

cmec

Council of
Ministers
of Education,
Canada

Conseil des
ministres
de l'Éducation
(Canada)

PISA in Canada

**BENCHMARKING,
SERVICES TO CITIZENS
AND INTERGOVERNMENTAL
RELATIONS ROUND TABLE**

**Kingston, Ontario
October 2012**



- What is PISA?
- How is PISA managed in Canada?
- What does it look like?
- A few results...
- Two examples of benchmarking using PISA:
 - **British Columbia**
 - **PISA results over time**

What is PISA?



- An international assessment conducted by the OECD;
- Administered to a sample of 15-year-old students every three years since 2000;
- Measures the extent to which youth, toward the end of compulsory schooling, have acquired some of the knowledge and skills essential for full participation in modern societies;
- Focuses on core subject areas (concept of literacy);
- Over 70 countries and economies are now participating.

How is PISA managed in Canada?



Partnership between the federal and provincial governments:

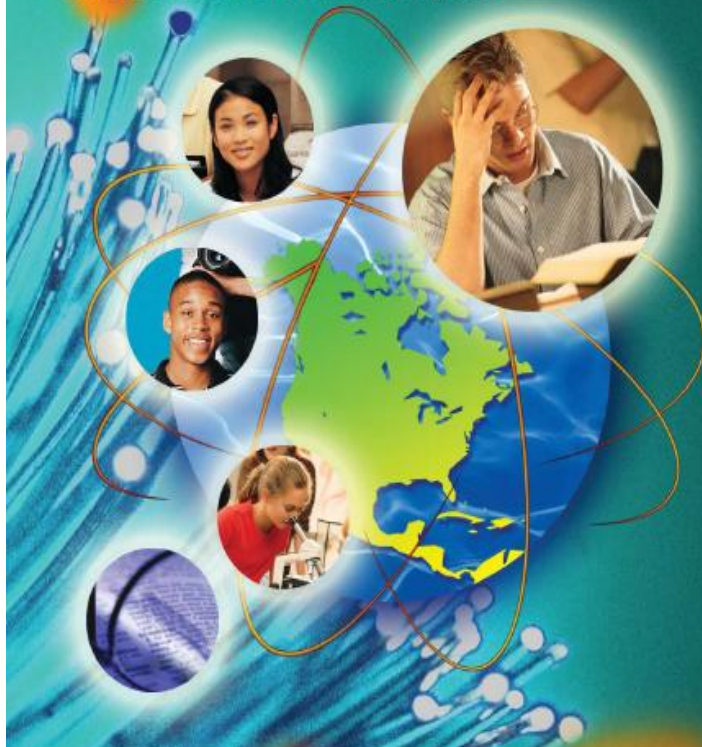
- **Human Resources and Skills Development Canada:**
 - provides most of the direct funding; co-member of the PISA Governing Board (PGB);
- **Statistics Canada:**
 - is responsible for sampling and data collection, co-National Project Managers (NPMs);
- **CMEC:**
 - liaises with ministries of education, provides content expertise and both direct and indirect funding; co-member of the PGB and an NPM.

- Large sample to allow provincial comparisons:
 - **approximately 20,000 students from about 1,000 schools;**
 - **all 10 provinces, with seven oversampling by language;**
 - **no territories and no Aboriginal schools on reserves.**
- Analyses:
 - **provinces compared to countries;**
 - **results by language;**
 - **contextual factors;**
 - **secondary analyses.**

