international voice of Canada’s publicly-funded colleges and institutes (including polytechnics), and universities with a college mandate (hereinafter referred to as colleges). With campuses in 1,000 urban, rural and remote communities, these institutions educate learners of all ages and from all socio-economic quarters. They partner with small- and medium-sized enterprises (SMEs) to share expertise in applied research and innovation.

Colleges are the advanced skills educators of choice. Advisory Committees comprising local employers ensure that college programs align with employers’ requirements and operate on the leading edge of skills identification, economic trends, and market shifts. Colleges support business growth and sustainability by supplying graduates with advanced skills, re-skilling employees, offering customized education, and providing applied research and development support. They help the disadvantaged gain access to post-secondary education, in particular Aboriginal peoples, the disabled and newcomers to Canada.
# Table of Contents

Executive Summary ................................................................................................. i

1. **INTRODUCTION** .................................................................................. 1

2. **COLLEGE AND INSTITUTE COMMITMENTS FOR APPLIED RESEARCH** ........................................ 2
   2.1 Institutional Budgets for Applied Research .................................. 2
   2.2 Applied Research Structures .................................................. 2
   2.3 Building Applied Research Capacity ....................................... 2
   2.4 Promotion and Knowledge Transfer ....................................... 3
   2.5 Eligibility with Federal Granting Councils .............................. 3
   2.6 Research Opportunities for College Faculty and Staff ............ 4
   2.7 Students at the Centre of Applied Research ......................... 5
       2.7.1 Student Entrepreneurship .................................................. 6
   2.8 Research Specializations and Expertise .................................. 7
   2.9 Research Centres and Laboratories ....................................... 8
   2.10 Research Networks ............................................................ 9
       2.10.1 Provincial / Territorial Research Networks ....................... 9
       2.10.2 Sector and Industry Networks ...................................... 10
   2.11 Performance Measurement of Applied Research .................. 11
   2.12 The Legacy Impact of Applied Research on Curriculum .......... 11

3. **A DIVERSITY OF FUNDING SOURCES** .................................................... 13
   3.1 The Tri-Council College and Community Innovation (CCI) Program ........................................... 15
       3.1.1 Impact of the CCI Program ............................................. 16
   3.2 Natural Sciences and Engineering Research Council (NSERC) ........................................... 17
   3.3 Social Sciences and Humanities Research Council (SSHRC) ........................................... 18
   3.4 Canada Foundation for Innovation ......................................... 18
   3.5 Regional Economic Development Agencies ........................................... 18
   3.6 National Research Council – Industrial Research Assistance Program ........................................... 19

4. **BUSINESS AND INDUSTRY PARTNERSHIPS** ........................................... 21

5. **PARTNERSHIPS FOR SOCIAL INNOVATION RESEARCH** ........................................... 22

6. **INTERNATIONAL RESEARCH PARTNERSHIPS** ........................................... 23

7. **CONCLUSION** .................................................................................. 24

References ........................................................................................................... 25

THE COLLEGE AND INSTITUTE APPLIED RESEARCH ADVANTAGE 2011-12: INNOVATION FOR SMALL BUSINESSES AND COMMUNITIES
Executive Summary

Colleges and institutes (including polytechnics) are contributing to innovation in Canada through enhanced institutional research infrastructure, involvement of faculty and students, and expanded industry and social innovation partnerships. The Government of Canada more than doubled its investments over the past year and is the largest source of external funding for applied research with a total of $72 million. Private sector investments continue to increase significantly, with an 18% increase from 2010-11.

Business and Industry Partnerships

- 4,586 companies partnered with colleges and institutes in 2011-12 – 4,477 for business and industrial research and 109 for social innovation
- 97% of external funding was for business and industrial research
- most partnerships were with small- and medium-sized enterprises (SMEs) (64%), followed by large enterprises (28%), and micro-enterprises (8%)

Partnerships for Social Innovation Research

- colleges and institutes reported 338 social innovation partners
- 3% of external funding was for social innovation research
- most social innovation partners were companies and public service agencies

Student Involvement

- increased investments and improved tracking by colleges and institutes confirmed that 24,108 students were engaged in applied research in 2011-12, up by 77% over last year
- colleges and institutes involved students in applied research through in-class projects, summer jobs and internships

Institutional Expertise

- 1,774 faculty and staff (e.g. industrial experts and technicians) engaged in applied research in 2011-12, up by 10% from 2010-11
- 98 institutions had a dedicated applied research division, an increase of 4% from 2010-11
- 387 specialized research centres and labs were identified, up by 27% from 2010-11
- 524 areas of research specialization were reported in natural resources, energy, environment, health, information and communications technologies, manufacturing and social innovation

Institutional Investment

- Colleges and institutes continued to allocate internal resources to support applied research with $38 million reported for 2011-12, unchanged from last year.
External Funding 2010-11

Colleges and institutes received $179 million in external funding from the following sources, with significant increases from 2010-11:

- Government of Canada: $72 million, up by 114%
- Private sector: $59.4 million, up by 18%
- Provincial and territorial governments: $44 million, up by 48%
- International partners: $1,533,000
- Community service organizations: $831,000, more than double the previous year
- Foundations: $730,000
- Municipal governments: $533,000

The highest proportion of Government of Canada funding (40%) was from the Tri-Council College and Community Innovation Program, totaling $34 million. Other significant federal sources included the Canada Foundation for Innovation and the following regional economic development agencies: Western Economic Diversification Canada, the Federal Economic Development Agency for Southern Ontario, the Canada Economic Development for Quebec Regions, the Atlantic Canada Opportunities Agency and the Canadian Northern Economic Development Agency.

International Research Partnerships

ACCC member institutions in British Columbia, Alberta, Manitoba and Ontario reported 29 international partnerships in 13 countries: Brazil, Chile, China, Costa Rica, Denmark, Dominican Republic, Mexico, Egypt, Japan, South Korea, South Africa, the United States, and Uruguay.

Performance Measurement

80% of institutions had performance measurement tools in place to evaluate the benefits of applied research, including:

- Number of new products, services or processes
- Number of prototypes
- Number of jobs created or maintained
- Number of improved products, services or processes
- Increased market share for the products or services
- Number of products successfully commercialized
## Key Findings

### Investment

<table>
<thead>
<tr>
<th></th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal government</td>
<td>$27,000,000</td>
<td>$28,000,000</td>
<td>$33,700,000</td>
<td>$72,000,000</td>
</tr>
<tr>
<td>Private sector</td>
<td>45,000,000</td>
<td>45,000,000</td>
<td>50,300,000</td>
<td>59,400,000</td>
</tr>
<tr>
<td>Provincial/territorial governments</td>
<td>25,000,000</td>
<td>29,000,000</td>
<td>29,700,000</td>
<td>44,000,000</td>
</tr>
<tr>
<td>Colleges</td>
<td>35,000,000</td>
<td>35,000,000</td>
<td>38,000,000</td>
<td>38,000,000</td>
</tr>
<tr>
<td>International partners</td>
<td>unknown</td>
<td>unknown</td>
<td>295,000</td>
<td>1,533,000</td>
</tr>
<tr>
<td>Community service organizations</td>
<td>unknown</td>
<td>168,000</td>
<td>319,000</td>
<td>831,100</td>
</tr>
<tr>
<td>Foundations</td>
<td>unknown</td>
<td>840,000</td>
<td>1,373,000</td>
<td>730,000</td>
</tr>
<tr>
<td>Municipal governments</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>533,000</td>
</tr>
<tr>
<td><strong>Total Investment</strong></td>
<td>$132,000,000</td>
<td>$138,008,000</td>
<td>$153,687,000</td>
<td>$216,027,100</td>
</tr>
</tbody>
</table>

### Partnerships

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnerships with companies</td>
<td>3,602</td>
<td>3,795</td>
<td>4,444</td>
<td>4,586</td>
</tr>
<tr>
<td>Social innovation research partners</td>
<td>unknown</td>
<td>unknown</td>
<td>289</td>
<td>338</td>
</tr>
<tr>
<td>Research centres</td>
<td>140</td>
<td>196</td>
<td>305</td>
<td>387</td>
</tr>
<tr>
<td>Faculty engaged in applied research</td>
<td>1,209</td>
<td>1,196</td>
<td>1,606</td>
<td>1,774</td>
</tr>
<tr>
<td>College students engaged in applied research</td>
<td>2,500</td>
<td>8,329</td>
<td>13,585</td>
<td>24,108</td>
</tr>
<tr>
<td>Areas of specialization</td>
<td>142</td>
<td>304</td>
<td>447</td>
<td>524</td>
</tr>
<tr>
<td>NSERC eligible institutions</td>
<td>51</td>
<td>64</td>
<td>84</td>
<td>92</td>
</tr>
<tr>
<td>SSHRC eligible institutions</td>
<td>unknown</td>
<td>unknown</td>
<td>38</td>
<td>55</td>
</tr>
<tr>
<td>CIHR eligible institutions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Research networks</td>
<td>97</td>
<td>137</td>
<td>137</td>
<td>171</td>
</tr>
</tbody>
</table>

*The numbers given may not match total counts due to rounding procedures.*
1. Introduction

Publicly-funded colleges, institutes, polytechnics, cégeps and university colleges\(^1\) are important players in Canada’s innovation ecosystem.

