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Education

REPORT HIGHLIGHTS

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 CANADIAN
index
OF WELLBEING
Measuring what matters

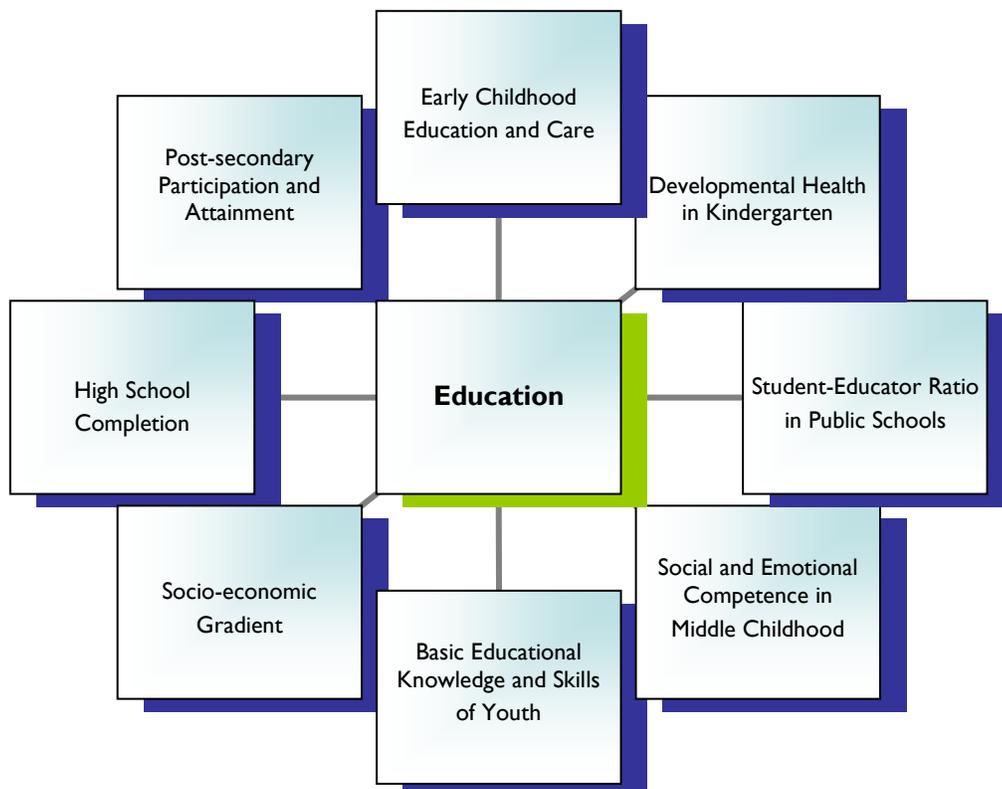
Education is the systematic instruction, schooling or training given to the young in preparation for the work of life; and by extension, similar instruction or training obtained in adult age.

Education should not be equated with schooling. It is a process that begins before school age and extends beyond high school, university, and apprenticeships. Before the start of formal schooling in kindergarten, education is reflected in pre-school arrangements such as childcare and early childhood education. Beyond high school, college or university, and professional training through apprenticeships, education takes place in the form of adult learning and lifelong learning.

Education is an inherently developmental and intergenerational endeavor. It requires learning over time, typically achieved by one generation (of teachers, parents, professionals, etc.) teaching the next (students, children, employees). It is important to pay attention to continuity in the educational process: the learners of today are the teachers of tomorrow, and any education gap in one generation will inevitably affect following ones.

The Education Domain measures eight headline indicators:

The Education Model



The Education Domain indicators were tracked primarily between the years 1994-2008.

Trends

- The percentage of childcare spaces increased, but varied considerably among provinces.
- Developmental health in kindergarten rose in the 1990s but levelled off in the 2000s.
- The student-teacher ratio steadily improved, but B.C. fell further behind the national average.
- Social and emotional competencies among children 12-13 declined.
- Math, science and reading scores remained above the international average, but the margin dropped.
- Parental socio-economic status became less important to student performance. Parental education attainment remained important.
- High school and university completion rates increased slowly but steadily.