Measuring up: Canadian Results of the OECD PISA Study

The Performance of Canada's Youth in Reading, Mathematics and Science

2009 First Results for Canadians Aged 15



Second Report from the 2009 Programme for International Student Assessment

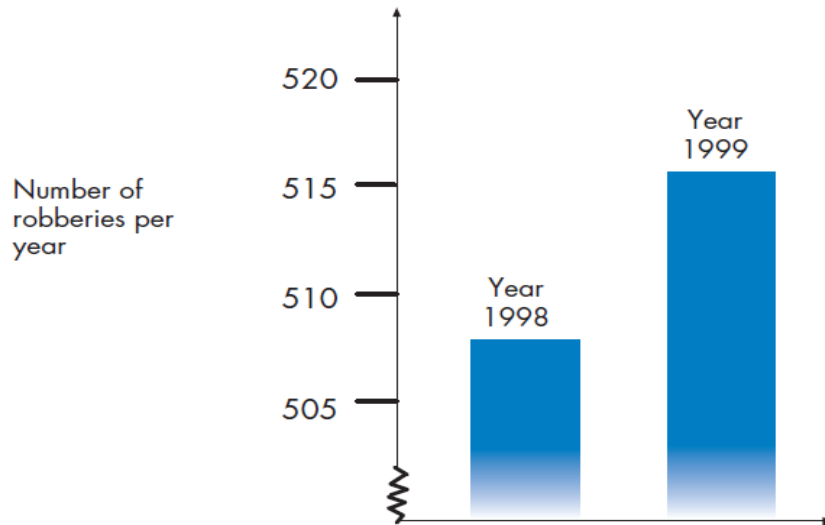


A example of a PISA question

QUESTION 9.1

A TV reporter showed this graph and said:

“The graph shows that there is a huge increase in the number of robberies from 1998 to 1999.”



Do you consider the reporter's statement to be a reasonable interpretation of the graph? Give an explanation to support your answer.

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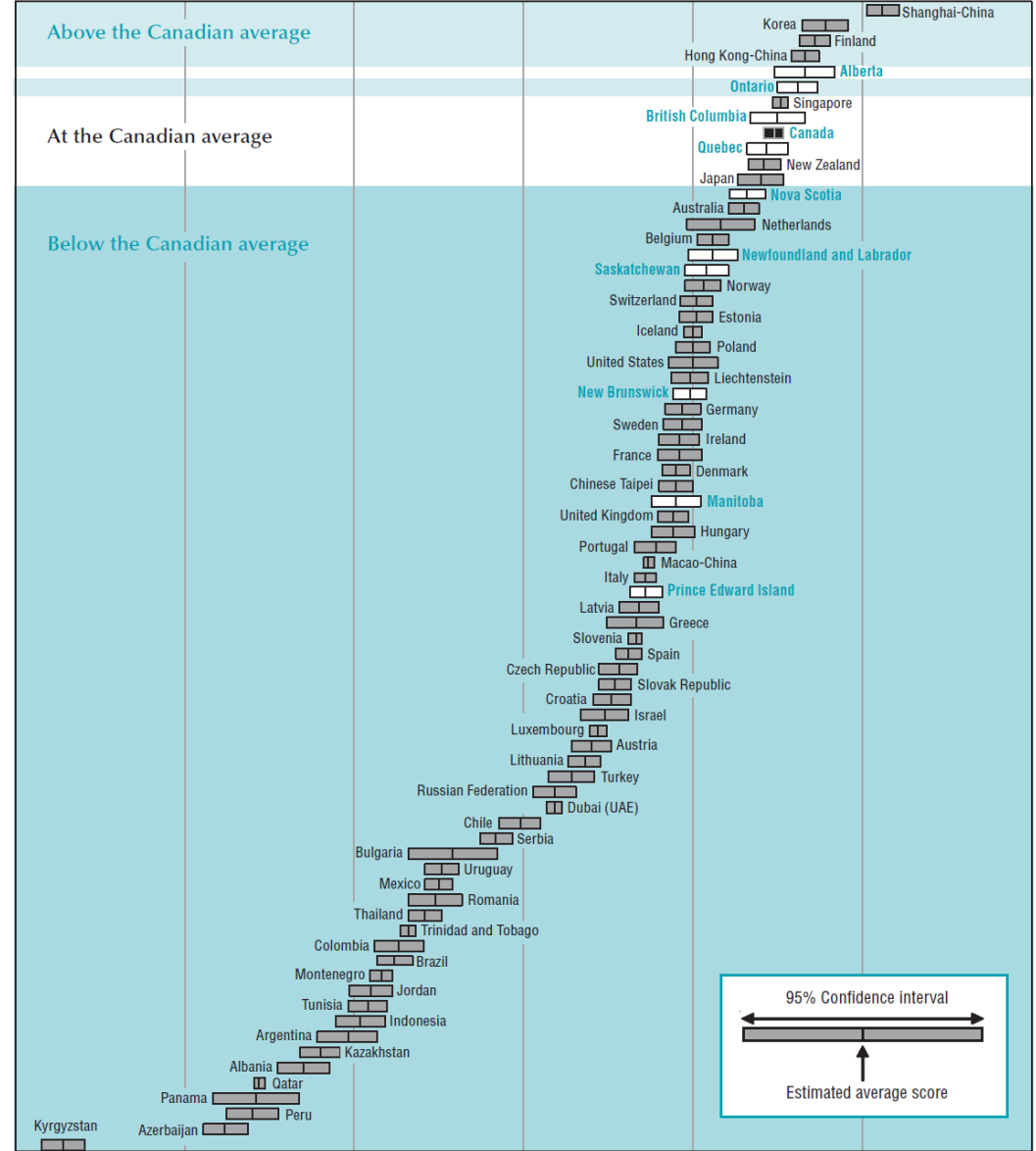
PISA 2009 – Reading