According to the Organisation for Economic Co-operation and Development (OECD), *OECD Economic Surveys: Canada 2012*, “colleges are becoming proactive in directly meeting the needs of small businesses in areas of problem solving, process innovation and technical skills.”\(^2\) The 2011 report *Innovation Canada: A Call to Action – Review of Federal Support to Research and Development – Expert Panel Report* (Jenkins Report) indicated, “R&D undertaken at colleges and polytechnics is often focused on helping companies address commercialization challenges by turning those challenges into student-led applied research problems. Colleges and polytechnics also directly assist firms with their innovation needs...”\(^3\) The Council of Canadian Academies also acknowledged the role of colleges and institutes in science and technology in its report *The State of Science and Technology in Canada 2012*.

With their business and community partners, colleges and institutes are increasing their applied research capacity and activities, providing greater research opportunities for students and faculty and diversifying sources of research funding. Colleges and institutes primarily focus on meeting the innovation needs of small- and medium-sized enterprises (SMEs). The impact for the Canadian economy is significant given that 98 percent of Canadian companies are small with less than 100 employees, and half of employed people work in these small firms.

Targeted funding programs for college and institute applied research are stimulating innovation among firms and community organizations, enhancing curriculum and producing highly skilled, innovative graduates. The 2012 evaluation of the College and Communities Innovation (CCI) Program, prepared for the Natural Sciences and Engineering Research Council (NSERC), confirms the positive impact of college and institute research partnerships for SMEs including improved annual revenues and number of new customers. A high proportion of companies improved their research and development capacity, leading to new or improved products, processes or services, as well as the ability to attract or make new research investments.

This ACCC report captures the level of college and institute applied research activity for 2011-2012. The responses of 103 institutions to the *Survey of 2011-2012 College and Institute Applied Research Activity* demonstrate sustained growth in applied research including institutional commitments, growing participation by faculty and students, and the increasing support from industry, community partners and government.

The report describes increased institutional commitments to applied research, the diversification of funding sources and expanding partnerships with business, community and international partners to support economic and social development.

---

\(^1\) Publicly-funded colleges, institutes, polytechnics, cégeps and university colleges will hereafter be referred to as “colleges and institutes”.


2. College and Institute Commitments for Applied Research

This section confirms a stronger institutional commitment to applied research including: institutional financial commitments, the establishment of research structures, opportunities for faculty and students, areas of research expertise, research facilities, involvement in research networks, the use of performance measurement tools, and their impact on curriculum and program delivery.

2.1 Institutional Budgets for Applied Research

Applied research is an essential part of college and institute education programs. As a result, institutions are allocating part of their core budgets to support applied research. For 2011-12, 88 colleges and institutes (85% of respondents) reported a total of $37,984,591 in institutional budgets for applied research development offices and projects, virtually unchanged from 2010-11 with $37.7 million.

2.2 Applied Research Structures

Eighty-eight percent of institutions indicated they had provincial legislation recognizing applied research and 94% reported that applied research was included in their institutional mission statements. Ninety-eight institutions (95% of respondents) reported having a dedicated research and development office, representing an increase of 2% from 2010-11. In 2011-12, applied research and development offices reported 1,019 full-time staff, up by 40% from the 730 reported in 2010-11 and up by 60% from 2009-10. Part-time staff remained unchanged from 2010-11 at 140, compared to 127 in 2009-10.

Table 1
Staffing Profile of Research and Development Offices

<table>
<thead>
<tr>
<th></th>
<th>Number of Full-Time Staff</th>
<th>Number of Part-Time Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management/Administrative</td>
<td>264</td>
<td>80</td>
</tr>
<tr>
<td>Technical and Scientific</td>
<td>755</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,019</strong></td>
<td><strong>140</strong></td>
</tr>
</tbody>
</table>

2.3 Building Applied Research Capacity

Colleges and institutes continue to build capacity through institutional training activities for faculty, staff and students, while strengthening ties with industry and community partners through outreach and promotional activities. All respondents reported offering training activities.
Institutional education activities included workshops, presentations, seminars, symposia, mentorship activities, one-on-one support for grant applications, and support for participation in conferences and symposia. Training offered in 2011-12 focused on building research capacity; particularly for the preparation of grant applications and research proposals, research ethics and intellectual property. Other topics include:

- project management
- funder requirements
- fundamental research policies
- commercialization
- work plan design and development
- research project development
- secondary research and sourcing
- technical report writing, team building
- health and safety
- connecting applied research to curriculum and assessment
- dissemination of research results.

2.4 Promotion and Knowledge Transfer

The promotion and knowledge transfer of research are indicators of applied research capacity. Ninety-three percent of respondents reported promotion and knowledge transfer activities.

These activities targeted business, industry and community partners, other colleges, institutes and universities, to identify new partnership opportunities. Activities included presentations to potential partners and networking events and conferences that brought together different partners. Publications, newsletters, research magazines and journals are also key knowledge sharing tools. A 2011 publication entitled *La recherche collégiale : 40 ans de passion scientifique* highlights the contribution of cégeps to the research landscape in Quebec and emphasizes the need for more effective knowledge transfer and promotion.4

Activities internal to colleges and institutes raise awareness about applied research among staff, faculty and students. To engage more students, colleges and institutes reported integrating social media marketing through Facebook and Twitter. Presentations to Program Advisory Committees and Deans’ Councils enhance the learning experience and integrate applied research into curriculum.

2.5 Eligibility with Federal Granting Councils

NSERC is a primary source of funding for college and institute applied research. An important indicator of applied research capacity is the number of institutions that have acquired NSERC eligibility. As of January 2013, 92 colleges and institutes were eligible, an increase of 10% from 2010-11 and 44% increase from 2009-10. In 2005-06 only 13 had NSERC eligibility.

There were 55 colleges and institutes eligible for support from the Social Sciences and Humanities Research Council (SSHRC), a 45% increase from last year. One college had eligibility with the Canadian Institutes of Health Research (CIHR).

---

2.6 Research Opportunities for College and Institute Faculty and Staff

In 2011-12, 1,774 faculty and staff (e.g. industrial experts and technicians) participated in applied research activities, a 10% increase from 2010-11. Most faculty and staff (78%) were involved part-time and had an impressive range of credentials: 14% had a college/institute diploma, 41% a bachelor’s degree; 29%, a master’s degree; and 16%, a doctorate.

Figure 1 shows the approaches colleges and institutes identified for involving faculty and staff in applied research. The highest proportion reported that the applied research office assisted with proposal development and awareness building activities such as Applied Research Days. Colleges and institutes supported faculty and staff involvement by identifying potential partners, facilitating networking and providing policies and procedures to support applied research. Faculty release time\(^5\) is identified as a key success factor for college and institute applied research. For 2011-2012, more colleges and institutes reported they provided faculty release time, 84% of respondents compared to 79% in 2010-2011.

Figure 1

How Colleges and Institutes Facilitate Faculty Participation in Applied Research

<table>
<thead>
<tr>
<th>Approach</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance with proposal development</td>
<td>96%</td>
</tr>
<tr>
<td>Awareness building activities</td>
<td>96%</td>
</tr>
<tr>
<td>Identification potential partners</td>
<td>92%</td>
</tr>
<tr>
<td>Network and contact identification</td>
<td>92%</td>
</tr>
<tr>
<td>Point of contact for faculty, the granting councils and partners</td>
<td>91%</td>
</tr>
<tr>
<td>Policy, procedure and practice assistance</td>
<td>88%</td>
</tr>
<tr>
<td>Release time</td>
<td>86%</td>
</tr>
<tr>
<td>Internal proposal calls for research projects</td>
<td>77%</td>
</tr>
<tr>
<td>Database of faculty expertise and curriculum vitae</td>
<td>18%</td>
</tr>
</tbody>
</table>

\(^5\) College faculty are expected to teach full time, with no allocation for research-related release time in provincial operating grants or collective agreements. Generally, college faculty are expected to conduct research on their own time, over and above full teaching loads. The lack of adequate funding for release time for college faculty to engage in research activities is a limiting factor for the expansion of research at colleges. NSERC’s CCI Program is the only funding program that recognizes faculty release time as an eligible expense and provides up to $7,000 per faculty release (to hire a replacement teacher) to allow a faculty to participate in CCI projects.
2.7 Students at the Centre of Applied Research

The Jenkins Report recognized that colleges and universities have a unique role in producing the skilled people for different components of the innovation ecosystem.

“…universities and colleges produce Bachelor’s degree holders who are often the front-line innovation performers; and our colleges produce technicians and technologists to facilitate the commercialization efforts of the firm.”

The interaction among these types of talent is the foundation for building an innovation-based economy.

Canada’s public colleges and institutes engage in applied research to enhance student learning. Research activities give students hands-on experience to address real world challenges. The Jenkins Report emphasized the importance of ensuring students graduate with the professional and entrepreneurial skills employers are seeking. Colleges and institutes reported that 24,108 students participated in applied research in 2011-2012, up by 77 percent from 2010-2011. This is a result of increased investments in college and institute applied research and improved tracking by institutions.