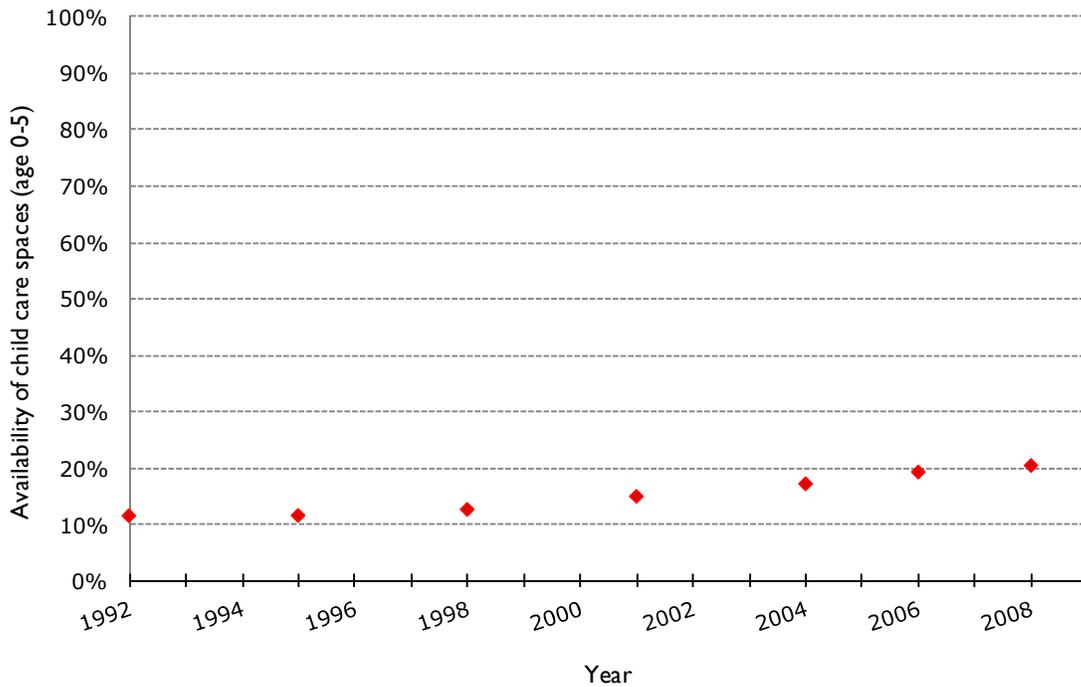
Report Highlights

The following are the key highlights of the report:

Childcare Spaces are Up

- Over the last two decades, the availability of childcare spaces increased. The percentage of children aged 0-5 years with a childcare space rose steadily from 12% in 1995 to 20% in 2008.
- Research has shown that high-quality childcare has significant positive effects on children's social, emotional, and academic developmental outcomes. The positive effects are especially pronounced for children from disadvantaged minority backgrounds.

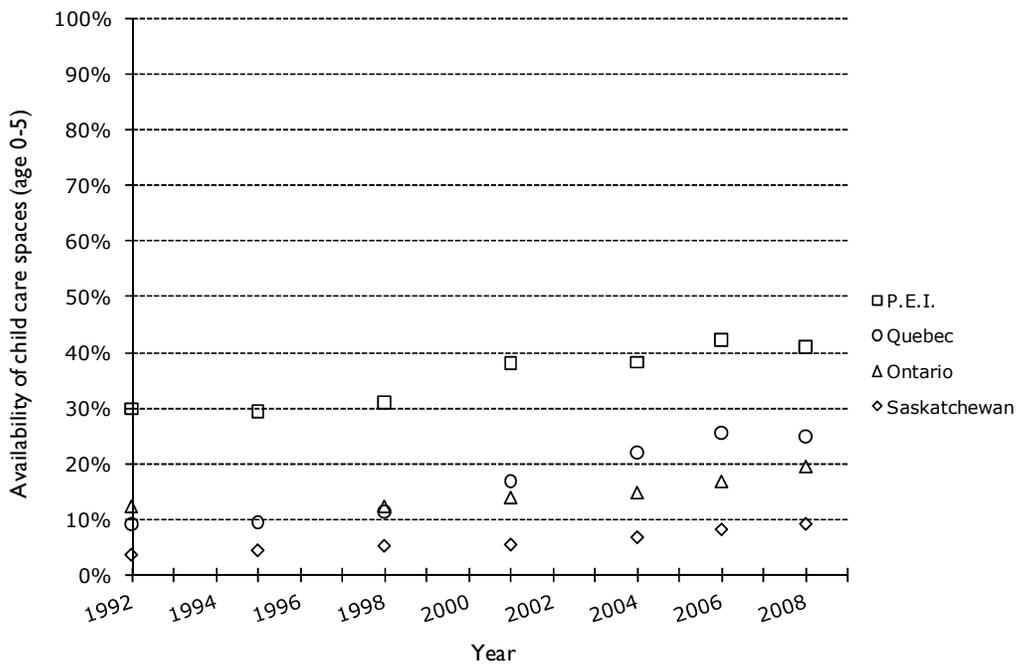
Chart I. Availability of Childcare Spaces



Source: Childcare Canada, (Childcare Resource and Research Unit)

- There was considerable variation among provinces.

