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## **Québec's Education System** and the International Standard Classification of Education

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Description of the International Standard Classification of Education (ISCED) (based on excerpts from Classifying Educational Programmes: Manual for ISCED-97 Implementation in OECD Countries - 1999 Edition).

In 1997, UNESCO<sup>1</sup> adopted a new version of the International Standard Classification of Education (ISCED-97), in order to facilitate statistical comparison of education in OECD countries.<sup>2</sup> This classification is used for international statistical surveys of education carried out jointly by UNESCO, the OECD and EUROSTAT.3

The development of the procedure for translating national education programs into internationally comparable categories in ISCED-97 was made possible through the collaboration of the 29 OECD countries with the OECD-INES Technical Group, 4 which collects and prepares education statistics and indicators.

The new classification plays an important role in the establishment of the educational policy of OECD countries, because it constitutes the essential basis for the collection of the data used by the OECD for its series of education indicators focused on government action in this field.

The purpose of this bulletin is to provide a brief introduction to the new classification and to relate Québec's education system to ISCED-97.

#### ISCED-97 The new classification of education systems in OECD countries

ISCED-97 provides a multidimensional frame of reference for classification, making it possible to compare the educational content of programs in the various OECD countries using multiple classification criteria. The criteria used include:

- type of subsequent education or labour market position for which the program prepares gradu-
- program orientation (general, pre-vocational or vocational education)
- duration of the program (criteria applicable to ISCED levels 3, 4 and 5, where program duration is highly variable)
- position of the program within the degree and qualification structure

In ISCED-97, level 4 comprises programs that, from an international point of view, straddle the boundary between upper-secondary and post-secondary education. In ISCED-76, such programs were placed either in level 3 or in level 5.

Tertiary, or higher education, now includes only levels 5 and 6, instead of levels 5, 6 and 7 as the previous classification did.

<sup>1.</sup> UNESCO is the acronym of the United Nations Educational, Scientific and Cultural Organization.

<sup>2.</sup> OCDE is the acronym of the Organisation for Economic Co-operation Development.

<sup>3.</sup> EUROSTAT is the Statistical Office of the European Communities.

<sup>4.</sup> INES is an OECD project that develops education statistics and indicators.

Level 5 includes programs that do not lead directly to the awarding of an advanced research degree, while level 6 is reserved for programs that do. Level 5 is divided into two categories, 5A and 5B.

Level 5A comprises programs with a greater theoretical basis and which give graduates access to degrees in advanced research or professions with high skills requirements. Level 5B comprises programs with a more practical orientation or a more specific occupational target, that lead to acquiring skills that are useful on the labour market.

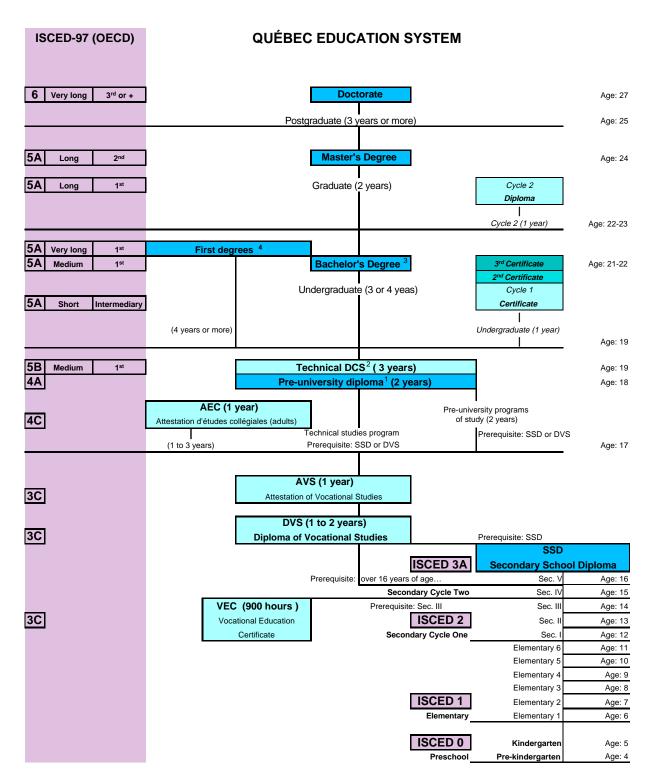
Advanced research degrees are placed exclusively in level 6.

