

**Centre de
recherche
et d'expertise en
multilittératie
des adultes
(CREMA)**

Center for Research & Expertise in Adult Multiliteracy



Loss of literacy skills among adults and impact on expected levels of acquired skills in technical programs



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Fact

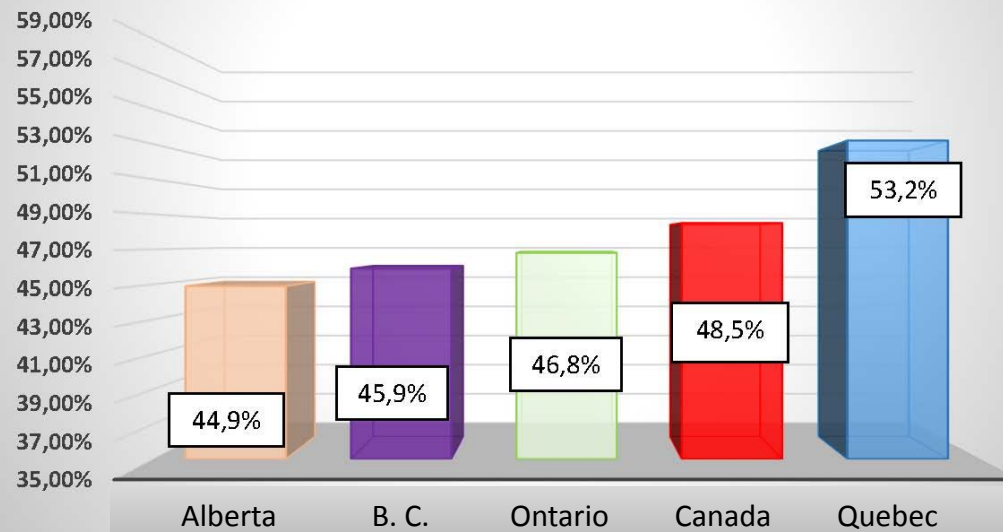
53.2%

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Percentage of population (ages 16-65) at skill level 2 or lower of the 4 most industrialised provinces and Canada



Source: Stats Canada, Table 477-0079

Fact

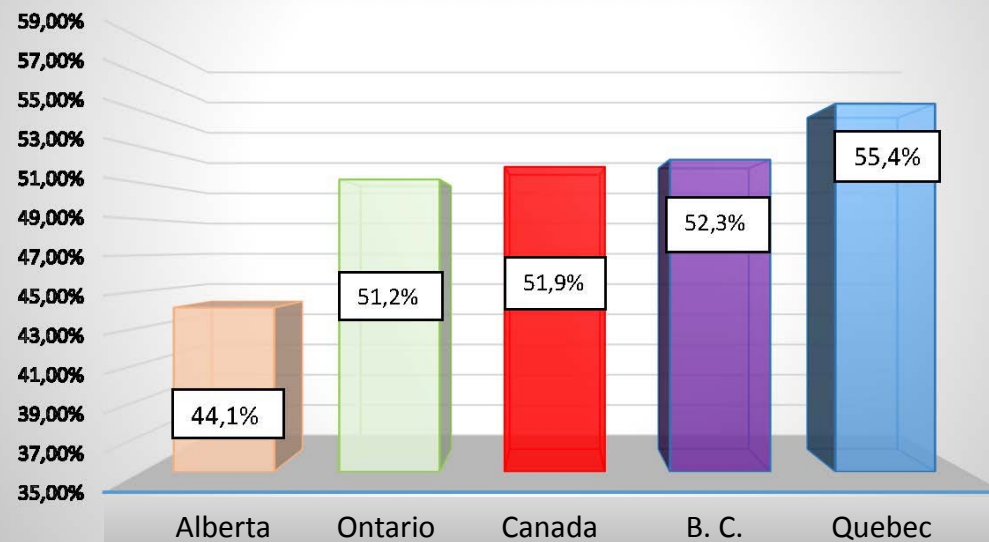
Results from PIAAC-OECD and Statistics Canada reveal that in terms of reading and comprehension, Québec is lagging behind.

53.2% of Québec adults aged 16 to 65 obtain results that are equivalent to or below the minimum level of skills necessary to function adequately in jobs requiring high skill levels in the job market.

