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PISA in Canada

U.S. PISA 2009 Conference

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Presentation Overview

- Context, PISA in Canada
- Canadian Results
- Use of PISA data



Context: Structure of Education in Canada

- Education falls under provincial/territorial jurisdiction
 - 13 education systems (10 provinces, 3 territories)
 - no national or federal department of Education
- Government of Canada plays a support role in education
 - Mandates of several government departments intersect with education
 - Federal government has responsibility for First-nations administered schools on reserves



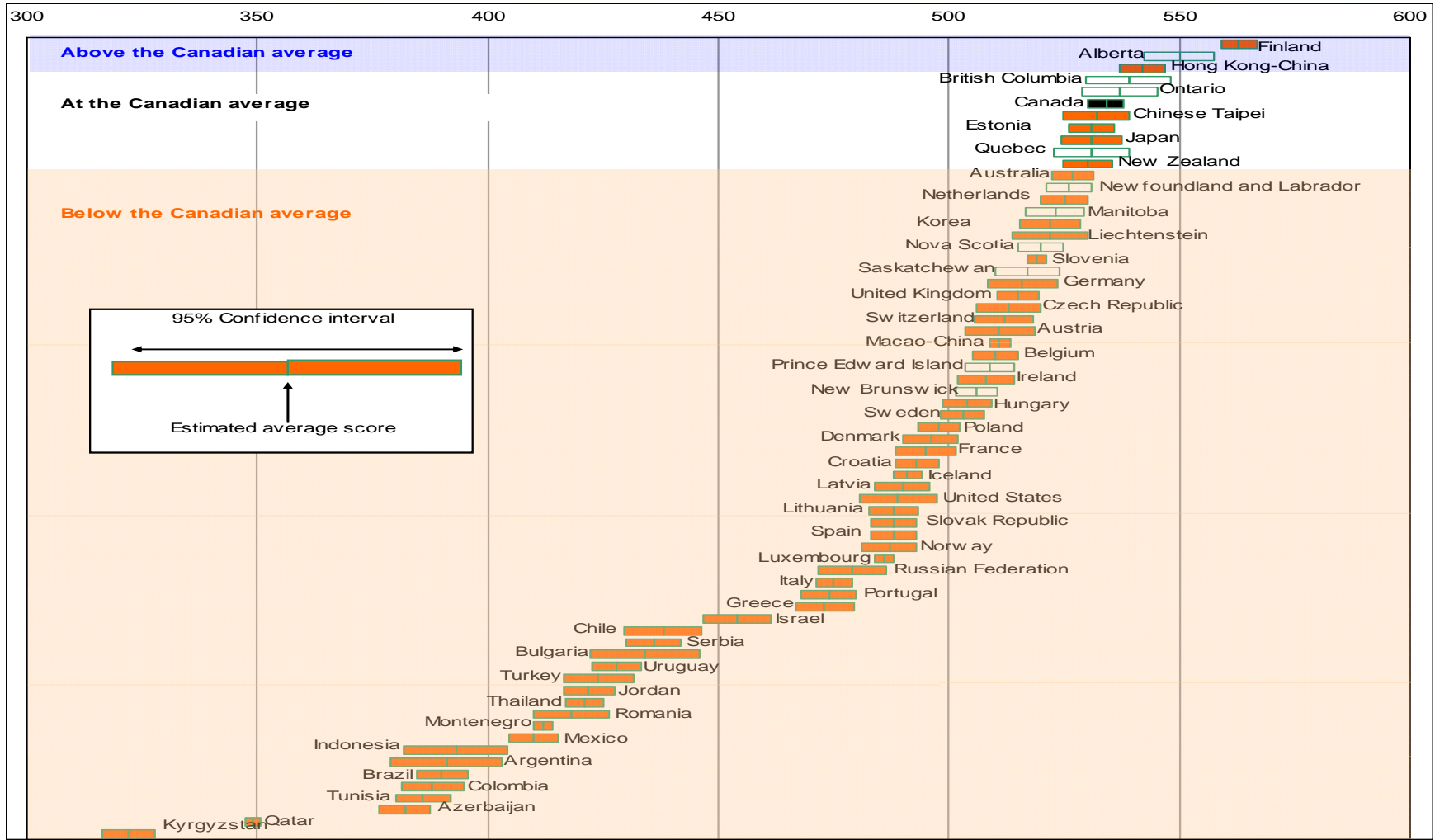
Context, Key Players

- Council of Ministers of Education, Canada (CMEC)
- Provincial Departments of Education
- Federal department of Human Resources and Development (HRSDC)
- Statistics Canada (STC)

Context: PISA participation

- Over-sample schools in Canada in order to provide reliable estimates at the provincial level
 - 2009, 1000 schools, 22,000 responding students
- Good school and student participation
 - 83% of schools participated in 2006, estimated 89% of schools participated in 2009
 - Student participation: 82%

Canada performs among the top in PISA, Science 2006 results





There is wide variation on provincial performance

- The mean scores for the 10 provinces cover the upper-half of the range of mean scores of OECD countries
- Alberta is the highest performing provinces and has scores comparable with Finland
- Quebec, Ontario and British Columbia perform at the same level as the Canadian average
- Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Saskatchewan perform below the Canadian average

Explaining provincial variations: the role of socioeconomic background

- About 40% of the variation in provincial mean scores is attributable to students' family background
 - After taking into account students' family background there remains a gap of about 30 points between the highest and lowest province.
- School Context: students from less advantaged families tend to perform considerably worse if they attend a school of low SES than if they attend a school with a student population from a high range of SES families