In ISCED-97, there is no level reserved for programs that cannot be associated with any level.

# ISCED-97

Levels of Brief description of the levels in ISCED-97 and the corresponding programs of study in Québec

> At the outset, it should be pointed out that the classification of Quebec's programs of study in terms of the various levels established by ISCED-97 is based on the definitions given by the OECD as well as on consideration of the classification of each OECD country's programs of study. In cases where programs of study seemed to correspond to several ISCED-97 levels, a choice had to be made among the levels. In such cases, we opted for the classification that simplified comparison with the OECD countries while reflecting Québec's education system as accurately as possible.



- 1. Pre-university DCS; DCS in Science, Literature and Languages, Creative Arts; Combined DCS; International Baccalaureate.
- 2. Technical DCS; Technical DCS, work-study program
- 3. Specialized Bachelor's Degree, Bachelor's Degree Cooperative Education, Multidisciplinary Bachelor's Degree, Major-Minor Bachelor's Degree, Honours Bachelor's Degree, Faculty Program Bachelor's Degree
- First professional degrees: Bachelor of Law, Doctor of Medicine, Doctorate in Dental Medicine, Doctor of Optometry, Doctorate in Veterinary Medicine, bacc. en sciences juridiques, Bachelor of Civil Law, Bachelor of Common Law, Bachelor of National Civil Law, Bachelor of National Common Law, Doctor of Medicine, Doctor of Dental Science.

### ISCED 0 Pre-primary

Pre-primary education (ISCED level 0) is, by definition, the first step in organized education. It is intended essentially to introduce very young children to a school-type environment, that is, to provide a bridge between home and school.

Age range: Children from at least 3 to no more than 6 years old.

## ISCED 0

#### **Québec Programs:**

Preschool for 4-year-olds, kindergarten for 5-year-olds

#### ISCED 1 Primary

Primary education begins at age 5, 6 or 7 and its duration is usually between four years (for example in Germany) and six years (typical duration in OECD countries). Admission to primary school does not usually require any preschool education, although it is becoming increasingly common for children to take part in a pre-primary program.

The first year of compulsory education is used to establish the boundary between ISCED levels 0 and 1.

ISCED level 1 corresponds to most countries' national definition of primary education. In countries where basic education covers the whole period of compulsory education (that is, where there is no break between primary education and lower-secondary education) and where the duration of basic education is longer than six years, only the first six years following pre-primary education should be counted as primary education.

## Québec Programs:

### **ISCED 1**

Elementary; students between 6 and 11 years old (6 years of schooling)

# ISCED 2 Lower secondary

Lower-secondary education is generally a continuation of the basic education given at the primary level, although the programs at the lower-secondary level are usually more subject-oriented, and often use specialized teachers teaching in their field of specialization. This level may be terminal (that is, it may prepare students to enter the labour market directly) and/or preparatory (that is, it may prepare students for upper-secondary education. The duration of schooling at this level may be from two to six years. (It is generally three years in OECD countries).

Usual entrance requirements: Completion of the primary level

Duration of level 2: Approximately 3 years after completion of the primary level

Sub-categories:

2A: Programs designed for access to levels 3A or 3B

2B: Programs designed for direct access to level 3C

2C: Programs designed for direct access to the labour market

Program orientation:

Type 1: General education (less than 25% of the content is vocational or technical in nature)

Type 2: Pre-vocational or pre-technical education (at least 25% of the content is vocational or technical in nature)

Type 3: Vocational or technical education (Type 2 programs leading to a labour-market relevant vocational diploma)

#### **ISCED 2**

### Québec Programs:

Secondary Cycle One; students aged between 12 and 14 (3 years of schooling)

### ISCED 3 Uppersecondary education

ISCED level 3 corresponds to the final phase of secondary education in most OECD countries. Education tends to be more subject-based than at ISCED level 2 and teachers generally need to be more qualified or specialized than for level 2. ISCED level 3 may be "terminal," that is, it may prepare students to enter the labour market directly and/or it may be "preparatory," preparing them for tertiary education.