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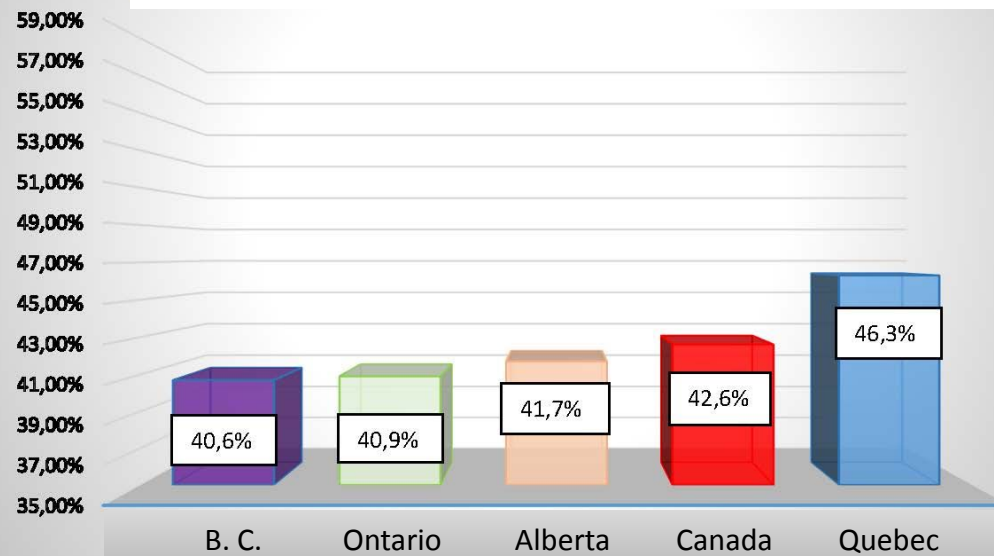


**This slide shows a Percentage of
manpower at skill level 2 or lower:
goods-producing industries
(most industrialised provinces)**



Source: Stats Canada, table 477-0083

**Percentage of manpower at skill level 2
or lower: services industries**
(most industrialised provinces)



Source: Stats Canada, table 477-0083

Fact

**96% of job requirements
created since 2000
necessitate skills at level 3
or more.**

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Fact

**The Cause for worry:
These findings indicate that
Canadian workers are less
effective in carrying out tasks and
make more errors. This involves a
higher rate of work accidents,
greater resistance to change and
less involvement in the
organisation of work.**

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Fact

These negative results have a direct impact on industry productivity, competitiveness and profitability.

This leads to diminished financial activity and directly influences GDP.

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Fact

67%

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Fact

Is the Proportion of adults with a skill level of 2 or less admitted into technical training programs in Canada.

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Fact

**In this 75% of adults
below level 3 who are
admitted into technical
programs are at level 2
and surprisingly, 25 % are
below level 2.**

(this 25% is the future dropouts)

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Fact

In terms of basics skills :

At level 1, an adult is able to read a text containing basic vocabulary and fill out a basic form.

An adult at level 2 is able to read a simple one-page text, make simple deductions, compare 2 elements of information, but cannot make sense of a complex text. An employee can read and understand basic safety instructions.

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Fact

At level 3, an adult is able to understand a complex text, interpret and evaluate a variety of information and make simple deductions; an employee can fill out a work accident report.

Finally, at level 4 and 5, an adult is able to interpret complex texts and make complex deductions. An employee can understand municipal bylaws.

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Loss of Skills

The loss of literacy skills in adults accelerates when :

- **Initial training is weak**
- **professional development rarely requires higher level skills** (Reder, 2009 ; Desjardins, 2004)
- **There is an interruption in professional development (unemployment, work unrelated to field of study)** (OCDE, 2012 ; 2016)
- **And finally, the evolution of the demand for acquired skills makes certain skills obsolete** (OCDE, 2012 ; 2016)



Underqualification

Underqualification is a situation in which a worker's skills are inferior to those required by the job. (OCDE, 2011a, online).

In terms of literacy skills (reading and processing of text information) or numeracy (calculations and processing of mathematical information), persons at a level of 1 or 2 are considered to have «weak skills» and those at level 3 or 4/5 as «average to high» (Cloutier-Villeneuve, 2014, p.11).

Workers with weak literacy skills where the job requires a relatively high degree of practical literacy have a «skills deficit» (OCDE, Statistics Canada, 2011).

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Skill Loss

Skill loss weakens the ability of individuals to carry out different tasks, to adapt to change and to establish benchmarks to acquire supplementary skills and maintain them throughout life.

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Skill Loss

Deficits mainly affect:

- **reading ability**
- **document usage**
- **calculations**

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Skill Loss

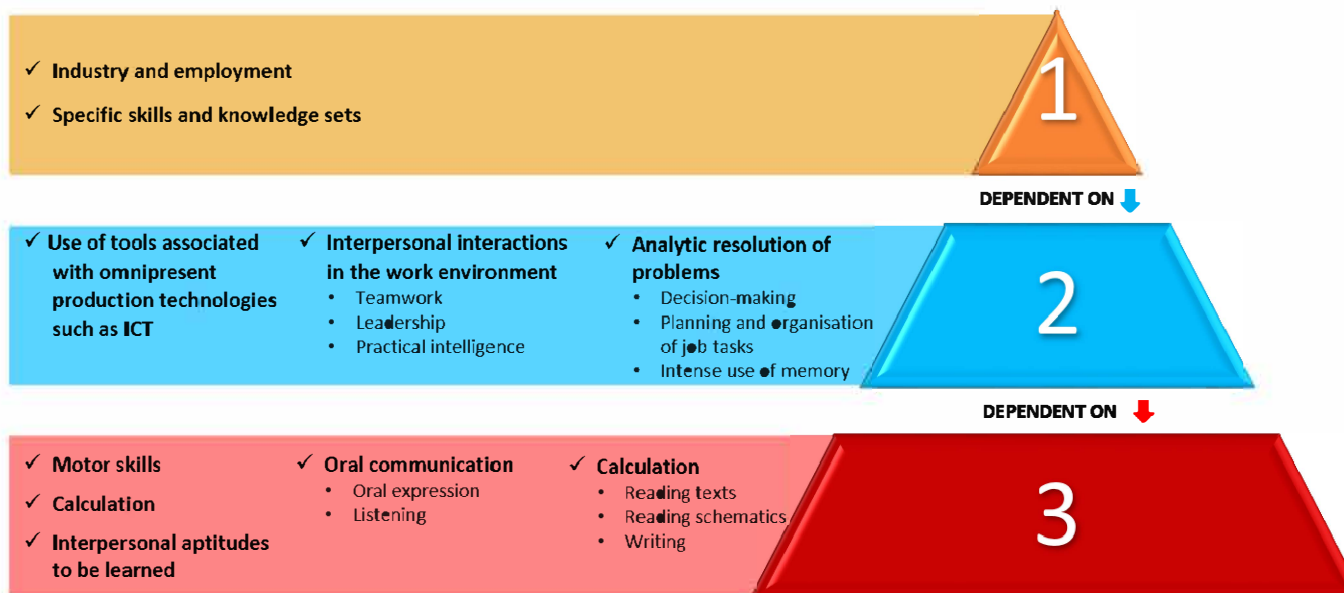
Also :

- reasoning ability
- oral and written communication
- numeracy skill
- interpersonal ability (teamwork, continuing education)

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PROFILE OF OFFER AND DEMAND FOR SKILLS



Centre de recherche et d'expertise en multilittératie des adultes (CREMA) du Collège Lionel-Groulx (2016). Adapté de la pyramide des compétences de Murray, T. Scott, Clermont, Yvan, Binkley, Marilyn (2005). The adult literacy and life skills survey: new frameworks for assessment. Statistics Canada and NCIE, [EN LIGNE] récupéré de <http://publications.gc.ca/site/archives/archived.html?url=http://publications.gc.ca/collections/Collection/CS89-552-13E.pdf>.

Solutions

**In this context,
how can we intervene?**

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Solutions

- **Intervene early in training programs with 45 to 60 hour literacy upgrading**
- **Mobilise school resources to offer workshops, information capsules and literacy support throughout student programs**
- **Invest in development of innovative practices in the scientific community**

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Solutions

- The next four slides show a breakdown of the most important essential skills : literacy and numeracy. Each skill is divided into 2 elements.
- We use this formula with success when we enable students to move up to the level 3 that is required by technical programs

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In Which Areas?

Statement of the Competency: Interpret and communicate textual information .

(Ministère de l'éducation et de l'enseignement supérieur, Québec)

Performance Criteria:

Appropriate use of various print and digital media.

Elements of the Skill

1. Extract the meaning of continuous, non-continuous and mixed texts.

Performance Criteria

- Identification of pertinent information according to the reading objective
- Correct understanding of inferences
- Appropriate understanding of relationships between different parts of the text
- Accurate and relevant overall interpretation according to the reading objective

In Which Areas?

Statement of the Competency

2. Write short texts on current subjects.

Performance Criteria

- Compliance with the communication objective
- Use of a tone adapted to the communication situation
- Compliance with the communication model required
- Sufficient development of the content
- Consistency and clarity of the text
- Quality of the written English

Mixed texts involve combinations of continuous elements (sentences, paragraphs, etc.) and non-continuous elements (lists, graphs, diagrams, maps, forms, etc.).

In Which Areas?

Statement of the Competency: Use mathematics in everyday situations.
(Ministère de l'éducation et de l'enseignement supérieur, Québec)
Performance Criteria: Appropriate use of various print and digital media.

Elements of the Skill

1. Perform basic mathematical operations.

Performance Criteria

- Sufficient proficiency with basic numerical concepts
- Accurate calculations for addition, subtraction, multiplication and division
- Correct solving of equations with one unknown
- Accurate calculations of rates, ratios and proportions
- Accurate conversion of measurements
- Accurate calculations of areas, perimeters and volumes
- Sufficient proficiency with basic geometric concepts
- Accurate calculation of averages
- Accurate interpretations of statistical data and probabilities

In Which Areas?

Elements of the Skill

2. And finally, apply a mathematical procedure in everyday situations.

Performance Criteria

- Accurate interpretation of the problem
- Accurate interpretation of mathematical information in various forms
- Accurate selection of relevant information
- Appropriate sequential representation of the operations to be performed
- Accurate calculations
- Clear formulation of the answer

Basic numerical concepts primarily include whole numbers, fractions, decimals and percentages.

Basic geometrical concepts primarily include the main types of angles and their measurements, polygons and their characteristics, parallelism and perpendicularity.

Forms of mathematical information primarily include objects, images, numbers, symbols, diagrams, graphs, tables, maps and texts

Positives impacts

What is the impacts when we are successful ?

- **Reduction of early dropout rate**
- **Increased perseverance**
- **Increased graduation rate**
- **Increased skill mastery**
- **Increased sustainability of skill mastery**

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Thank you!

Any questions?

**Please share your solutions
with me!**

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