Chart 2. Availability of Childcare Spaces for Select Provinces

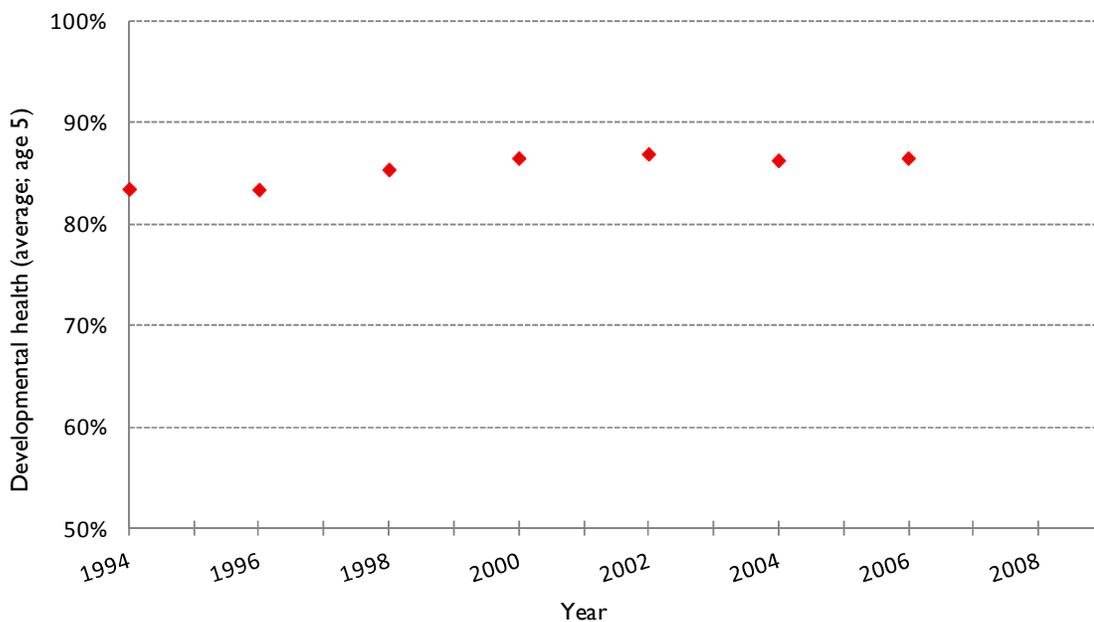


Source: Childcare Canada, (Childcare Resource and Research Unit)

Developmental Health in Kindergarten has Levelled off

- Developmental health is a composite of the scores in five categories: physical health, social relationships, emotional wellbeing, cognitive skills (vocabulary), and contextual factors (parental reading).
- The percentage of children in kindergarten who did well on developmental health scores in the *National Longitudinal Study of Children and Youth* increased consistently from 83% in 1994 to 86% in 2000, but remained at 86% in 2006.
- The fact that data show a consistently increasing trend over one decade (1990s) and a consistent plateau during the following decade (2000s) raises important questions about the social and political changes that accompanied this pattern.