Usual entrance age: 15 or 16

Usual duration: From 2 to 5 years of schooling
Usual entrance requirements: Completion of level 2

Sub-categories:

3A: Programs designed to provide direct access to level 5A

3B: Programs designed to provide direct access to level 5B

3C: Programs designed to prepare students to enter the labour market directly or to enter level 4 programs or other level 3 programs

Program orientation:

Similar to the types of orientation for level 2 programs

#### Québec Programs:

ISCED 3A S

Secondary Cycle Two general education programs leading to a Secondary School Diploma (SSD)

**ISCED 3C** 

Vocational education programs at the secondary level leading to the following diplomas:

VEC: Vocational Education Certificate (900 hours after Secondary Cycle One)

DVS: Diploma of Vocational Studies (1 to 2 years after Secondary IV or after the awarding of an SSD)

AVS: Attestation of Vocational Specialization (1 year or more after the awarding of an SSD or a DVS)

#### **ISCED 4**

# Postnon-tertiary

Level 4 was created in ISCED-97 for programs that, from an international point of view, straddle secondary the boundary between upper-secondary and post-secondary education, even though they might clearly be considered as either upper-secondary or post-secondary programs from a national education point of view. According to ISCED-97 (paragraph 72), because of their content, level 4 programs cannot be regarded as tertiary programs. They are often not significantly more advanced than programs at ISCED level 3, but they serve to broaden the knowledge of participants who have already completed a program at level 3.

Usual duration: 6 months to 2 years on a full-time equivalent basis

Entrance requirements:

In general, access to level 4 programs is based on successful completion of a level 3 program. (If completion of a level 3A or 3B program is a prerequisite for access to a given program, then that program fulfills the minimum conditions for classification as an ISCED-97 level 4 program).

Sub-categories:

- 4A: Programs designed to provide direct access to level 5A
- 4B: Programs designed to provide access to level 5B
- 4C: Programs designed to prepare students to enter the labour market directly or to enter other level 4 programs

Program orientation:

Similar to the types of orientation for level 2 programs

### Québec Programs:

#### **ISCED 4A**

For students with an SSD or a DVS, two-year college-level general education programs, leading to one of the following diplomas of college studies:

- Pre-university DCS
- DCS in science, arts, literature and languages
- Double path DCS
- International Baccalaureate

#### **ISCED 4C**

For students with an SSD or a DVS, one- to three-year college-level programs leading to an Attestation d'études collégiales (attestation of college studies) for adults.

#### **ISCED 5** First stage of tertiary education

Programs in ISCED level 5 have an educational content more advanced than those offered at levels 3 and 4. Entry to these programs normally requires the successful completion of a program at level 3A or 3B or a qualification at level 4A or 4B. Level 5 programs must have a cumulative theoretical duration of at least 2 years from the beginning of level 5, and do not lead directly to the awarding of an advanced research qualification (level 6). At this level, there is a distinction between level 5A programs, which are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programs and professions with high skills requirements, and level 5B programs, which generally have more practical and technical content or a more specific occupational target than level 5A programs.

At this level, the degree courses have contents that are largely theoretical, that concern mainly literary and scientific fields (history, mathematics, etc.) or prepare for professions with high skills requirements (medicine, dentistry, architecture, etc.).

#### Sub-categories:

#### Level 5A programs:

- have a minimum cumulative theoretical duration (at tertiary education level) of three years' full-time equivalent, although typically they are of 4 or more years. This level is usually preceded by at least 13 years of schooling at the primary and secondary levels.
- provide the level of education required for entry into a profession with high skills requirements or an advanced research program
- typically require that the faculty have advanced research credentials
- may involve completion of a research project or thesis

#### **Duration categories:**

Short duration: From 2 to less than 3 years

Since short programs do not meet the minimum duration criteria for classification at ISCED-97 level 5A, only programs considered as "intermediary" in the national degree issuance structure can be placed in this category. In other words, to be classified in level 5A, programs with a duration of less than 3 years must constitute a component or a stage within a longer program. However, students having completed these intermediary programs are not included in the number of graduates for the 5A level.

### **Québec Programs:**

# ISCED 5A Short duration

#### **Qualifying courses:**

Cycle One certificates (undergraduate university programs with a one- or two-year duration following the awarding of a Diploma of College Studies).

Note: For the purpose of comparing with OECD countries, students enrolled in these short programs are included in level 5A, but graduates of these programs are not included in the number of graduates from level 5A programs.

Medium duration: From 3 to less than 5 years

#### Québec Programs:

# ISCED 5A Medium duration

Programs leading to a bachelor's degree (undergraduate university programs with a three- to five-year duration following the awarding of a Diploma of College Studies).