Employers see programs that encourage post-secondary student participation in research projects with business as having a number of benefits, including (i) the chance to identify the best recruits, (ii) the ability to influence curricula to be more industry-relevant, (iii) exposure to new ideas and specialized equipment in educational institutions and (iv) access to a flexible workforce.

Colleges and institutes have different approaches for involving students in applied research. Figure 2 shows that the most common approach was in-class projects that provide students with direct research experience in their field of study. More colleges and institutes reported programs that include capstone projects, which are large and intensive research projects required for program completion. These projects provide graduates with the dynamic and multi-faceted skills that employers are in need of.

Summer employment and internships provide students with essential work experience and exposure to employers. In 2011-2012, colleges and institutes reported they employed 2,053 students through research activities. Some institutions build in requirements for all funded applied research projects to include employment of at least one paid student research assistant.
Thirty percent of colleges and institutes reported that 585 students found employment as a result of applied research projects. ACCC anticipates that these numbers will increase as colleges and institutes enhance tracking mechanisms and reporting capacity.

### 2.7.1 Student Entrepreneurship

According to the OECD, it is commonly accepted that managerial and entrepreneurial skills should be part of education curricula from an early stage and should closely involve business through student interactions with local entrepreneurs and internships.⁸

Eighty percent of respondents reported they supported student entrepreneurship. Most institutions achieved this through the integration of courses into education programs in fields such as business, engineering technologies and information and communications technology, mentorship of student entrepreneurs, on-campus clubs such as *Students in Free Enterprise* and *Enactus*, competitions and awards, services from on-campus entrepreneurship centres, incubators and entrepreneurs in residence. In 2011-2012, 1,054 students received direct support to pursue an entrepreneurial idea.

---

2.8 Research Specializations and Expertise

Through Applied Research Environmental Scans in 2008-09, 2009-10, 2010-11 and 2011-12, colleges and institutes identified 524 areas of research specialization, with 77 new areas just last year.

Table 2 identifies areas of specialization for eleven provinces and territories across six categories: natural resources and energy, environmental science and technologies, health and life sciences, information and communication technologies (ICT), manufacturing and building technology and social innovation. The top three areas are highlighted and colour-coded. The areas of expertise concentrate on the economic and social development priorities of the regions served. The list of all areas of specialization is provided in an accompanying document.

Ontario colleges and institutes reported the highest number of areas of research expertise across five of six categories. For natural resources and energy, Ontario had the highest number of areas of specialization focused on renewable energy and agriculture research. Alberta had high areas of concentration in social innovation, natural resources and energy and the environment. In Quebec, cégeps and their affiliated centres for technology transfer focused on research in manufacturing and building technology, natural resources and social innovation. In British Columbia, the main areas of focus were health, social innovation, natural resources and energy. Manitoba colleges reported expertise in natural resources and energy, social innovation and information technology.

Table 2
Distribution of Areas of Research Specializations - Total 524

<table>
<thead>
<tr>
<th></th>
<th>Natural Resources and Energy</th>
<th>Environmental Science and Technologies</th>
<th>Health, Medical and Life Sciences</th>
<th>Information and Communications Technologies</th>
<th>Manufacturing and Building Technology</th>
<th>Social Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>3</td>
<td>3%</td>
<td>6</td>
<td>9%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>2</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>2</td>
<td>2%</td>
<td>1</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>5</td>
<td>4%</td>
<td>1</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Quebec</td>
<td>17</td>
<td>15%</td>
<td>6</td>
<td>9%</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Ontario</td>
<td>30</td>
<td>26%</td>
<td>19</td>
<td>29%</td>
<td>31</td>
<td>41%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>10</td>
<td>9%</td>
<td>3</td>
<td>5%</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>2</td>
<td>3%</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Alberta</td>
<td>26</td>
<td>22%</td>
<td>16</td>
<td>24%</td>
<td>16</td>
<td>21%</td>
</tr>
<tr>
<td>British Columbia</td>
<td>20</td>
<td>17%</td>
<td>10</td>
<td>15%</td>
<td>20</td>
<td>27%</td>
</tr>
<tr>
<td>Yukon</td>
<td>2</td>
<td>2%</td>
<td>2</td>
<td>3%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>117</td>
<td></td>
<td>66</td>
<td>75</td>
<td>80</td>
<td>84</td>
</tr>
</tbody>
</table>

Legend
- **Highest Concentration of Research Expertise**
- **Second Highest**
- **Third Highest**
2.9 Research Centres and Laboratories

One hundred and three colleges and institutes (100% of respondents) had specialized research centres and laboratories. A total of 387 research centres were identified, 82 more than last year. Table 3 shows the distribution of research centres by province/territory for the same categories. A list of all research centres and laboratories is provided in an accompanying document.

Ontario colleges and institutes reported the highest number of research centres and labs for all categories. Colleges and institutes in Quebec and Alberta also had a significant proportion of research facilities. The research centres in Quebec included 46 college centres for the transfer of technology (CCTT) affiliated with cégeps, with the most in manufacturing, information and communication technologies, natural resources and social innovation. The highest number of social innovation research centres was in Ontario, comprising 25% of the total. Alberta had a significant number of research centres in natural resources and energy, environment and social innovation. The number of centres in Saskatchewan, the Atlantic and the Yukon were evenly distributed among all categories.

Table 3
Distribution of Research Centres and Laboratories - Total 387

<table>
<thead>
<tr>
<th>Province</th>
<th>Natural Resources and Energy</th>
<th>Environmental Science and Technologies</th>
<th>Health, Medical and Life Sciences</th>
<th>Information and Communications Technologies</th>
<th>Manufacturing and Building Technology</th>
<th>Social Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>4</td>
<td>5%</td>
<td>1</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>1</td>
<td>1%</td>
<td>3</td>
<td>4%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>5</td>
<td>6%</td>
<td>3</td>
<td>7%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>5</td>
<td>6%</td>
<td></td>
<td></td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Quebec</td>
<td>16</td>
<td>20%</td>
<td>6</td>
<td>13%</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Ontario</td>
<td>23</td>
<td>29%</td>
<td>20</td>
<td>44%</td>
<td>44</td>
<td>66%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>2</td>
<td>3%</td>
<td>1</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>17</td>
<td>22%</td>
<td>8</td>
<td>18%</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>British Columbia</td>
<td>6</td>
<td>8%</td>
<td>5</td>
<td>11%</td>
<td>8</td>
<td>12%</td>
</tr>
<tr>
<td>Yukon</td>
<td></td>
<td></td>
<td>1</td>
<td>2%</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>45%</td>
<td>67</td>
<td>69%</td>
<td>67</td>
<td>67%</td>
</tr>
</tbody>
</table>

Legend
- Highest Concentration of Research Expertise
- Second Highest
- Third Highest
2.10 Research Networks

Colleges and institutes identified 171 research networks at the local, regional, provincial and national levels, many of which are sector-specific. A list of the 171 research networks is available as a separate document.

2.10.1 Provincial / Territorial Research Networks

The purpose of provincial and regional research networks is to increase capacity and advocate for increased financial support for college and institute applied research. The current provincial and regional networks are described below.

The British Columbia Applied Research and Innovation Network, with representatives from colleges in British Columbia and from Yukon College, meets to share information about applied research and innovation activities and to support the development of institutional policies and practices. Website: http://www.bcarin.ca

The Alberta Association of Colleges and Technical Institutes (AACTI), is the collective voice of 14 colleges and technical institutes, two undergraduate universities and one specialized arts and culture institution. AACTI’s innovation office supports applied research and innovation through capacity building, faculty engagement, student innovation projects and community of practice development and exchange of best practices. Website: http://www.aacti.ca

The Heartland Applied Research Partners (HARP), formerly the Great Plains Applied Research Network (GPARN), comprises directors of applied research from Red River College and the Saskatchewan Institute of Applied Science and Technology, and senior officers of academic and research services from University College of the North and Assiniboine Community College. HARP delivers applied research capacity that brings value to students, industry and community partners and the regional economy.

The Colleges Ontario Network for Industry Innovation (CONII) comprises 24 colleges and institutes supported by the Ministry of Economic Development and Innovation. CONII connects SMEs to the applied research and commercialization expertise of colleges and institutes to help SMEs develop their products and become more competitive. Website: http://www.conii.ca

All 24 colleges and institutes have representation on the Colleges Ontario Heads of Applied Research Committee that assists with the promotion and expansion of applied research.