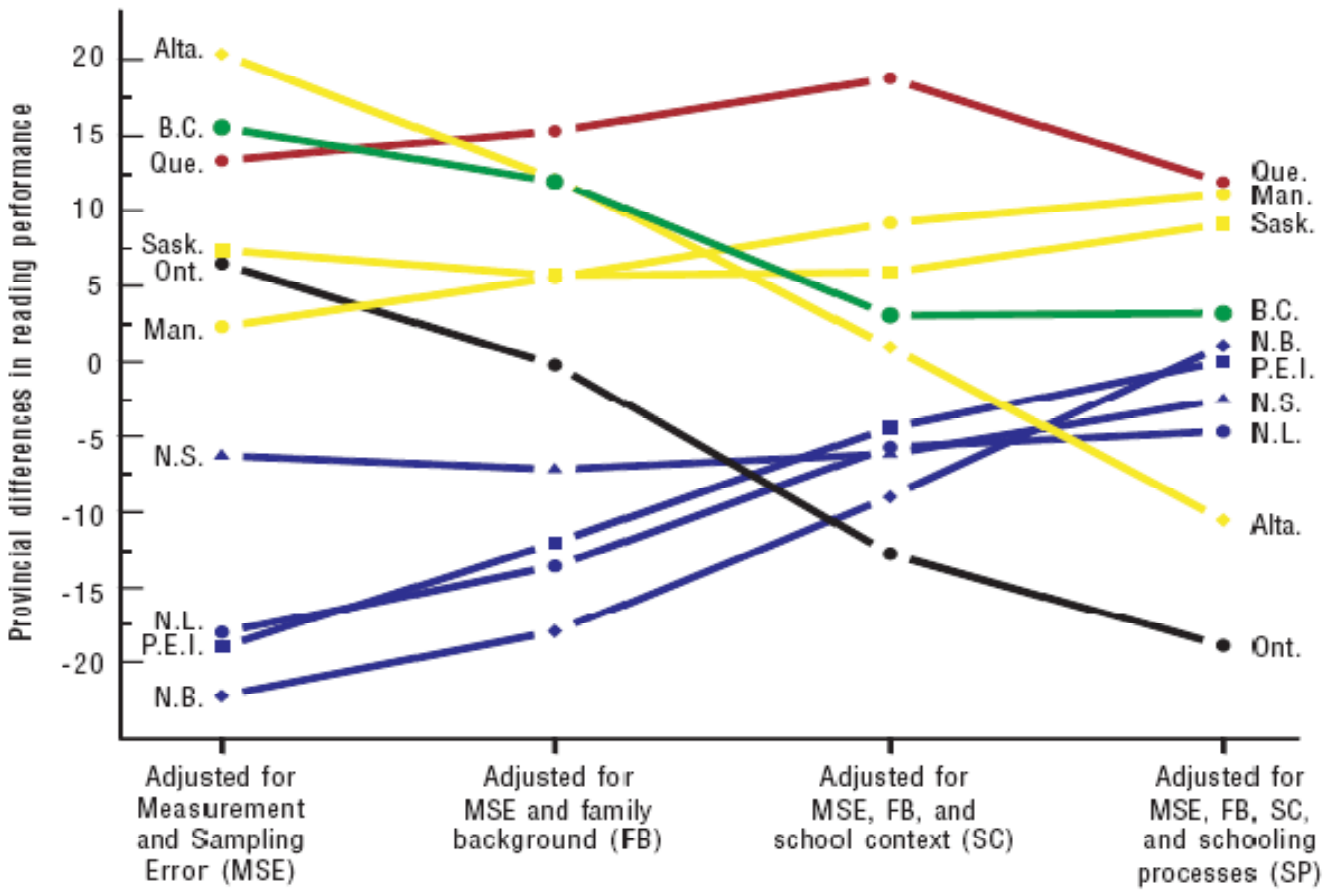


Explaining Provincial variation: school practices and policies

- Some of the variation is attributable to measurable aspects of school resources and classroom and school policy and practices
- Not possibly to identify one of two key factors
- Effects of any particular factor are fairly small



Variation in provincial reading performance explained by family background, school context, and schooling processes