Long duration: From 5 to 6 years

#### Québec Programs:

# ISCED 5A Long duration

Programs leading to a master's degree (graduate university programs with a one- to two-year duration following the awarding of a bachelor's degree);

Programs leading to a graduate degree (graduate university programs other than those leading to a master's degree).

Durée très longue : Six ans et plus.

#### **Québec Programs:**

### ISCED 5A Very long duration

#### First professional degrees:

Bachelor of Law, Doctor of Medicine, Doctorate in Dental Medicine, Doctor of Optometry, Doctorate in Veterinary Medicine, bacc. en sciences juridiques, Bachelor of Civil Law, Bachelor of Common Law (LLB Law), Bachelor of National Civil Law (BCL Nat. Pgm), Bachelor of National Common Law (LLB Nat. Pgm), Doctor of Medicine (MDCM), Doctor of Dental Science (DDS).

#### Level 5B programs:

- are generally more practical and technical in nature and have a more specific occupational target than level 5A programs
- usually require shorter studies than level 5A programs and are based on the acquisition of occupationally specific skills with a view to direct professional integration
- have a minimum of two years' full-time equivalent duration

### **Duration categories:**

Very short duration: Less than 2 years

Short duration: From 2 to less than 3 years

Medium duration: From 3 to less than 5 years

# ISCED 5B Medium duration

#### Québec Programs:

Vocational or technical education programs with a three-year duration leading to a diploma of college studies: the Technical DCS.

Long duration: From 5 to 6 years

Very long duration: Over 6 years

ISCED 6 Second stage ISCED-97 level 6 is reserved for tertiary programs which lead directly to the awarding of an of tertiary education advanced research qualification. The theoretical duration of these programs is three vears' full-time equivalent in most countries (that is, a total cumulative duration of at least seven years in full-time equivalent schooling in tertiary education), although the actual duration is generally longer. The programs are devoted to advanced study and original research.

To be classified in ISCED-97 level 6, a program:

- must be successfully completed, which requires the submission of a thesis or a dissertation of publishable quality which is the product of original research and represents a significant contribution to knowledge
- must not be based on course-work only
- must prepare students for faculty posts in institutions offering ISCED 5A programs, and for research posts in the public sector and industry.

#### Québec Programs :

#### **ISCED 6**

Programs leading to a doctorate (postgraduate university programs with a duration of three years or more, following a master's degree).

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#### Other Education • **Statistics Bulletins** available:

- Lespérance, André. Level of Graduation Upon Leaving the Education System, No. 1, November 1997.
- Demers, Marius. Statutory Salaries and Teaching Time of Teachers in Public Elementary and Lower Secondary Schools: A Comparison of Québec and OECD Countries, No. 2, November
- Demers, Marius, Educational Expenditure Relative to the GDP: A Comparison of Québec and OECD Countries, No. 3, June 1998.
- Maheu, Robert. Graduation from Secondary School, College and University in 1995: A Comparison of Québec and OECD Countries, No. 4, June 1998.
- Beauchesne, Luc. Secondary Schools and College Graduates: A Sociodemographic Analysis, No. 5, June 1998.
- St-Germain, Claude, Québec Student Achievement in Mathematics and Science: An International Comparison, No. 6, June 1998,
- Foucault, Diane. The Aboriginal School Population of Québec, No. 7, September 1998.
- Demers, Marius. The Return on Investment in Education, No. 8, November 1998.
- Ouellette, Raymond. Projections of Teaching Staff in Québec School Boards: 1996-97 to 2008-09, No. 9, February 1999.
- St-Germain, Claude, The Linguistic Situation in the Education Sector, 1997-98, No. 10, March 1999.
- St-Germain, Claude. Education Level of the Adult Populations of the Principal Cultural Communities of Québec in 1996, No. 11, May 1999.
- DUFORT, Jean-Pierre. Secondary School Vocational Education, No 12, september 1999.
- St-Germain, Claude. The Linguistic Situation in the Education Sector, 1997-98, No. 13, March 1999.
- Lespérance, André, Pierre Ducharme and Diane Foucault. Dropping Out of School, No. 14, March 2000
- Ouellette, Raymond. School Administrators in Québec School Boards, No. 15, May 2000.
- Demers, Marius. Education pays!, No. 16, June 2000.
- Audet, Marc. The Professional Integration of Holders of Bachelor's and Master's Degrees Over the Past Two Decades no. 17, august 2000.