The Association pour la recherche au collegial, representing 48 Quebec cégeps, fosters research throughout the college system disseminating position papers on research issues, research-related activities and conferences, and offering support measures and prizes for student applied research. Website: http://vega.cvm.qc.ca/arc Réseau Trans-tech is the network representing the 46 college centres for the transfer of technology in Quebec. Website: http://reseautranstech.qc.ca

The Applied Research Network of the Atlantic Provinces Community College Consortium comprises directors of research from the College of the North Atlantic, Nova Scotia Community College, Holland College, New Brunswick Community College and Collège communautaire du Nouveau Brunswick. Its main objective is to advance applied research through collaboration, cooperation and sharing of best practices. Website: http://www.apccc.ca/research/reference.html
The **Social Economy Research Network of Northern Canada** is part of a national research program funded by the Social Sciences and Humanities Research Council. This network is led by Aurora College, Nunavut Arctic College and Yukon College and their respective research institutes. The network links researchers working in the North with students, community organizations and universities for research on the following themes: the social economy in northern Canada; resource regimes and social economy in the north; the impact of public policy on social economic development in the north; and indigenous communities and the social economy.
Website: [http://dl1.yukoncollege.yk.ca/sernnoca/about](http://dl1.yukoncollege.yk.ca/sernnoca/about)

### 2.10.2 Sector and Industry Networks

Involvement in sector or industry specific research networks enables colleges and institutes to remain current with industry innovations and connected to leading edge practices and research. The following are some examples of sector research networks.

**Alberta Rural Development Network** is a not-for-profit partnership of Alberta’s 21 public colleges, universities, and technical institutes. Members work together to support and enhance the well-being of individuals and the vibrancy of communities. It draws on the strengths and experiences of rural communities, post-secondary institutions, and community-based organizations to assist in the development of rural Alberta through education, research, collaboration and networking. The organization assists with the creation of community driven projects, provides opportunities for new partnerships, collects and shares applied research and information, and works with rural communities to identify and address gaps in education. Website: [http://www.ardn.ca](http://www.ardn.ca)

**Canada Mining Innovation Council (CMIC)** is a network of high-level industry, academic and government leaders interested in enhancing the competitiveness of a responsible Canadian mining industry through excellence in research, innovation and commercialization. The Yukon Research Centre at Yukon College is a member of this network. CMIC does not fund research, but acts as a facilitator and catalyst to promote collaboration, facilitate communications, and links the needs of industry with the capabilities of researchers and with funding opportunities. Website: [http://www.cmic-ccim.org](http://www.cmic-ccim.org)

**Ontario Research and Innovation Optical Network (ORION)** has partnerships with 23 Ontario colleges, universities, school boards, teaching hospitals, research and cultural educational facilities. ORION is an advanced technology fibre optic network that supports and facilitates research, education, collaboration and innovation across Ontario. Website: [http://www.orion.on.ca](http://www.orion.on.ca)

**Vancouver Island Community Research Alliance (VICRA)** is an Island-focused community-campus research alliance among the five post-secondary institutions, including Camosun College and North Island College, on Vancouver Island working with partners such as the Vancouver Island Economic Alliance, the United Way and community foundations, local governments, community agencies, provincial government bodies, and the Vancouver Island Health Authority. The goal of VICRA is to mobilize the collective and diverse research, knowledge, skills and capacities in service of the people of Vancouver Island. Website: [http://mapping.uvic.ca/vicra/welcome/about_vicra](http://mapping.uvic.ca/vicra/welcome/about_vicra)
2.11 Performance Measurement of Applied Research

Eighty percent of institutions reported using performance measurement metrics and tools to report on applied research. Colleges and institutes in Alberta, Ontario and Quebec have strong performance measurement and reporting systems owing to the support mechanisms provided by AACTI, CONII and Réseau Trans-Tech.

Colleges and institutes identified the following performance indicators that most effectively demonstrate the impact of research activities on company or community partners:

- number of new products, technologies, services, or processes
- number of prototypes
- number of jobs created or maintained for the company or community partner
- number of improved products, technologies, services or processes
- increased market share for the products or services
- number of products successfully commercialized
- number of new licenses
- number of patents

Colleges and institutes identified the following indicators to report on the impact of applied research on institutions, faculty, staff and students:

- research partnerships: number of industry and community partners; number of projects with industry and community partners; number of workshops delivered for industry and community partners; and number of partnerships with other colleges, institutes and universities
- number of faculty and staff (technicians, researchers or industrial experts) engaged in research
- number of students engaged in research
- funding for research activities: federal funding by source (NSERC, SSHRC, Canada Foundation for Innovation, etc.); provincial funding by source; industry funding; funding from institutional budgets and; annual revenues from research activity and number of successful grant applications
- number of programs with applied research projects and elements integrated into curriculum
- improved teaching content and instruction
- enhanced learning opportunities for students leading to employment
- robust policy, guidelines and procedures for faculty, students and industry to engage in applied research, technology transfer and enterprise development
- enhanced culture of applied research, innovation and creativity among faculty, staff and students
- number of students employed by industry partners

2.12 The Legacy Impact of Applied Research on Curriculum

Thirty-seven percent of responding institutions identified courses that include applied research projects. For 2011-2012, colleges and institutes reported that 452 courses have integrated applied research projects. Respondent institutions indicated that their figures will increase as they finish compiling the list of courses that include applied research as part of the curriculum and as they enhance tracking mechanisms to collect this data.
Colleges and institutes described the legacy impact of applied research in the curriculum as follows:

• **Enhanced Education Programs**
  The integration of applied research and curriculum keeps program content current, cutting-edge and provides access to industry-relevant technologies and equipment. Close ties with industry partners enable faculty to remain current in their field of study, which ensures programs are more relevant for students and their future employers.

• **Benefits for Students**
  Including applied research in the curriculum gives students experiential learning opportunities by working with industry partners on real world problems. Students develop rigour and marketable workplace skills in fields such as: project management, troubleshooting, intellectual curiosity, proposal writing and reporting.
  
  Applied research activities facilitate 'innovation literacy' improving students' competitiveness in the job market and their capacity to innovate in the workplace. These activities enrich student learning, enhance life skills, and improve preparedness and professionalism.

• **Enhanced Partnerships**
  Industry partners benefit from access to faculty with expertise and youth who are keen and eager to learn and apply their skills. Colleges and institutes reported that the integration of applied research in curriculum fosters new partnerships with industry and business, and strengthens existing partnerships.
  
  A 2011 study in Quebec examined the impact of the cégep-CCTT tandem on education programs in cégeps, faculty and students. As a result of this study, a tool was developed to enable cégeps and CCTTs to assess the capacity and impact of CCTT activities on learning and outcomes for students. Website: [http://www.cegep-ste-foy.qc.ca/freesite/index.php?id=26989](http://www.cegep-ste-foy.qc.ca/freesite/index.php?id=26989)

---

9 Kingsbury, F.; Bourgeois, Fanny; Doré, André. *Article de vulgarization - Du CCTT au Collège : une responsabilité collective, Un outil pour favoriser les retombées sur la formation collégiale.* June 2011
3. A Diversity of Funding Sources

External funding for college/institute applied research continues to increase, most notably from the private sector, the Government of Canada and provincial/territorial governments.

Colleges and institutes reported $179,085,260 in external funding, an increase of 55% from 2010-2011. Table 4 shows that the largest proportion of the funding was from the Government of Canada (40%), for a total of $71,978,719. This is more than double the amount reported receiving from the Government of Canada last year. Private sector investment increased by 18% and totaled $59,445,302. This represents one third of all investments in 2011-2012. Provincial and territorial governments’ contributions increased substantially, by 48% in the last year totaling $44,034,464 and represented a quarter of the total investments. Colleges and institutes reported a decrease in contributions from foundations, however contributions from community service organizations more than doubled. A new funding source reported for 2011-2012 is municipal governments at $532,762. Colleges and institutes also reported substantially more funding from international partners, $1,532,583, up from $295,000 last year.

Table 4

External Funding Sources for College and Institute Applied Research

<table>
<thead>
<tr>
<th>Funding Sources</th>
<th>2005-06</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Sector</td>
<td>$4,200,000</td>
<td>$45,540,384</td>
<td>$44,622,335</td>
<td>$50,376,575</td>
<td>$59,445,302</td>
</tr>
<tr>
<td>Federal government</td>
<td>28,000,000</td>
<td>27,336,506</td>
<td>27,886,643</td>
<td>33,661,068</td>
<td>71,978,719</td>
</tr>
<tr>
<td>Provincial/territorial governments</td>
<td>13,000,000</td>
<td>25,591,430</td>
<td>28,821,309</td>
<td>29,760,550</td>
<td>44,034,464</td>
</tr>
<tr>
<td>Foundations</td>
<td>unknown</td>
<td>unknown</td>
<td>838,411</td>
<td>1,372,555</td>
<td>730,347</td>
</tr>
<tr>
<td>Community service organizations</td>
<td>unknown</td>
<td>unknown</td>
<td>167,575</td>
<td>318,554</td>
<td>831,083</td>
</tr>
<tr>
<td>Municipal</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>532,762</td>
</tr>
<tr>
<td>International</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>295,260</td>
<td>1,532,583</td>
</tr>
<tr>
<td>Total</td>
<td>$45,200,000</td>
<td>$98,468,320</td>
<td>$102,336,273</td>
<td>$115,784,562</td>
<td>$179,085,260</td>
</tr>
</tbody>
</table>

Ninety-seven percent of external funding was for business and industrial research and 3% for social innovation. In 2011-12, colleges and institutes reported a substantial year-over-year increase to social innovation research supported by the private sector, totaling $1,853,285. The proportion of Government of Canada investments in industrial and social innovation research remained unchanged (97% and 3% respectively). For provincial and territorial government sources, a higher proportion was allocated to business and industrial research - 98% compared to 2% for social innovation research. Colleges and institutes reported that foundations were favouring business and industrial research slightly more than social innovation research during this period (57% compared to 43%).