Average scores and confidence intervals for provinces and countries:
Combined reading

estimated average score

300 350 400 450 500 550 600

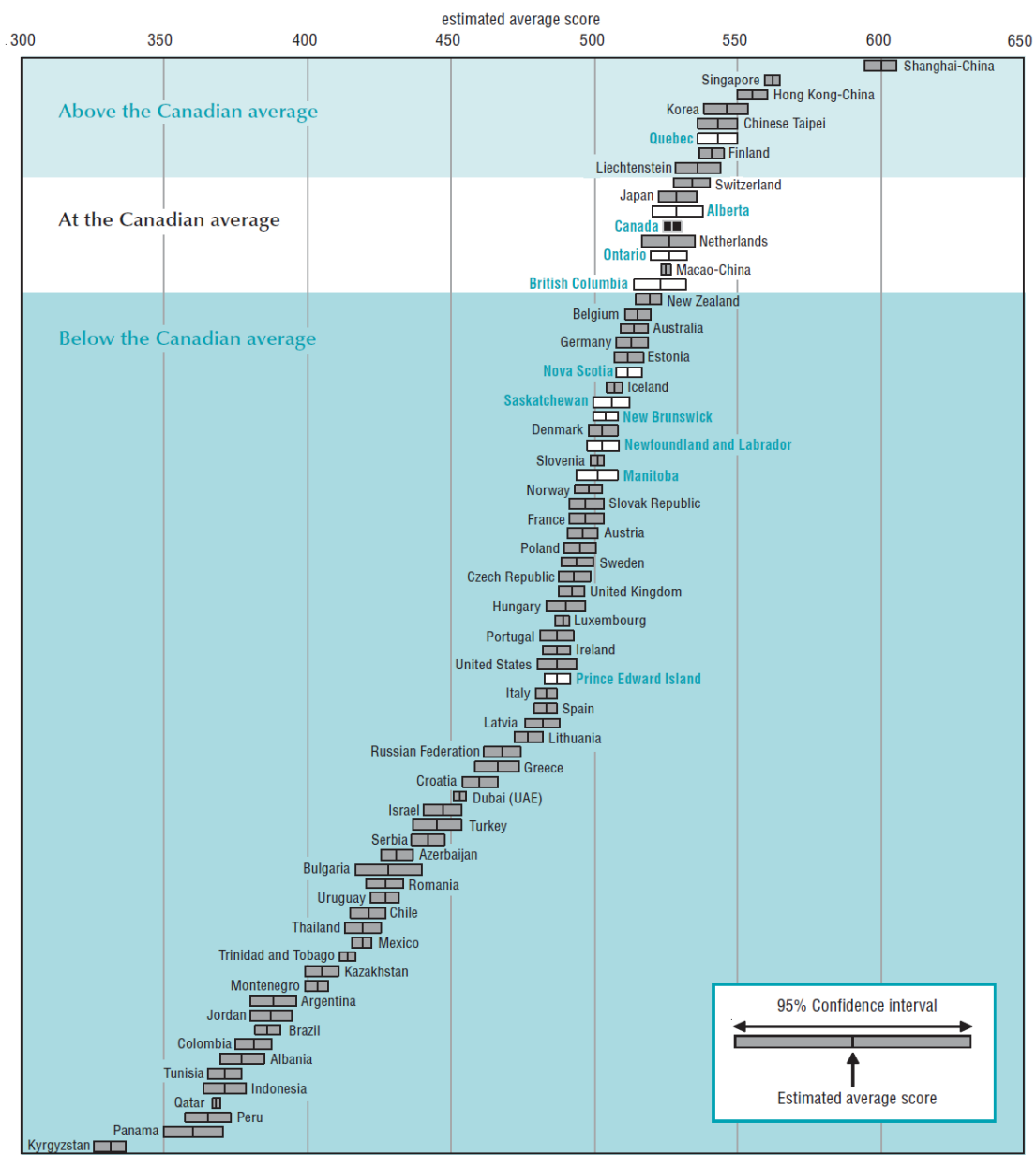


PISA 2009 – Mathematics



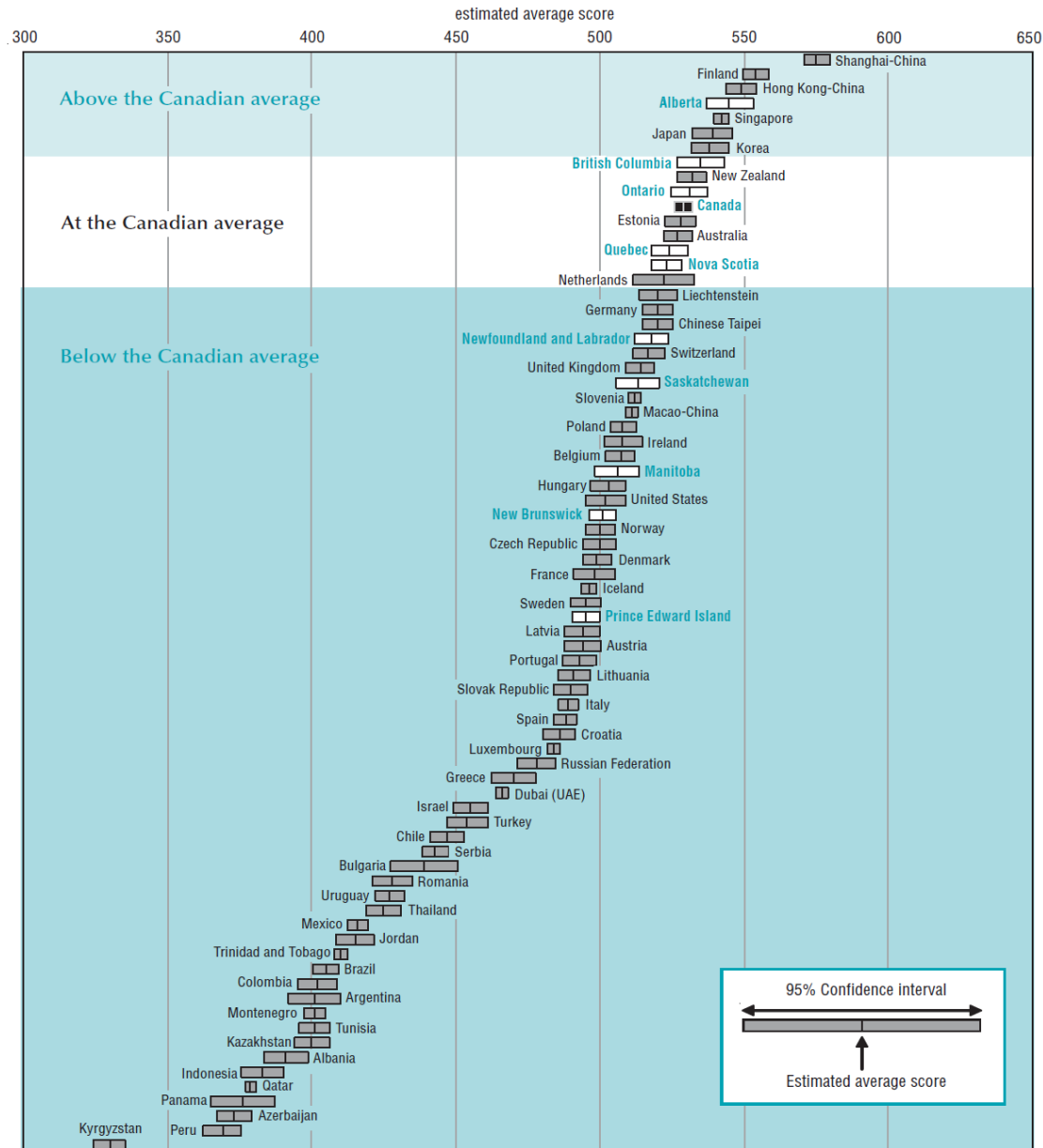
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Average scores and confidence intervals for provinces and countries:
Mathematics





Average scores and confidence intervals for provinces and countries:
Science



Highlights of Canadian results



- Consistent performance over time and across subject areas;
- High performance with high equity;
- Small variation across schools;
- Small variation by immigration status;
- Limited impact of socioeconomic status;
- Positive student-teacher relationships.