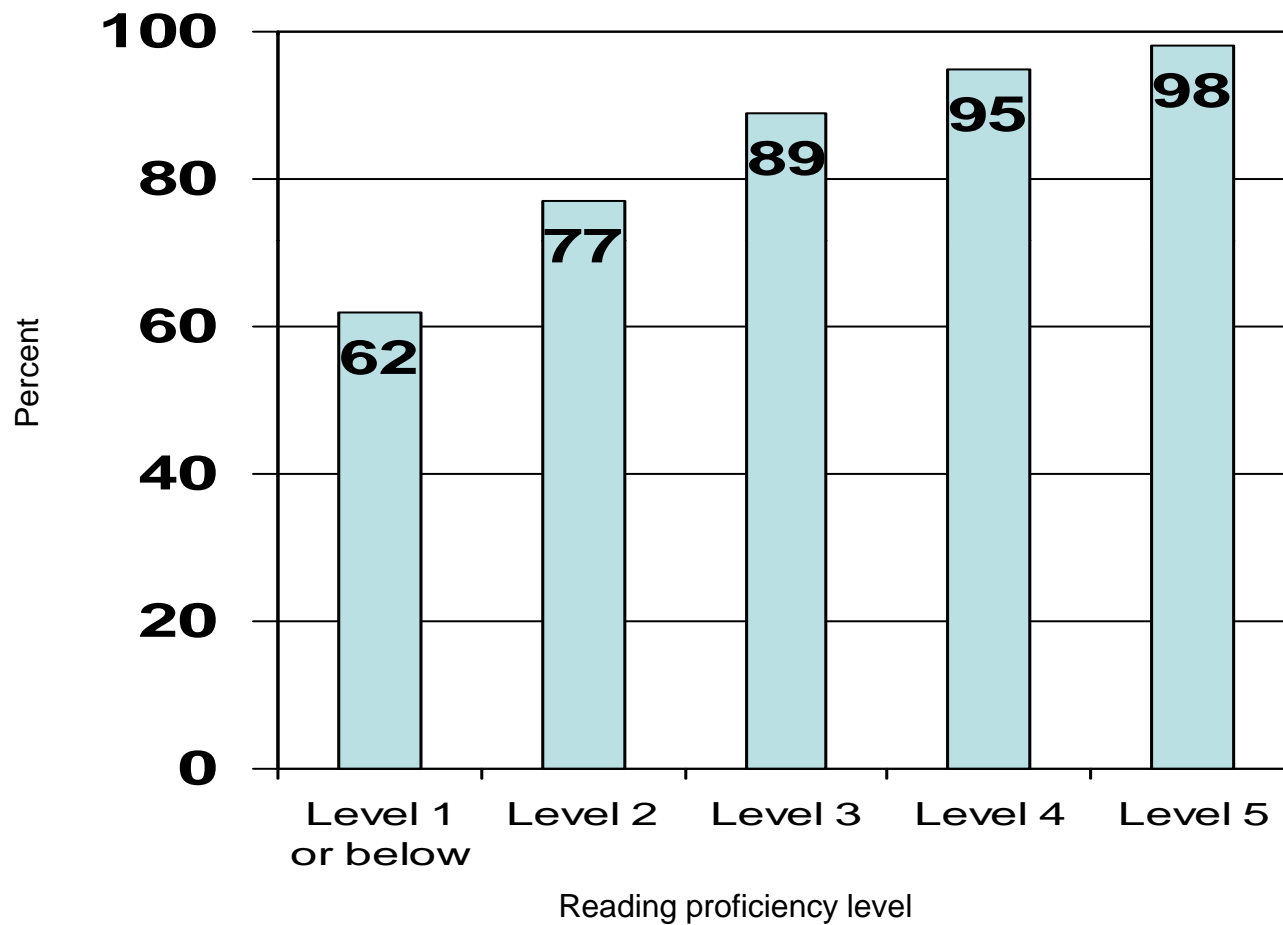




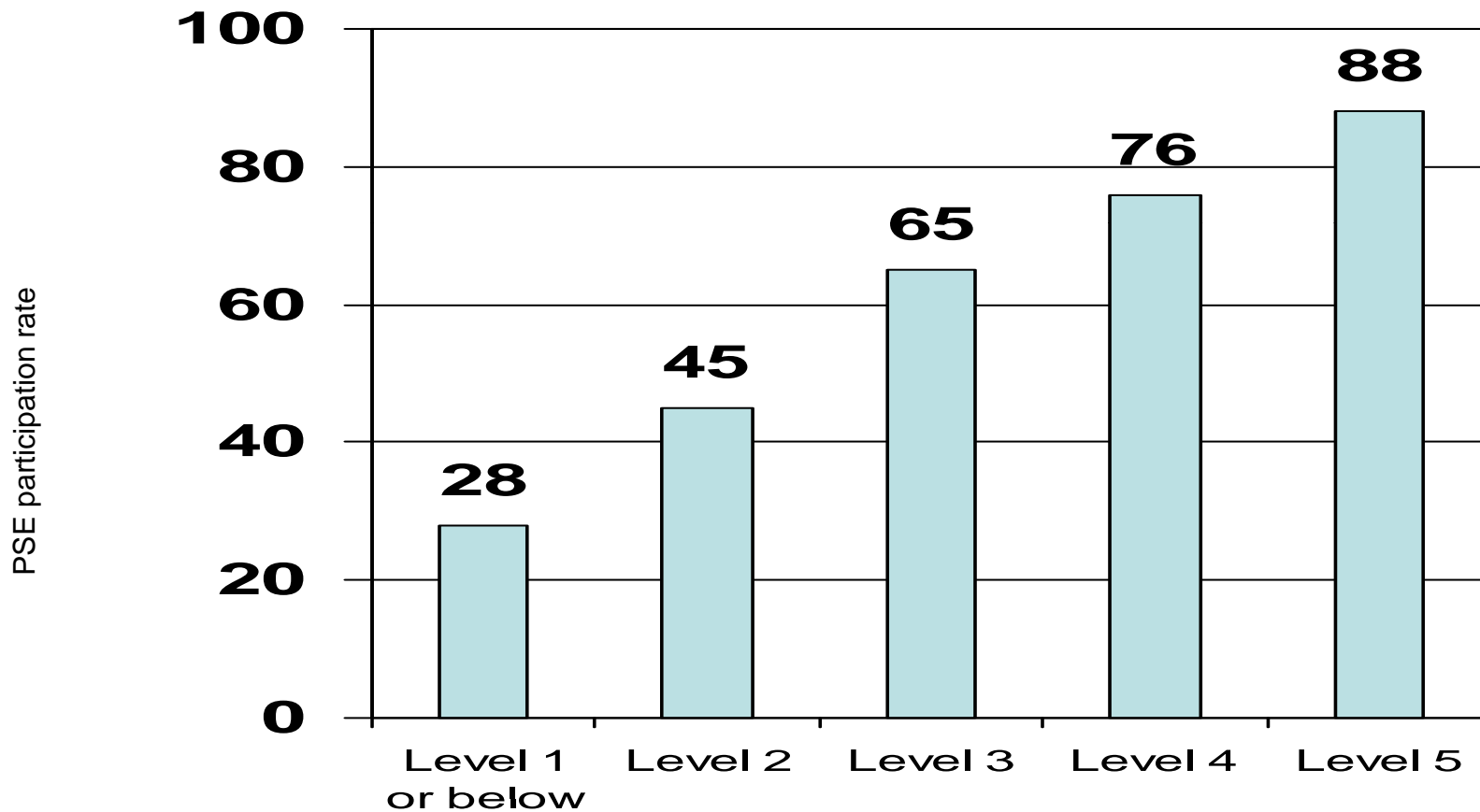
PISA proficiency and subsequent educational pathways

- PISA 2000 respondents re-surveyed every 2 years.
- Collect detailed information on education and labour market pathways and factors influencing these pathways.
- How does PISA performance relate to subsequent educational pathways?

High school completion by age 19 increased with reading level at age 15



Post-secondary participation rates by age 19 increased with reading proficiency levels at age 15



The impact of factors on education trajectories

<p>Some of the facilitating factors that allowed low reading achievers to pursue higher education</p>	<ul style="list-style-type: none"> * Positive academic behaviour (not skipping classes) * Less intensive employment (20 hours per week or less) * Association with extracurricular activities * Avoiding risky behaviours
<p>Key factors that increased the likelihood of some of high reading achievers to drop out from high school</p>	<ul style="list-style-type: none"> * Poor marks * Not put sufficient effort into their academic career * influenced strongly by negative peer behaviour *
<p>Factors that decreased the likelihood of high reading achievers to pursue PSE</p>	<ul style="list-style-type: none"> * Poor high school marks * Negative peer educational supports * Lack of future orientation * Intensive employment during the school year (over 20 hours per week) * Non-participation in extracurricular activities * Low level of household income (negative impact on university participation only)



Use of PISA data, PISA Stakeholders

- Provincial Ministries of Education
- Federal government department
- School boards
- Schools
- Parents
- Students



How has PISA data been used

Provincial Ministries of Education

- Linkage with provincial assessments (1)
- Implementation of curriculum review plan (1)
- Report results to school boards and schools (1)
- Inform policy on school language sector (5)
- Research priority for PISA 2009: aboriginal performance

Federal government

- Human capital stock perspective
- Evolution of Reading competencies
 - Reading skills at age 15 versus age 24
- PISA 2009: Performance in First Nation's schools, demonstration project