Table 5 shows the sources of Government of Canada funding for 2011-12. The expansion of the Tri-Council College and Community Innovation (CCI) Program, administered by NSERC, was the largest funding source and represents 48% of federal investments for a total of $34,298,576. More details about the CCI Program are provided in section 3.1.
The next most important funding source is the Canada Foundation for Innovation (CFI) representing 16% of all federal sources. Western Economic Diversification Canada (WED) represents 12% of federal sources at $8,665,783. The support reported by Ontario colleges and institutes from the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) increased threefold to $6,572,689, representing 9% of federal support. For 2011-12, Réseau Trans-Tech reported Quebec cégeps and affiliated CCTTs received $4,682,296 from the Canada Economic Development for Quebec Regions. The funding reported by Atlantic colleges from the Atlantic Canada Opportunities Agency (ACOA) increased by 20% in the period to $1,718,689.

Table 5

Federal Funding for College and Institute Applied Research

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tri-Council College and Community Innovation Program</td>
<td>$34,298,576</td>
</tr>
<tr>
<td>Canada Foundation for Innovation</td>
<td>$11,339,532</td>
</tr>
<tr>
<td>Western Economic Diversification Canada</td>
<td>$8,665,783</td>
</tr>
<tr>
<td>Federal Economic Development Agency for Southern Ontario</td>
<td>$6,572,689</td>
</tr>
<tr>
<td>Canada Economic Development for Quebec Regions</td>
<td>$4,682,296</td>
</tr>
<tr>
<td>Atlantic Canada Opportunities Agency</td>
<td>$1,718,689</td>
</tr>
<tr>
<td>Natural Sciences and Engineering Research Council</td>
<td>$793,311</td>
</tr>
<tr>
<td>Department of National Defence</td>
<td>$651,778</td>
</tr>
<tr>
<td>Social Sciences and Humanities Research Council</td>
<td>$573,542</td>
</tr>
<tr>
<td>National Research Council Industrial Research Assistance Program</td>
<td>$558,379</td>
</tr>
<tr>
<td>Heritage Canada</td>
<td>$450,000</td>
</tr>
<tr>
<td>Natural Resources Canada</td>
<td>$411,685</td>
</tr>
<tr>
<td>Citizenship &amp; Immigration Canada</td>
<td>$300,000</td>
</tr>
<tr>
<td>Canadian Northern Economic Development Agency</td>
<td>$258,000</td>
</tr>
<tr>
<td>Human Resources and Skills Development Canada</td>
<td>$165,909</td>
</tr>
<tr>
<td>Environment Canada</td>
<td>$158,361</td>
</tr>
<tr>
<td>Rural and Co-operatives Secretariat</td>
<td>$104,087</td>
</tr>
<tr>
<td>Agriculture and Agri-Food Canada</td>
<td>$77,000</td>
</tr>
<tr>
<td>Canadian Institutes of Health Research</td>
<td>$68,386</td>
</tr>
<tr>
<td>Federal Government Indirect Costs Program</td>
<td>$60,000</td>
</tr>
<tr>
<td>International Development Research Centre</td>
<td>$35,000</td>
</tr>
<tr>
<td>Parks Canada</td>
<td>$23,706</td>
</tr>
<tr>
<td>Service Canada</td>
<td>$12,010</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$71,978,719</strong></td>
</tr>
</tbody>
</table>
3.1 The Tri-Council College and Community Innovation (CCI) Program

The Government of Canada has made important investments in college and institute applied research capacity through the CCI Program administered by NSERC in collaboration with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research. Funding is provided through six grant types:

- Innovation Enhancement (IE) grants
- Applied Research and Development (ARD) grants
- Applied Research Tools and Instrument (ARTI) grants
- Technology Access Centre (TAC) grants
- Industrial Research Chairs for Colleges (IRCC) grants
- College-University Idea to Innovation Program (CU-I2I) grants

Appendix 2 provides a description of the grants.

For 2011-12, colleges and institutes reported receiving $34,298,576 from the CCI Program. The highest proportion (65%) of the funds was for the five-year Innovation Enhancement grants. Colleges and institutes received $3,775,559 from Applied Research Tools and Instruments grants (ARTI). The ARTI grants were a one-time allocation and have not been renewed.

Table 6

<table>
<thead>
<tr>
<th>Tri-Council CCI Grants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Research and Development (ARD) grants</td>
<td>$2,377,546</td>
</tr>
<tr>
<td>Applied Research Tools and Instruments (ARTI) grants</td>
<td>3,775,559</td>
</tr>
<tr>
<td>College University Idea to Innovation (CU-I2I) grants</td>
<td>21,000</td>
</tr>
<tr>
<td>Innovation Enhancement (IE) grants 5 year</td>
<td>22,294,367</td>
</tr>
<tr>
<td>Innovation Enhancement (IE) grants 2 year</td>
<td>898,975</td>
</tr>
<tr>
<td>Industrial Research Chairs for Colleges (IRCC) grants</td>
<td>3,141,217</td>
</tr>
<tr>
<td>Technology Access Centre (TAC) grants</td>
<td>1,789,912</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$34,298,576</strong></td>
</tr>
</tbody>
</table>

Annual federal investments are enabling colleges and institutes to strengthen their capacity to work with local companies, particularly SMEs, and support applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies. However, these investments have been out-paced by demand for Innovation Enhancement grants and the expansion of CCI Technology Access Centres, which is a pilot program that allows for only five centres to be established.

Social sciences and humanities research activities are also eligible for funding through the CCI Program. Colleges and institutes can apply to the program directly, or contribute to projects led by institutions in the natural sciences, engineering and health.

One of the key benefits of the CCI Program is providing students with advanced skills, industry experience and employment opportunities. Private sector partners are saying that the quality of applied research
projects undertaken by college and institute students is equal to or superior than research projects undertaken by university undergraduates. The OECD 2012 Economic Surveys also recognized the benefit of industry access to college students to meet innovation needs.

*Internships, co-ops, and placement programs have always been geared toward graduate-level students and newly minted university graduates; therefore, industry has had only that finite talent pool from which to choose when accessing placement programmes, leaving substantial resources in colleges untapped.*10

An investment to support student internships under the CCI Program would provide more companies with greater access to highly skilled students.

### 3.1.1 Impact of the CCI Program

Colleges and institutes confirmed the CCI Program builds capacity within their institutions, enhances research partnerships and contributes to economic and social development within the communities and regions they serve.

Islamic impact on Colleges and Institutes:

- **Strengthened Capacity to Deliver Applied Research**
  CCI grants enhance capacity to undertake applied research with SMEs through strengthened administrative and operational practices and increased opportunities for sustainable applied research programs.

- **Improved Human Resource Capacity**
  Institutions are able to provide more opportunities for faculty to engage in research and to attract research staff, including technicians and technical experts.

- **Enhanced Learning Experiences for Students**
  Increased opportunities for students in applied research enrich the learning experience and diversify students’ skills.

- **Enhanced Research Partnerships**
  CCI expands research partnerships with industry, community organizations and academia. Colleges and institutes are better positioned to address partners’ research needs by supporting the development of new processes, products and services.

- **Improved Research Infrastructure and Equipment**
  CCI grants improve applied research facilities and infrastructure, increase access to equipment and leverage access to resources and capital. CCI projects have served as a model to support the development of centres of excellence at some institutions.

- **Integration of Research into Curriculum**
  CCI funding supports efforts to integrate applied research within program curricula, thus enhancing program content and the learning experiences of students.

Impact on SMEs:

- **Develop or improve products, processes, services and/or technologies**
  The principal impact on SMEs is the development of new or improved products, processes, services that enhance profile and market opportunities.

- **Access to equipment, facilities and highly skilled faculty, personnel and students**
  SMEs gain access to resources for R&D that they could not otherwise afford.

- **Support commercialization of products and develop new markets**
  CCI projects enhance SMEs’ capacity to commercialize products by reducing the time to market, and developing new market niches and export opportunities.

- **Leverage partnerships and funding**
  CCI projects help SMEs leverage additional funding and expand partnerships nationally and internationally. SMEs are more responsive to customer demand, can explore new avenues of research and increase awareness of their companies.

- **Increased awareness about the importance and value of R&D**
  SMEs have increased their awareness of the importance of R&D and the benefits for their business line and sector.

- **Business outcomes and impacts**
  CCI funding results in increased commercial opportunities and revenue for SMEs, which enables them to improve employee development and to create and maintain jobs.

Impact on Communities and Regions:

- **Enhanced collaboration among economic actors in a community or region**
  The most commonly identified impact at the community or regional level is enhanced collaboration among economic actors. CCI projects enable colleges and institutes to create research hubs that foster networking with companies, community partners, First Nations, local associations and organizations.

