Draft Paper

The future of preparatory training leading to a trade or an occupation

A question of partnership, autonomy and evaluation

Direction de la planification et du développement
Ministère de l'Éducation, du Loisir et du Sport

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Overview of vocational and technical training

Context of the study

➢ Describe the sharing of responsibilities among training programs authorities for programs leading to a trade or an occupation offered in an **educational environment** or in the workplace

States under study

➢ Lithuania, for the European Union
➢ Quebec, Ontario and Massachusetts, for North America

A few background elements

- In Quebec
  - Demographics
  - Regionalization
  - Partnership
  - The development of VTT in Quebec with two reforms to VT and TT

- Reasons…
  - Ontario
  - Massachusetts
  - Lithuania?

Aspects considered in the study

1. Structure of educational systems
2. Occupational qualifications model
3. Continuity between training paths
4. Development of programs of study
5. Evaluation of programs of study
6. Evaluation of learning

1   Structure of educational systems

Overview of the structure of educational systems

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Quebec

Cegep

AVE   DVS AVS

Ontario

OYAP → App.

CERTIF *CAAT*

Mass.

State Coll

COP: Vocational technical Schools

Community Co

Lith.

Colleges

1   2   3   4

| Elementary | Secondary | VT | TT |

Organization of vocational and technical training

		Name	Number	Diplomas
Quebec (7.2 M)	VT	**Vocational Training Centres**	**70 boards 169 centres**	**AVE, DVS, AVS**
	TT	**Cegeps**	**48**	**DCS, ACS**
Ontario (12 M)	VT	*School Boards*	72 SB	**SSD: Pre-employment path 05 apprenticeship programs**
	TT	**CAAT** *College of Applied Art and technology*	**25**	*Certificate* (1 year) *Diploma* (2 or 3 years)
Massachusetts (6.3)	VT	*Vocational Technical Schools*	200	*Certificate of Occupational Proficiency*
	TT	*Community College*	**15**	*Certificate* (1 year) *Associate degree* and *Technical trade* (2 years)
Lithuania (3.5 M)	VT	*Vocational Schools*	80	*Qualification Certificate Qualified Worker's Diploma*
	TT	*Colleges*	**25**	*Higher Education Diploma, Specific Qualification and Qualified Worker's Diploma*

Centralized management bodies responsible for VTT

- In Lithuania: (2 ministries)
  - Education and Sciences
  - Social Security and Labour

- Massachusetts: (3 bodies)
  - *Massachusetts Department of Education*
  - *Massachusetts Board of Higher Education*
  - *U.S. Department of Labor*

- Ontario: (1 ministry)
  - Ministry of Training, Colleges and Universities

In Quebec

- 2 ministries:
  - Éducation, Loisir et Sport (MELS)
  - Emploi et Solidarité sociale (MESS)

2   Occupational qualifications models

The notion of occupational qualifications model

- Definition
  - Set of functional links between needs for initial training and continuing training of the workforce and the means provided within a given state to fill these needs

- Components
  - Occupational activity reference system
  - Training reference system
  - Evaluation reference system

Components of an occupational qualifications model

Occupational activity reference system

➤ Defines the set of **responsibilities** and **tasks** specific to an occupation and the **skills** required to perform it

Training reference system

➤ Corresponds to a **study program** in the educational network or a learning program or upgrading activities within the workplace

Evaluation reference system

➤ Refers to the accuracy of **evaluation criteria** or the **specification** of learning

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                    │  Quebec qualifications model  │
                    └──────────────────────────────┘
          ┌──────────────────────┼──────────────────────────┐
┌────────────────────────┐ ┌────────────────────┐ ┌────────────────────┐
│ Type of reference system│ │     Education      │ │     Employment     │
└────────────────────────┘ └────────────────────┘ └────────────────────┘
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Type of reference system	Education	Employment
Occup. activity ref. sys.	Training project for a program developed with job analysis	Professional standards determined by trade analysis
Training ref. sys.	Study program	PAMT (apprenticeship prog)
Evaluation ref. sys.	Specifications	To come

Occupational qualifications model used in Lithuania

Training offered within the educational network

Training offered in the workplace

Occupational activity ref. system

Job Profile

Training reference system

Vocational Education and Training Standard

Standard for Qualification

Evaluation reference system

Qualification Requirement

Training programs offered in schools

Training programs offered in the workplace

Occupational qualifications model used in Ontario

Training offered within the educational network

Program standards defined by the Ministry of Training, Colleges and Universities (MTCU)

