QUÉBEC CEGEPs
An example of postsecondary education in Canada

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President of Cégep International
Director General, Cégep André-Laurendeau
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Postsecondary education in Canada
Postsecondary education in Canada

- Provincial (10) / territorial (3) jurisdiction
- 150 institutions (Colleges, institutes of technology, CEGEPs, university colleges)
- Campuses in over 1000 communities
- 1.5 million learners
- 65,000 employees
- Multicultural
- Applied education and training
- Applied research
Canadian Institutes of technology, Cégeps, University colleges and Polytechnics
Common attributes

- Community-based (serving a region)
- Learner-focused (93% employability)
- Connected to industry (Program Advisory Committees)
- Global (internationalization)

Core competencies with broad diversity
CEGEPs in the education system in Québec

Collège d’Enseignement Général et Professionnel
Québec’s college model, an original idea

1. Accessibility and quality
   - First stage of higher learning (pre-university training)
   - Gateway to the job market
     - technical training
     - continuing education

2. Support for regional development

3. Applied research
CEGEPs: An accessible network

48 public colleges
5 English (15% students)
± 100 campuses
170,000 students (95%)
40% pre-u / 60% tech

16 colleges in metro Montreal (50% students)
Education in Québec

JOB MARKET

- Trades
- Technical
- Professional

Vocational training

Secondary (5 years)

Pre-university (2 years)

CEGEP

Doctorate (2-4 years)
Master’s (2 years)
Bachelor’s (3-4 years)

University

CEGEPs IN THE EDUCATIONAL SYSTEM IN QUÉBEC
Education outside Québec

JOB MARKET

Trades

Technical

Professional

1. Vocational training

2. Secondary education (6 years)

Technical (1 up to 4 years)

Student fees

Doctorate (2-4 years)

Master’s (2 years)

Bachelor’s (4 years)

University
Variety of programs in Quebec

8 Pre-university programs (2 years)

In all major branches of science, social studies, arts and literature

132 Higher technical programs (3 years)

In all principal sectors of the job market
Five main fields of specialization

- **Agri-food Technology and Biological Technology**
  - Animal Product Technology, Management of Farming Enterprises, Bi-ecology, Environment, Dental Hygiene, Radiation Oncology, Nursing, etc.

- **Physical Sciences Technology**

- **Community Affairs Technology**
  - Social Service, Early Childhood Education, Correctional Intervention, Special Care Counselling, etc.
Five main fields of specialization

• **Business Administration Technologies**
  – Accounting and Management Technology, Hotel Management, Tourism, Office Systems Technology, Computer Science Technology, etc.

• **Applied Arts**
  – Graphic Design, Professional Theatre/Acting, Industrial Design Techniques, 3-D Animation and Image Synthesis, Illustration and Design, etc.
Characteristics of the Québec Model

Integral part of higher education
- Linkage between college and university programs (DEC-BAC)
- Programs written with an advisory committee

Program-based approach
- Each course contributes to the program goals
- Cohesiveness and integration

Competency-based approach
- Knowledge, skills and aptitudes are taught in a concrete manner (including Intership, coop program, etc.)
Example of programs

Pure & Applied Science (Dawson College)

two-year pre-university profile

<table>
<thead>
<tr>
<th>Year 1 - 1st Semester</th>
<th>Year 1 - 2nd Semester</th>
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</thead>
<tbody>
<tr>
<td>• Calculus I</td>
<td>• Chemistry of Solutions</td>
</tr>
<tr>
<td>• General Chemistry</td>
<td>• Calculus II</td>
</tr>
<tr>
<td>• Mechanics</td>
<td>• Waves, optics &amp; modern Physics</td>
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<tr>
<td>• English</td>
<td>• English</td>
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<tr>
<td>• Humanities</td>
<td>• French</td>
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<tr>
<td>• Physical Education</td>
<td>• Humanities</td>
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<tr>
<td>• Complementary Course</td>
<td>• Physical Education</td>
</tr>
</tbody>
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Example of programs

3D Animation and Computer Generated Imagery (Dawson College)

Three-years Technical program

Year 1 - term 1
- Perspective Drawing Techniques
- Drawing Anatomy and Expression
- History of Visual and Graphic Arts
- Introduction to Preproduction
- Principles of Animation I
- Introduction to 3D Animation
- Physical education
- English
- Complementary