- **Stimulating the local and regional economies**
  CCI contributes to local and regional socio-economic development. New products, processes, services and technologies stimulate local and regional economies by raising the profile of SMEs, support product diversification and improve productivity through increased specialization, the consolidation of economic sectors and the development of export markets.

- **Support job creation**
  CCI projects increase access to quality jobs and support the development of a specialized and highly skilled employment market.

3.2 Natural Sciences and Engineering Research Council (NSERC)

Colleges and institutes reported other funding from NSERC for a total of $793,311 including from NSERC regional offices such as Regional Opportunities Funds and the Strategic Network, Engage and Discovery Grants.
Colleges and institutes are increasingly taking proactive measures to develop common approaches and processes for building their organizational research capacity. With the support of NSERC, ACCC designed a tool kit of models, practices, procedures and forms for Intellectual Property agreements with industry and community partners in applied research. The tool kit is based on information and exemplars provided by colleges and institutes that have received NSERC CCI program grants.

The toolkit is available on the ACCC Website at: 

3.3 Social Sciences and Humanities Research Council (SSHRC)

While the scale and scope of college and institute applied research activity in the social sciences and humanities is significant and rising, the proportion of SSHRC funding allocated to colleges and institutes remains small. Many colleges and institutes with capacity for social sciences research have not yet applied for SSHRC eligibility. For 2011-2012, 13 colleges and institutes received funding from SSHRC grants totaling $573,542, about the same as 2010-2011.

The introduction of SSHRC’s new Program Architecture and grants designed to support multi-sector, multi-disciplinary partnerships are potential funding opportunities for colleges and institutes. Colleges and institutes are encouraged to examine the Partnership Development Grants, the Partnership Grants and the Connections Grants to support their social sciences and humanities research activities.

**Partnership Development Grants**

SSHRC contributes from $75,000 to $200,000 over one to three years to help launch new research partnerships. Projects may result in best practices, models and/or direct business applications.

**Partnership Grants**

SSHRC contributes from $500,000 to $2.5 million over four to seven years to advance social sciences and humanities research and the use of that research on a larger scale.

**Connections Grants**

SSHRC contributes from $7,000 to $50,000 to support events and activities (workshops, forums or outreach activities) that bring social sciences and humanities research findings to wider audiences.

3.4 Canada Foundation for Innovation

With the launch of the Canada Foundation for Innovation (CFI) College-Industry Innovation Fund (CIIF), colleges and institutes reported significantly higher contributions of $11,339,532, compared to less than one million in 2010-2011. The improved research infrastructure will make an enormous difference for colleges’ and institutes’ capacity to respond to business pressures, and ultimately stimulate regional economic development and job creation.

CIIF has two funding streams. The first aims to enhance existing applied research and technology development capacity, and the second builds on the research infrastructure associated with projects that qualify for Five-Year CCI Program Innovation Enhancement Grants.
3.5 Regional Economic Development Agencies

Regional economic development agencies support college and institute applied research through programs and initiatives that provide businesses with access to college and institute research capacity. For 2011-2012, colleges and institutes reported funding from the Atlantic Canada Opportunities Agency (ACOA), the Canada Economic Development for Quebec Regions, the Canadian Northern Economic Development Agency, the Federal Economic Development Agency for Southern Ontario (FedDev Ontario), and Western Economic Diversification Canada (WED). Combined, these federal economic agencies represent the second largest federal source after NSERC, totaling $21,897,430.

The Atlantic Innovation Fund (AIF) and the Business Development Program (BDP) under the Atlantic Canada Opportunities Agency encourage partnerships between the private sector and colleges, universities and other research institutions to develop new or improved products and services. Springboard Atlantic Inc. is a commercialization network supported through the AIF, which is mandated to support the commercialization of research in Atlantic Canada. Four colleges in the Atlantic region reported they accessed these ACOA programs in 2011-12: Collège communautaire du Nouveau-Brunswick, Nova Scotia Community College, Holland College and College of the North Atlantic. The total funding received in 2011-12 was $1,718,689.

Canada Economic Development for Quebec Regions provided $4,682,269 to eight college centres for the transfer of technology, as reported by Réseau Trans-Tech. Canadian Economic Development for Quebec Regions has funding to support innovation, technology adoption or transfer. CCTTs received funding to support technology transfer and improve the performance and productivity of business partners.

Yukon College reported a $258,000 grant from the Canadian Northern Economic Development Agency (CanNor) in 2011-2012 for research related to cold climate innovation and resources and sustainable development for the Arctic. This grant is funded by CanNor’s Strategic Investments in Northern Economic Development (SINED) program, which focuses on long-term economic growth, economic diversification and capacity-building in all three territories.

In Ontario, the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) Applied Research and Commercialization Pilot Initiative has enabled colleges and institutes to work with SMEs on research and innovation in areas that include product, process and technology development; and product testing, piloting and demonstration. Twelve colleges and institutes reported they received funds for projects during 2011-2012 totaling $6,572,689.

Western Economic Diversification Canada (WED) supported the expansion of the applied research and innovation portfolio of colleges and institutes in Western Canada through infrastructure investments. Five institutions received funding from WED in 2011-2012: the British Columbia Institute of Technology, Grande Prairie Regional College, NorQuest College, Northern Lights College and Red River College. The total received by these institutions is $8,665,783.

3.6 National Research Council – Industrial Research Assistance Program

In November 2011, the Government of Canada launched the Digital Technology Adoption Pilot Program (DTAPP), an $80 million investment over three years starting in 2011-2012, designed to accelerate the adoption of digital technologies by at least 600 SMEs in any sector or location. The program is delivered through the National Research Council’s Industrial Research Assistance Program (IRAP) and engages colleges and institutes to provide services, training, expertise and the use of facilities.
DTAPP launched late in 2011-12. As such, the commitment of funds to colleges and institutes for use in that year was limited. However, by the end of March 2012, all regions were working actively to engage colleges and institutes and seven Contribution Agreements were either in place or under development. These included two in Ontario and Quebec and one in each in the Pacific, West and Atlantic Regions. The total amount to be committed at that time was $1.12M. Throughout the 2012-13 fiscal year, uptake has increased significantly as agreements came to fruition and new engagements were developed. Table 7 shows the DTAPP projects with colleges and institutes which will deliver services to SMEs to support their adoption projects approved as of January 8, 2012. These services include training, consulting services, use of facilities to test or adapt hardware and software.

Table 7
DTAPP Projects Approved, by Region, as of January 8, 2013

<table>
<thead>
<tr>
<th>Region</th>
<th>College/Cegep</th>
<th># of DTAPP Projects FY2012-13</th>
<th>Funded Amounts FY2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>Okanagan College</td>
<td>1</td>
<td>$1,300</td>
</tr>
<tr>
<td></td>
<td>Camosun College</td>
<td>1</td>
<td>89,000</td>
</tr>
<tr>
<td></td>
<td>College of New Caledonia</td>
<td>1</td>
<td>67,000</td>
</tr>
<tr>
<td></td>
<td>Selkirk College</td>
<td>1</td>
<td>61,523</td>
</tr>
<tr>
<td></td>
<td>British Columbia Institute of Technology</td>
<td>2</td>
<td>58,049</td>
</tr>
<tr>
<td>Pacific Total</td>
<td></td>
<td>6</td>
<td>$276,872</td>
</tr>
<tr>
<td>West</td>
<td>Red Deer College</td>
<td>1</td>
<td>80,000</td>
</tr>
<tr>
<td></td>
<td>Grande Prairie Regional College</td>
<td>1</td>
<td>56,290</td>
</tr>
<tr>
<td></td>
<td>Red River College</td>
<td>1</td>
<td>90,000</td>
</tr>
<tr>
<td>West Total</td>
<td></td>
<td>3</td>
<td>$226,290</td>
</tr>
<tr>
<td>Ontario</td>
<td>Entrepreneurship (CONII), represents 14 colleges</td>
<td>1</td>
<td>$315,000</td>
</tr>
<tr>
<td>Ontario Total</td>
<td></td>
<td>1</td>
<td>$315,000</td>
</tr>
<tr>
<td>Quebec</td>
<td>Cégep de Trois-Rivières (C2T3)</td>
<td>1</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Cégep de Sherbrooke (CPIQ)</td>
<td>1</td>
<td>290,000</td>
</tr>
<tr>
<td></td>
<td>Cégep de Lévis-Lauzon (CRVI)</td>
<td>1</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>Cégep André-Laurendeau (IILM)</td>
<td>1</td>
<td>95,000</td>
</tr>
<tr>
<td></td>
<td>Le Réseau Trans-tech, represents 9 cégeps (including the above cégeps)</td>
<td>2</td>
<td>575,000</td>
</tr>
<tr>
<td>Quebec Total</td>
<td></td>
<td>6</td>
<td>$1,120,000</td>
</tr>
<tr>
<td>Atlantic</td>
<td>Collège communautaire du Nouveau-Brunswick</td>
<td>1</td>
<td>$42,624</td>
</tr>
<tr>
<td></td>
<td>College of the North Atlantic</td>
<td>2</td>
<td>80,645</td>
</tr>
<tr>
<td></td>
<td>New Brunswick Community College</td>
<td>1</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Nova Scotia Community College</td>
<td>1</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>Holland College</td>
<td>1</td>
<td>31,500</td>
</tr>
<tr>
<td>Atlantic Total</td>
<td></td>
<td>6</td>
<td>$199,769</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>22</td>
<td>$2,137,931</td>
</tr>
</tbody>
</table>

Total Number of Colleges Participating in DTAPP Projects 36
4. Business and Industry Partnerships

In 2011-12, colleges and institutes partnered with 4,477 companies for business and industrial research. Ninety-seven percent of external funding shown in Table 4, was for business and industrial research totaling $173,243,278. As shown in Figure 3, the majority of partnerships were with SMEs defined as having 5 to 500 employees, followed by large companies with over 500 employees and micro-enterprises with 1 to 4 employees.