And some challenges too



- Interprovincial variations;
- Lack of improvement = lower relative ranking;
- Proportion of high achievers in reading decreased;
- Reading performance decreased in some provinces between 2000 and 2009;
- Gender gap in reading remains at the OECD average;
- The performance of students in minority settings is lower.

Benchmarking of PISA in British Columbia

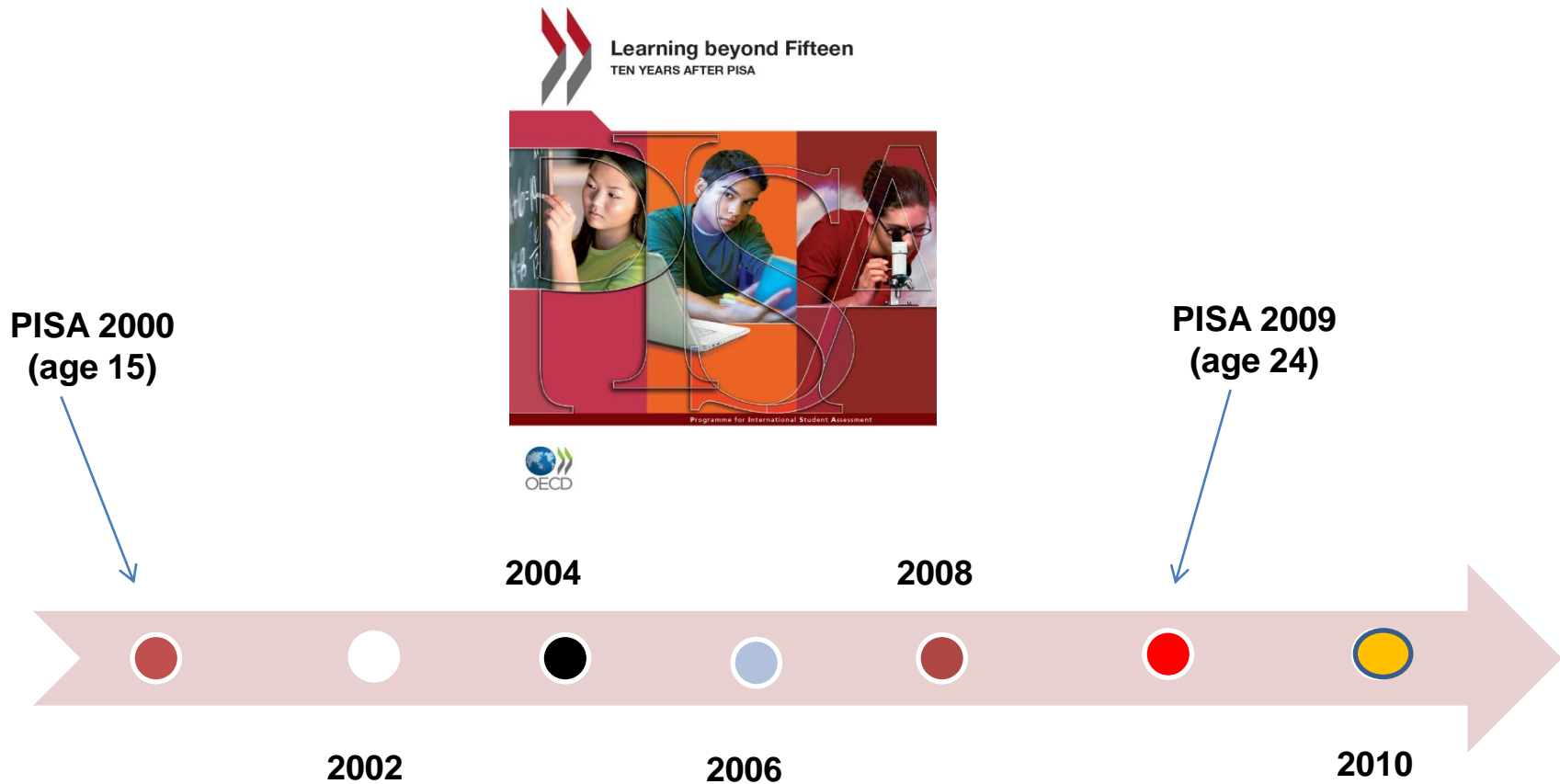


Figure 5
Comparing FSA and PISA standards using the PISA reading scale

FSA Reading Standards	PISA Reading Scale	PISA Reading Proficiency Levels
Exceeding expectations (above ~ 669)	700	Level 5 (above 626)
	600	Level 4 (553 - 625)
Meeting expectations (~ 473 to ~ 668)	500	Level 3 (481 - 552)
	400	Level 2 (408 - 480)
	300	Level 1 (335 - 407)
Not meeting expectations (below ~ 472)	200	Below level 1 (below 335)