Year 1 - term 2
- Sculpting Human Anatomy
- History of Film Production Techniques
- Principles of Animation II
- 3D Animation Techniques
- Digital Video and Photography
- Sketching Techniques for Animation
- Digital Colours and Textures
- Physical education
- French
- English technique
MISSION

SPECIFIC SHORT TERM TRAINING FOR THE JOB MARKET

TWO WAYS

AEC = ATTESTATION OF COLLEGE STUDIES
Training from 400 to 2000 hours, linked to a technical program

NON-CREDITED PROGRAMS
Specific programs linked to the needs of the market
Example from Cégep André-Laurendeau

- Middle size college
- 4 000 students – Montreal
- 8 pre-u / 10 tech
- 14 AEC
- 2 CCTT (Optic / Logistic)
Attestation of Collegial Studies in Cégep André-Laurendeau

Many programs link to technical programs:

- Inspection and quality control of road works and municipal works (1260 h);
- Computerized financial accounting (1395 h);
- Adaptation in instrumentation and automation (600 h);
- Skill upgrading in the use of management software (195 h);
- Architecture and building construction (690 h).
Expertise in logistics:

Seven specialized training programs leading to a certificate recognized by the Québec Department of Education

- Long-term higher education in Transportation Logistics Techniques (DEC)
- Attestation of Collegial Studies:
  - Logistics and transportation of goods (1200 h);
  - International intermodal logistics (1170 h);
  - Skill upgrading in release of goods from customs control (420 h);
  - Skill upgrading in management of transportation of goods (375 h);
  - Customs procedures (720 h);
  - Train conductor (585 h).
The recognition of acquired competencies (RAC) in vocational and technical training is a process that allows adults to be evaluated and obtain official recognition for competencies acquired on the job or through real-life experience in relation to a program of study.

Three fields of recognition of acquired competencies in Cegep André-Laurendeau:

- Residential real estate brokerage (570 h);
- Coordination of clerical work (420 h);
- Administration officer (925 h).
What is the purpose of PLA for people

- To improve your job prospects;
- To improve your qualifications and keep your job;
- To increase your chances of getting a job;
- To identify the competencies you have already acquired and obtain the ones you are missing;
- To shorten your time in school;
- To facilitate a career change;
- To identify your training or retraining needs;
- To obtain the prerequisites you need for a given training program.
Reception:
on-line (Web site) or in person

File preparation:
self-evaluation of competencies

File analysis

Validation interview

Determination of the competencies to be evaluated and the conditions for recognition

Determination of the training to be completed in order to obtain a diploma or achieve another goal

Recognition of prior learning and competencies

Competency recognized

- Fully
- Partially

Certification and results

Partial training required

Plan for acquiring missing competencies
MISSION

SUPPORT COMPANIES IN THE INNOVATION PROCESS THROUGH

- Technical support
- Technological development
- Information and training

46 CENTRES
600 experts
Mission

• Improve its clients’ productivity by optimizing their logistical activities

• Giving access to technological applications produced by research and the additional expertise of Universities and College Centers for the Transfer of Technology

• Allow clients to integrate the technologies best to their needs.
Profile
The International Institut of Logistics of Montreal is a center of excellence working in all supply chain and transportation fields to support small and medium-sized businesses in this activity sector, with the aim of contributing actively to the development of Quebec’s economy.

- Training
- Business Intelligence
- Traceability
- Applied research
- Technology transfer

Video
CEGEPs and the job market
Technical training and the job market

- 100 out of 132 technical programs offered at CEGEPs have an employment rate higher than 88%.

- General placement rate for all technical programs is 93.6%.

- 67% of 271,000 new jobs to be filled in Québec from now to 2018 will require postsecondary education.

- Most of them will require technical training.
Great need for technicians

- **84.6% of graduates from technical programs** find a job in their field of studies;

- Very low unemployment rate:
  - 3.7% for graduates vs. 12.5% for non-graduates;
  - **Shortage of graduates in almost all technical sectors.**
Technical training right on target

- Human resources personnel in business say of employees with a technical degree from colleges that:
  - 91% show **basic** competencies that meet or even exceed their needs
  - 87% show **specialized** competencies that exceed or match their needs

*Survey by the Fédération des cégeps du Québec (2009)*
Cégep international
Cégep international

• Represents its college members internationally
• Fosters partnerships between its members and foreign institutions
• Makes its members’ expertise available to international partners
• Collaboration with Canadian and international organizations (ACCC, CBIE, EURASHE, CONAHEC, IMHE/OECD, UNESCO)

Promotes college expertise on the world scene