Figure 3

Distribution of Business and Industry Partners by Size of Enterprise

Table 8 shows a sector breakdown of college and institute partnerships with business and industry. Forty-six percent of SME partners were in the manufacturing sector and 20% in information and communication technology fields. Partnerships with large companies were concentrated mostly in manufacturing, natural resources and energy.

Table 8

<table>
<thead>
<tr>
<th>Sectoral Breakdown of Partnerships by Size of Enterprise</th>
<th>Micro Enterprises</th>
<th>Small- and Medium-sized Enterprises</th>
<th>Large Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Energy</td>
<td>23%</td>
<td>17%</td>
<td>30%</td>
</tr>
<tr>
<td>Environmental Science and Technology</td>
<td>21%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Health, Medical and Life Sciences</td>
<td>7%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>Information and Communication Technology</td>
<td>16%</td>
<td>20%</td>
<td>1%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>17%</td>
<td>46%</td>
<td>56%</td>
</tr>
<tr>
<td>Building Technology</td>
<td>6%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

The 2012 evaluation of the CCI program Innovation Enhancement grants included a survey of business and industry partners and confirmed that 86% were satisfied with their college partnerships and that 69% are planning future collaborations. The evaluation highlights how 39% of businesses increased revenues, customers, or employees; and that 69% experienced positive impacts on at least one element of their R&D capacity, including new or improved products, processes or services, the ability to attract investments, or their ability to make additional research investments.11

5. Partnerships for Social Innovation Research

Funding for social innovation research represented 3% of college and institute research funding and totaled $5,358,040 from all sources. Colleges and institutes reported 338 social innovation research partners, up by 17% from 2010-11. As shown in Figure 4, the highest proportion of respondents reported social innovation partnerships with private sector companies, about one third. Public service agencies or departments, non-governmental organizations and community or social service organizations were nearly equal with 24%, 23% and 21% respectively.

Figure 4
Distribution of Social Innovation Research by Organization Type

Table 9 shows the social innovation partnerships by discipline. The highest proportion of partnerships was for research related to serving disadvantaged populations including immigrants, Aboriginal peoples and people with disabilities, followed by education related fields, and industrial relations, social services and management/business.

Table 9
Distribution of Social Innovation Research by Organization Type

<table>
<thead>
<tr>
<th>Distribution of Disciplines for Social Innovation Research</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantaged populations</td>
<td>19</td>
</tr>
<tr>
<td>Education</td>
<td>18</td>
</tr>
<tr>
<td>Industrial relations</td>
<td>14</td>
</tr>
<tr>
<td>Social services</td>
<td>14</td>
</tr>
<tr>
<td>Management and business</td>
<td>14</td>
</tr>
<tr>
<td>Communications and media</td>
<td>7</td>
</tr>
<tr>
<td>Environmental awareness and planning</td>
<td>5</td>
</tr>
<tr>
<td>Scholarship</td>
<td>4</td>
</tr>
<tr>
<td>Justice</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
</tr>
</tbody>
</table>

Colleges and institutes were asked to report on the impact of applied research on social innovation research partners. The most significant impact was that social innovation partners benefited from new, adapted, or improved services, processes or policies. A significant number also improved services for disadvantaged groups.
6. **International Research Partnerships**

There is growing interest among colleges and institutes to share applied research capacity and expertise with international partners. Institutions from British Columbia, Alberta, Manitoba and Ontario reported international partnerships in 2011-12. Table 10 shows that colleges and institutes identified 29 research partnerships in 13 countries: Brazil, Chile, China, Costa Rica, Denmark, Dominican Republic, Mexico, Egypt, Japan, South Korea, South Africa, the United States, and Uruguay. The approximate value of the funding received in 2011-12 was $1.5 million.

### Table 10

**International Research Partnerships**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Partners</th>
<th>%</th>
<th>Country</th>
<th>Approximate Funding Received in 2011-2012 (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Energy</td>
<td>5</td>
<td>17%</td>
<td>USA, Dominican Republic, Denmark</td>
<td>$1,000 and in-kind</td>
</tr>
<tr>
<td>Building Technology</td>
<td>5</td>
<td>17%</td>
<td>Brazil, Uruguay, USA</td>
<td>in-kind</td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>17%</td>
<td>Mexico, Chili</td>
<td>47,000</td>
</tr>
<tr>
<td>Environmental awareness and planning</td>
<td>5</td>
<td>17%</td>
<td>USA, China, Egypt</td>
<td>466,579</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3</td>
<td>10%</td>
<td>Japan, South Korea</td>
<td>525,000</td>
</tr>
<tr>
<td>Disadvantaged populations (e.g. Aboriginal peoples, immigrants, people with disabilities)</td>
<td>2</td>
<td>7%</td>
<td>Brazil</td>
<td>62,500</td>
</tr>
<tr>
<td>Environmental Science and Technology</td>
<td>1</td>
<td>3%</td>
<td>Mexico</td>
<td>40,000</td>
</tr>
<tr>
<td>Information and Communications Technology</td>
<td>1</td>
<td>3%</td>
<td>Uruguay</td>
<td>in-kind</td>
</tr>
<tr>
<td>Communications and Media</td>
<td>1</td>
<td>3%</td>
<td>USA, Multiple Developing Countries</td>
<td>52,400</td>
</tr>
<tr>
<td>Management and Business</td>
<td>1</td>
<td>3%</td>
<td>South Africa</td>
<td>in-kind</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3%</td>
<td>USA, Costa Rica, Chile</td>
<td>338,104</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td></td>
<td></td>
<td><strong>$1,532,583</strong></td>
</tr>
</tbody>
</table>
7. Conclusion

The results of the ACCC Survey of 2011-12 College and Institute Applied Research Activity confirm applied research activity is continuing to grow. There are more institutions becoming involved in research, with increasing numbers of structures to administer research projects, more faculty, staff and students engaged and more partnerships with industry and social innovation partners.

Seventy-seven new areas of research specialization were identified by colleges and institutes, which total 524 in six categories: natural resources and energy, environment, health and medical sciences, information technologies, manufacturing and social innovation. There were 387 research centres and laboratories identified, which is an increase of 27% from 2010-11.

Colleges and institutes are tapping into diverse funding sources. Internal allocations remained steady. The private sector continued to contribute significantly, accounting for one third of all external funding. Despite continued economic uncertainty, private sector investments increased by 18% to $59.4 million. The Government of Canada became the largest source of external funding at $72 million, double the amount reported in 2010-11.

Colleges and institutes reported 4,586 private sector partnerships, 4,477 for business and industrial innovation and 109 for social innovation research. Industry partners were mostly SMEs in the manufacturing sector. Colleges and institutes reported 338 social innovation research partners, most of which were companies, public service agencies and community or social service organizations. The top three areas of social innovation research were serving disadvantaged peoples, education and industrial relations.

Colleges and institutes help their partners make incremental innovations to products, processes or services that enhance productivity, sustain or create jobs, increase the value of companies and build capacity. For industry partners, the most significant impacts were new or improved products or services; better production processes, and increased interest to pursue R&D. For social innovation partners the main impacts related to adapted or improved services, processes or policies, and improved services for disadvantaged peoples.

The government of Canada has made significant investments in college and institute applied research partnerships. The current allocation represents 2.5% of the $2.9 billion of annual federal funding for research conducted by the higher education sector. ACCC’s goal is to attract to the college sector 5% of these investments. A modest shift within existing R&D envelopes to increase support for colleges, institutes and their applied research partners would do much to stimulate economic development in Canada’s SME sector, the source of 70% of new jobs.
References


Alberta Rural Development Network: http://www.ardn.ca/about-us/mandate/

Applied Research Network of the Atlantic Provinces Community College Consortium:
http://www.apccc.ca/research/reference.html


Atlantic Canada Opportunities Agency:
http://www.acoa-apeca.gc.ca/eng/ImLookingFor/ProgramInformation/AtlanticInnovationFund/Pages/AtlanticInnovationFund.aspx

British Columbia Applied Research and Innovation Network: http://www.bcarin.ca/


http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/h_00261.html


L'Association pour la recherche au collégial: http://vega.cvm.qc.ca/arc/1_1_presentation.php#


Ontario Research and Innovation Optical Network: http://www.orion.on.ca/

Piché, Sébastien, in collaboration with Lynn Lapostolle and Monique Lasnier, La recherche collégiale : 40 ans de passion scientifique, Québec, Presses de l'Université Laval, 2011.