Study programs developed by the colleges

Learning evaluation process developed by the colleges

Occupational activity ref. system

Training reference system

Evaluation reference system

Training offered in the workplace

Apprenticeship standards defined by Ontario's sectoral committees

Professional standards of the Red Seal Program defined by sector councils of **HRDC**

Apprenticeship programs developed by the sectoral committees and the MTCU

Apprenticeship programs developed by the sectoral committees and the MTCU

Evaluation by the sectoral committees and the MTCU

Evaluation by the sectoral committees and the MTCU

Occupational qualifications model used in Massachusetts

Training offered within the educational network

Training offered in the workplace

Colleges in accordance with requirements set by the *Board of Higher Education*

The *Department of Labor and Workforce Development*

Occupational activity ref. system

Occupational activity ref. system

Training reference system

Training ref. sys. (theoretical component)

Training ref. sys. (practical component)

Evaluation reference system

Evaluation reference system

Evaluation reference system

Educational institutions

Educational institutions

Labour market partners

Comparison of occupational qualifications models in the education system and the workplace

In Europe

➢ Use of a *single* occupational activity reference system to develop the training reference systems and to define common evaluation reference system

In North America

➢ Use of *different* occupational activity reference systems to develop distinct training and evaluation reference systems
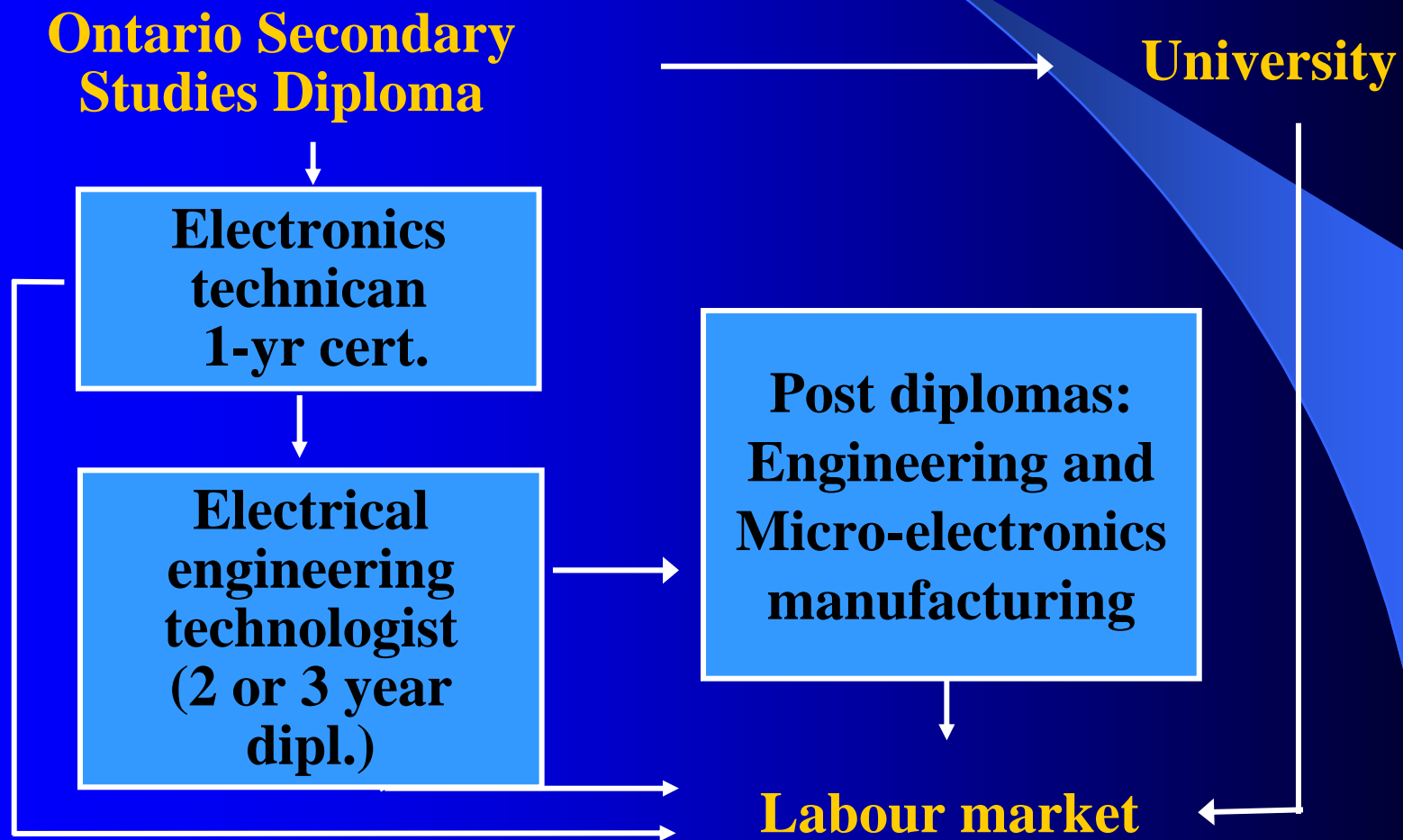
3 Continuity between training paths