Chart 3. Children Doing Well in Five Categories of Developmental Health

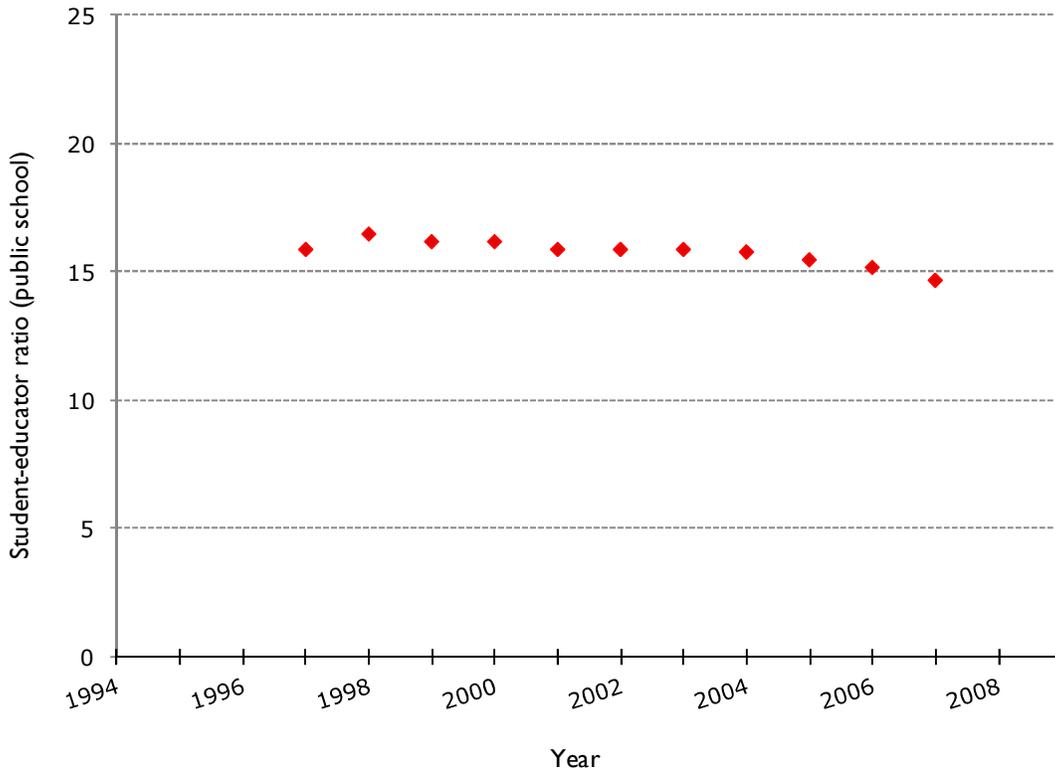


Source: *National Longitudinal Study of Children and Youth* (Statistics Canada)

Student-Educator Ratio is Improving – Except in British Columbia

- The number of students per educator steadily dropped from 16.5 in 1998 to 14.7 in 2007.

Chart 4. Student-Educator Ratio



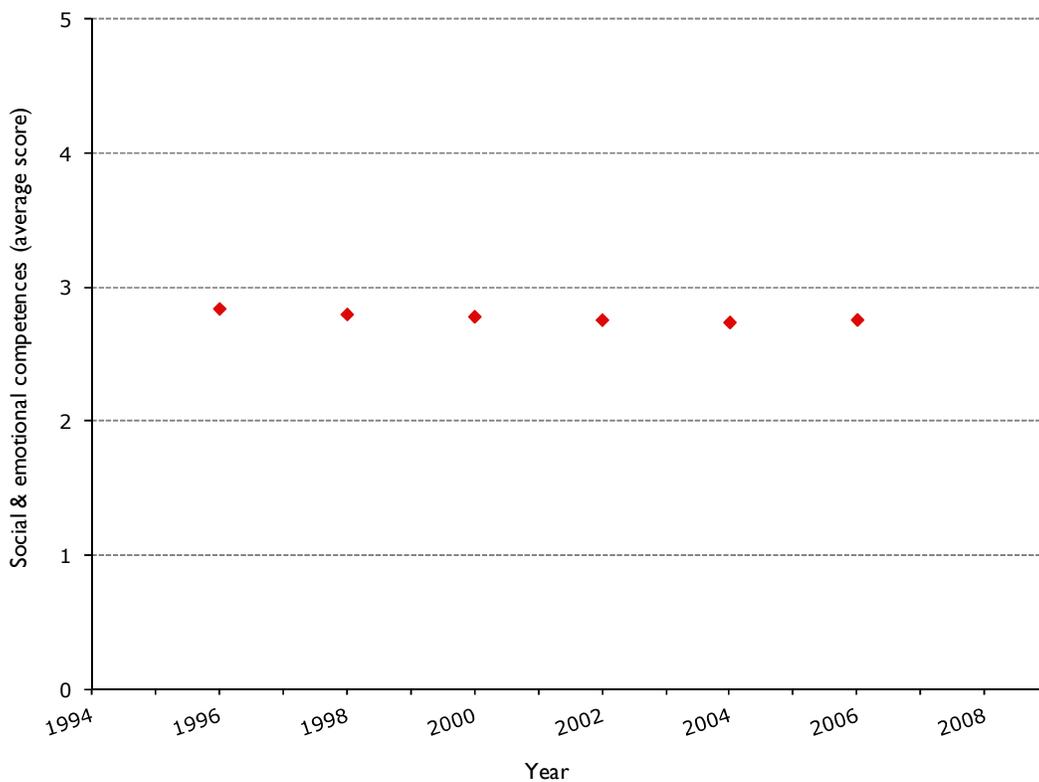
Source: Centre for Education (Statistics Canada)