Social Economy Research Network of Northern Canada: http://dl1.yukoncollege.yk.ca/semnoca/about


Vancouver Island Community Research Alliance: http://mapping.uvic.ca/vicra/welcome/about_vicra

Western Economic Diversification Canada: http://www.wd.gc.ca/eng/16.asp
## Appendix 1

### ACCC 2011/2012 Applied Research Environmental Scan

#### List of Participating Institutions

**British Columbia / Yukon**
- British Columbia Institute of Technology
- Camosun College
- Capilano University
- College of New Caledonia
- Justice Institute of British Columbia
- Kwantlen Polytechnic University
- Langara College
- Northern Lights College
- Northwest Community College
- Selkirk College
- Vancouver Community College
- Yukon College

**Alberta**
- Grande Prairie Regional College
- Keyano College
- Lakeland College
- Lethbridge College
- Medicine Hat College
- NorQuest College
- Northern Alberta Institute of Technology
- Olds College
- Red Deer College

**Saskatchewan / Manitoba**
- Saskatchewan Institute of Applied Science and Technology
- Red River College of Applied Arts, Science and Technology
- University College of the North
- Assiniboine Community College

**Ontario**
- Algonquin College
- Cambrian College
- Canadore College
- Centennial College
- Collège Boréal
- Conestoga College
- Confederation College Institute of Technology and Advanced Learning
- Durham College
- Fanshawe College
- George Brown College
- Georgian College
- Humber College Institute of Technology and Advanced Learning
- La Cité Collégiale
- Lambton College
- Loyalist College
- Mohawk College
- Niagara College
- Sault College
- Seneca College
- Sheridan College Institute of Technology and Advanced Learning
- Fleming College
- St. Lawrence College

**Quebec**
- Cégep de l’Outaouais
- Cégep de Trois-Rivières
- Cégep Régional de Lanaudière
- Cégep Saint-Jean-sur-Richelieu
- Vanier College

**Data Provided by Réseau Trans-tech for the 46 College Centres for the Transfer of Technology at the following cégeps:**
- Cégep André-Laurendeau
- Cégep Beauce-Appalaches
- Cégep de Baie-Comeau
- Cégep de Chicoutimi
- Cégep de la Gaspésie et des Îles
- Cégep de Jonquière
- Cégep de l’Abitibi-Témiscamingue
- Cégep de La Pocatière
- Cégep Marie-Victorin
- Cégep John Abbott College
- Cégep de Lévis-Lauzon
- Cégep de Rimouski
- Cégep de Sainte-Foy
- Cégep de Saint-Hyacinthe
- Cégep de Saint-Jérôme
- Cégep de Saint-Laurent
- Cégep de Sept-Îles
- Cégep de Sherbrooke
- Cégep de Sorel-Tracy
- Cégep de Thetford
- Cégep de Victoriaville
- Cégep du Vieux-Montréal
- Cégep de Trois-Rivières
- Collège Ahuntsic
- Collège d’Alma
- Dawson College
- Collège de Maisonneuve
- Collège Méridien
- Collège Édouard-Montpetit
- Collège Lionel-Groulx
- Collège de Rosemont
- Collège Shawinigan

**Atlantic**
- Collège communautaire du Nouveau-Brunswick
- College of the North Atlantic
- Holland College
- New Brunswick Community College
- Nova Scotia Community College
Appendix 2

The Tri-Council College and Community Innovation (CCI) Program Grant Types

**Innovation Enhancement (IE) grants** enhance innovation at the community and/or regional level by enabling colleges to increase their capacity to work with SMEs. These grants support the direct costs associated with applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies. Funding for the first two years is up to $100,000 per year (per project) and for subsequent years is up to $500,000.

**Applied Research and Development (ARD) grants** provide companies access to the knowledge, expertise and capabilities available at colleges and train students in essential technical skills required by companies. The grants support short-term and small-scale projects that range from six months to three years, with project costs shared by the partner company. ARD-funded projects apply at any point in the R&D spectrum consistent with a college’s applied research, training and technology transfer mandate. The three levels of funding under ARD grants are: under $25,000; up to $75,000; and more than $75,000 to a maximum of $150,000.

**Applied Research Tools and Instruments grants** support the purchase of research equipment and installations to enhance the ability of colleges to undertake applied research and training for local companies. These grants were one-year awards to assist in buying applied research equipment costing between $7,000 and $150,000.

**Technology Access Centre (TAC) grants** provide funding for the core operations of centres that address the applied research needs of SMEs. The centres enhance the productivity, innovation and competitiveness of SMEs by offering access college expertise, technology and equipment. TAC grants provide five-year, renewable funding of up to $350,000 per year.

**Industrial Research Chairs for Colleges (IRCC) grants**
Support for 30 new Industrial Research Chairs at colleges will accelerate applied research where there is an important industrial need. The program begins with a $3 million allocation in 2011-12 and $5 million per year on a permanent basis starting in 2012-13.

**College-University Idea to Innovation (CU-I2I) grants**
The Idea to Innovation grants will support joint college-university R&D projects with promising commercialization potential, with $12 million over five years starting in 2011-12.
### ACCC Member Colleges and Institutes

#### British Columbia
- Camosun College
- Capilano University
- Collège Éducacentre
- Douglas College
- University of the Fraser Valley
- Justice Institute of British Columbia
- Kwantlen Polytechnic University
- Langara College
- College of New Caledonia
- Native Education College
- Nicola Valley Institute of Technology
- North Island College
- Okanagan College
- College of the Rockies
- Selkirk College
- Vancouver Community College
- Vancouver Island University

#### Yukon
- Yukon College

#### Alberta
- Bow Valley College
- Grande Prairie Regional College
- Grant MacEwan University
- Keyano College
- Lakeland College
- Lethbridge College
- Medicine Hat College
- NorQuest College
- Northern Alberta Institute of Technology
- Northern Lakes College
- Olds College
- Portage College
- Red Deer College

#### Northwest Territories
- Aurora College

#### Manitoba
- Assiniboine Community College
- University College of the North
- Red River College
- École technique et professionnelle, Université de Saint-Boniface
- Winnipeg Technical College

#### Nunavut
- Nunavut Arctic College

#### Saskatchewan
- Carlton Trail Regional College
- Cumberland Regional College
- Great Plains College
- North West Regional College
- Northlands College
- Parkland College
- Saskatchewan Indian Institute of Technologies
- Saskatchewan Institute of Applied Science and Technology
- Southeast Regional College

#### Ontario
- Algonquin College
- Collège Boréal
- Cambrian College
- Canadore College
- Centennial College
- La Cité collégiale
- Conestoga College Institute of Technology and Advanced Learning
- Confederation College
- Durham College
- Fanshawe College
- Fleming College
- George Brown College
- Georgian College
- Humber College Institute of Technology & Advanced Learning
- Lambton College
- Loyalist College
- The Michener Institute for Applied Health Sciences
- Mohawk College
- Niagara College
- Northern College
- St. Clair College
- St. Lawrence College
- Sault College
- Seneca College
- Sheridan College Institute of Technology and Advanced Learning
- Université de Guelph, Campus d'Alfred
- University of Guelph, Kemthville Campus

#### Quebec
- Cégep de l’Abitibi-Témiscamingue
- Collège Ahuntsic
- Cégep André-Laurendeau
- Cégep de Baie-Comeau
- Cégep Beaupre-Appalaches
- Champlain Regional College
- Cégep de Chicoutimi
- Dawson College
- Cégep de Drummondville
- Collège Édouard-Montpetit
- Collège François-Xavier-Garneau
- Cégep de la Gaspésie et des Îles
- Collège Gérald-Godin
- Heritage College
- Institut de technologie agroalimentaire, campus de La Pocatière
- Cégep John Abbott College
- Cégep de Jonquière
- Cégep de La Pocatière
- Collège Laforté
- Cégep Limoulou
- Collège Lionel-Groulx
- Collège de Maisonneuve
- Cégep Marie-Victorin
- Cégep de Matane
- Collège Montmorency
- Cégep de l’Outaouais
- Cégep régional de Lanaudière
- Collège de Rosemont
- Cégep de Sainte-Foy
- Cégep de Saint-Hyacinthe
- Cégep Saint-Jean-sur-Richelieu
- Cégep de Saint-Jérôme
- Cégep de Saint-Laurent
- Cégep de Sept-Iles
- Collège Shawinigan
- Cégep de Sherbrooke
- Cégep de Trois-Rivières
- Vanier College
- Cégep de Victoriaville
- Cégep du Vieux-Montréal

#### New Brunswick
- New Brunswick College of Craft and Design
- New Brunswick Community College
- Collège Communautaire du Nouveau Brunswick

#### Newfoundland and Labrador
- College of the North Atlantic
- Marine Institute
- Centre for Nursing Studies

#### Nova Scotia
- Cape Breton University
- Canadian Coast Guard College
- Dalhousie Agricultural Campus of Dalhousie University
- Nova Scotia Community College
- Université Sainte-Anne · Collège de l’Acadie

#### Prince Edward Island
- Holland College
- Collège Acadie I.-P.-É.