Continuity between training paths

- Definition of the concept
  - Potential for individual to advance from one order of education to another to continue studies within the same speciality

- State-based differences
  - In Europe, continuity occurs through recognition of skills acquired in various places and using different modes
  - In North America, continuity occurs through recognition of skills or credits accumulated in courses under one or more related study programs

Observations related to continuity

➢ In Quebec: Harmonization, articulation and continuity grids between certain DVS programs and DCS-BAC bridges

➢ In Lithuania: Requirement under Copenhagen agreement, emerging work (Ex: levels 3 and 4 and vocational training programs in colleges)

➢ In Massachusetts: Included in the program evaluation process (*Joint Admissions Program*) (Ex: Priority for *Tech. Prep* in *Community Colleges*, *Associate in Arts Degree* in the *Bachelor's Degree*, the apprenticeship continuum)

➢ In Ontario: An integral part of the certificate-diploma-post diploma model within a single CAAT

An illustration of continuity between training paths: the case of Ontario

Ontario Secondary Studies Diploma → University

Electronics technican 1-yr cert.

Electrical engineering technologist (2 or 3 year dipl.)

Post diplomas: Engineering and Micro-electronics manufacturing

Labour market

4   Development of vocational and technical training programs

Activity implemented to develop programs of study	Authority that executes each activity in the jurisdictions examined			
	Lithuania	Ontario	Massachusetts	Quebec
Establish a national consensus on the skills necessary to perform a given occupation	**Ministry of Education and Science**	**Ministry of Training, Colleges and Universities**	**No consensus at state level**	**MELS**
Analyze the labour market to determine the labour training needs for a given occupation	**Ministry of Education and Science** *Industrial Lead Bodies*	**CAAT**	*Community College*	**MELS**
Propose the development of new programs of study or review and adapt existing programs	*Colleges*	**CAAT**	*Community College*	**MELS**
Evaluate the pertinence of proposed new programs of study or reviewed and adapted programs and approve them	**Ministry of Education and Science**	**Ministry of Training, Colleges and Universities**	*Massachusetts Board of Higher Education*	**MELS**