Benchmarking with PISA over time

- PISA and the Youth in Transition Survey

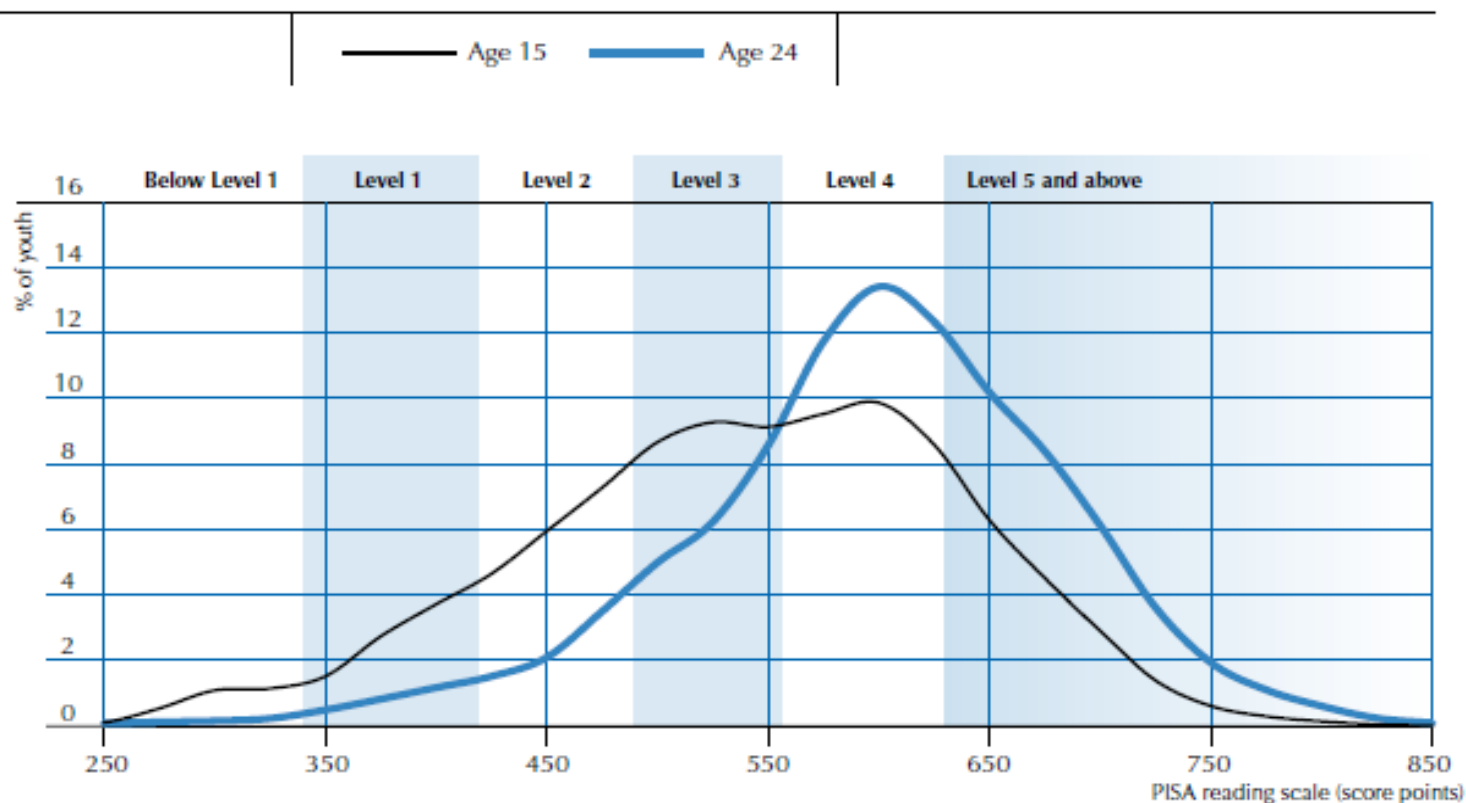


Learning beyond 15



Comparison of distribution of reading skills, PISA-15 and PISA-24

Percentage of participants age 15 in 2000 and 24 in 2009

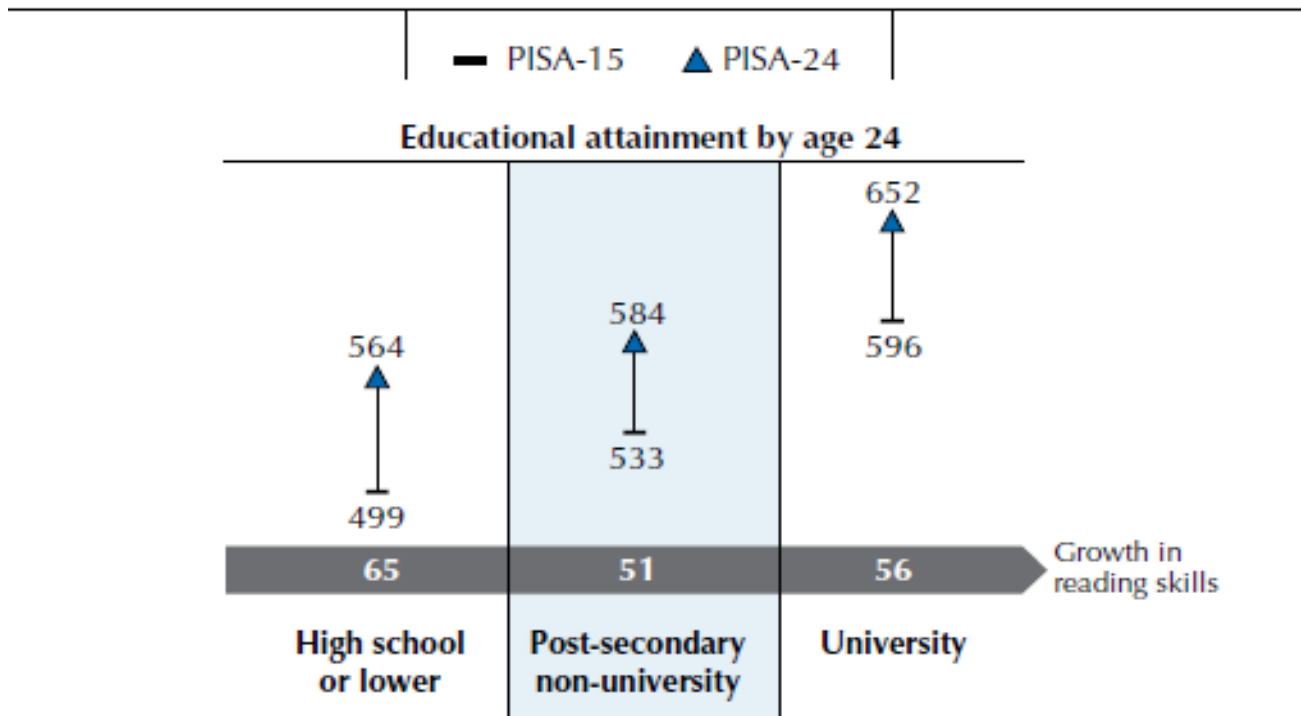


	Below Level 1	Level 1	Level 2	Level 3	Level 4	Level 5 and above
PISA-15 (2000)	2%	5%	14%	25%	29%	25%
PISA-24 (2009)	0%	2%	5%	15%	34%	45%
Difference in percentage points	-1	-4	-10	-11	5	20

The Youth in Transition Survey



Growth in reading skills between the ages of 15 and 24, by educational attainment at age 24



- In Canada, PISA is used as ONE of several measures used for benchmarking. Others include:
 - **provincial assessments (school/district/provincial results over time)**
 - **the Pan-Canadian Assessment Program (provincial/territorial results over time)**
 - **other international assessments (provincial/national/international results over time)**
- In Canada, given our results, educational assessments are used to inform reforms but they are not the driving force.

A major challenge:

**“If you want to measure change, don’t change the measure.”
– (Otis Dudley Duncan, 1969)**

For more information

- www.cmec.ca
- <http://publications.gc.ca/collections/Collection/Statcan/81-595-MIE/81-595-MIE2003005.pdf>
- <http://www.oecd.org/canada/49893598.pdf>



» <http://www.youtube.com/watch?v=q1l9tuScLUA>

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