Activity implemented to develop study programs (cont.)	Authority that executes each activity in the jurisdictions examined			
	Lithuania	Ontario	Massachusetts	Quebec
Develop programs of study in accordance with the occupational activity reference system and established requirements	*Colleges*	**CAAT**	*Community College*	**MELS** **Cegeps Framework program**
Approve new programs of study based on established requirements or conditions prescribed by law and reference framework	**Ministry of Education and Science** the *Chambers*	**Independent organization**	*Massachusetts Board of Higher Education*	**MELS** **CNPEPT notice**
Implement programs of study	*Colleges*	**CAAT**	*Community College*	**VT Centres pedagogical choices** **Cegeps Framework program**
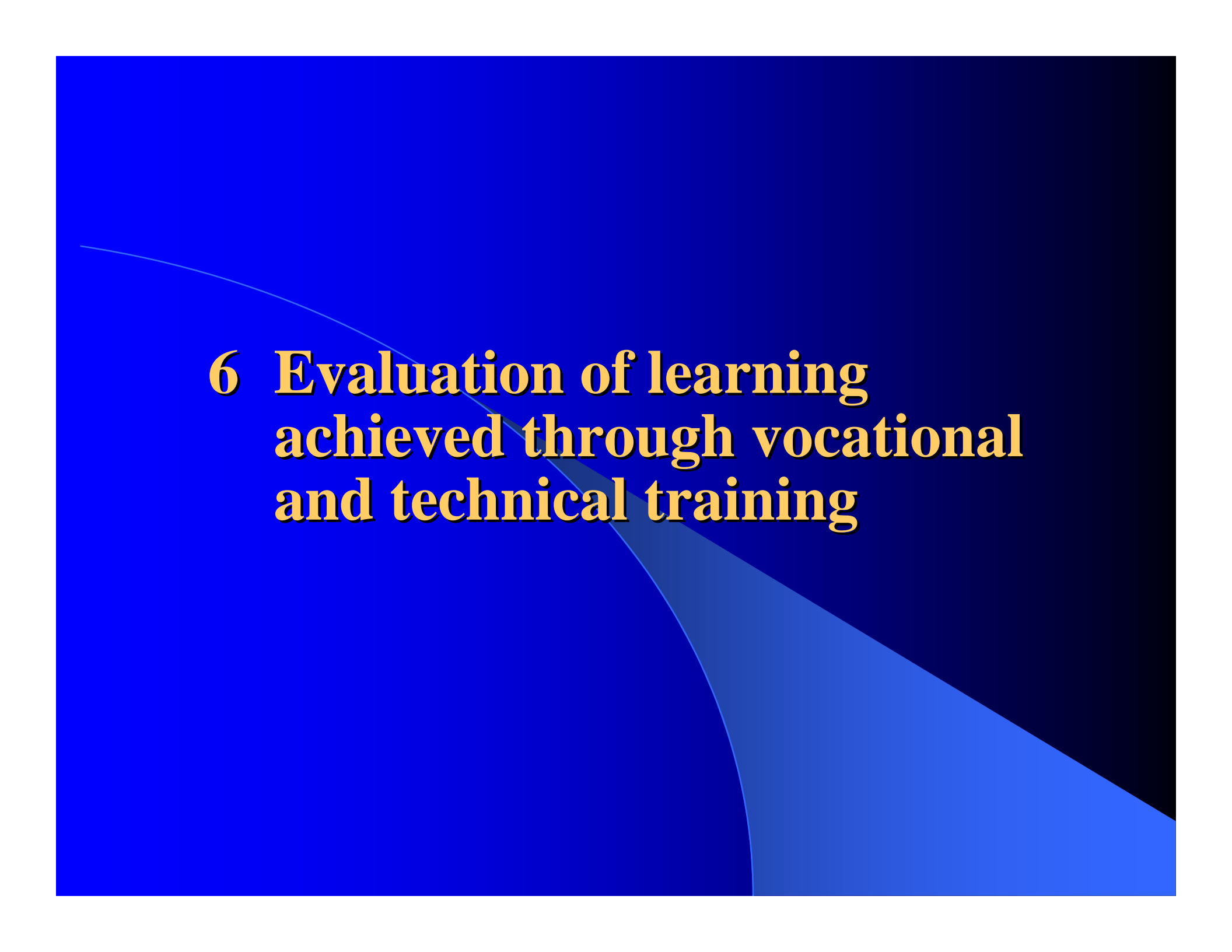
5 Evaluation of vocational and technical programs of study

Activity implemented to evaluate programs of study	Authority that executes each activity in the jurisdictions examined			
	Lithuania	Ontario	Massachusetts	Quebec
Follow-up programs of study	*Centre for Quality Assesment in Higher Education* and partners	**CAAT and the** *Credentials Validation Service*	*Board of Higher Education* and *Community Colleges*	**MELS**
Evaluate vocational training programs of study	*Centre for Quality Assesment in Higher Education* and partners	–	–	**MELS**
Evaluate technical training programs of study	*Centre for Quality Assesment i n Higher Education* and partners	**CAAT and the** *Credentials Validation Service*	*Board of Higher Education* and *Community Colleges*	**MELS** **CEEC** **Cegeps**

Development and evaluation of programs of study

Centralized management → **General orientations**
Legislative framework

Shared responsibilities

Development of programs of study
Evaluation of programs of study
Development of tools

Local management → **Organization of training**
Learning activities
Evaluation of learning

6 Evaluation of learning achieved through vocational and technical training

Evaluation of learning based on the occupational qualifications model

In Europe

➢ Use of a single evaluation reference system to evaluate learning achieved in training programs offered in the educational network or in the workplace

In North America

➢ Use of distinct location-based evaluation reference systems to evaluate learning achieved in training programs offered in the educational network or in the workplace

Sharing of learning evaluation responsibilities based on…		Authority involved in evaluating learning in the jurisdictions examined			
		Lithuania	Ontario	Massachusetts	Québec
Training level	Vocational training	**Evaluation board Labour market partners**	–	*Massachusetts Department of Education*	**MELS**
	Technical training	*Colleges*	**CAAT**	*Community College*	**MELS Cegeps**
The evaluation process phase	Development of evaluation conditions	*Colleges*	**CAAT**	*Community College*	**MELS School boards (CS) Cegeps**
	Implementation of evaluation activities	**Three-party evaluation board with *Chambers*: employer, worker and instructor representatives**	**CAAT**	*Community College*	**School board (CS) Cégeps**

Considerations to reflect on

➢ How to ensure more convergence related to labour training?

➢ How to evaluate and follow-up of programs of study?

➢ How and why to share certain responsibilities related to the evaluation of vocational and technical training?

➢ How to ensure stable and recurring financing for vocational and technical training?