- While the student-educator ratio steadily improved in Ontario (from 15.8 to 14.5), in British Columbia it strongly fluctuated and did not improve (16.9 in 1999 and 16.6 in 2007). B.C. already had one of the poorest student-educator ratios in the country so the gap between it and other provinces widened over the past 15 years. Canada's average improved from 15.9 to 14.7, while BC's poor ratio remained unchanged i.e. the gap increased from a 1-point difference to a 2-point difference.

Social and Emotional Competencies are Declining in Middle Childhood

- Social and emotional competencies is a composite based on scores in five categories: self-concept (self-esteem); peer belonging; friendship intimacy; bullying (victimization); and empathy.
- Social and emotional competency scores among children 12-13 declined slowly but steadily from 3.25 in 1996 to 3.13 in 2006. The trend was not reflected equally in the five individual components: self-concept and peer belonging stayed at a steadily high level, while bullying (victimization), friendship intimacy, and empathy went down over time.
- The continued overall decline raises critical questions from social, educational, and developmental perspectives. In an increasingly globalizing, diverse Canadian society, fostering inter-personal competences is critical for building trust and social capital across different groups within our society. If the trend for children 12-13 reflects a general societal trend, it will be important to understand and address the underlying processes and causes.

Chart 5. Average Score of Five Categories of Social and Emotional Competencies in Middle Childhood (age 12-13)

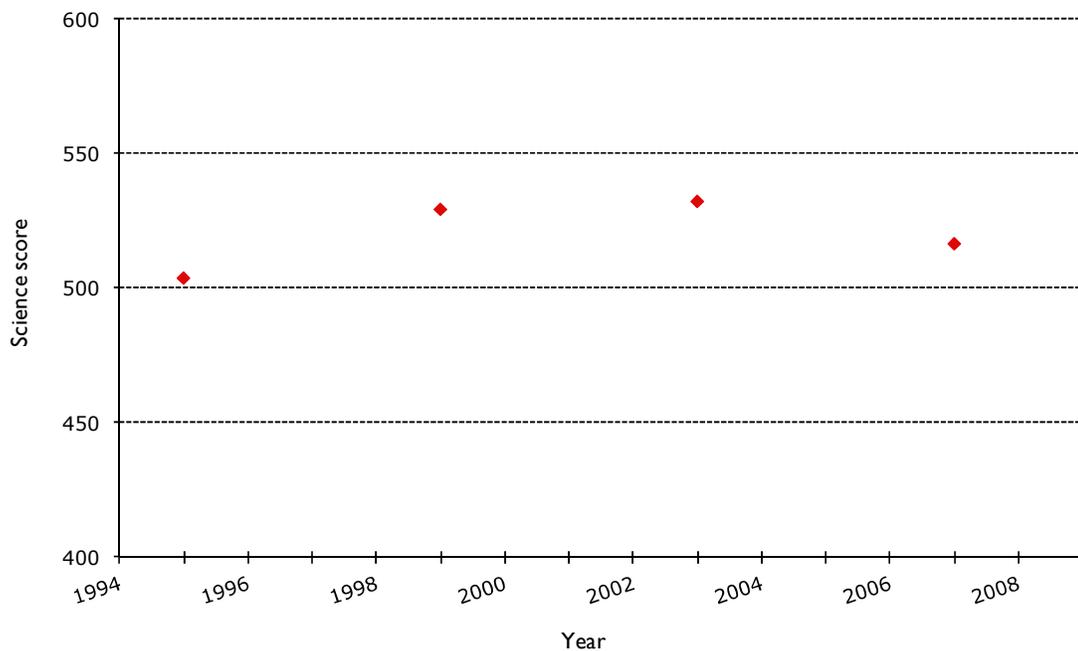


Source: National Longitudinal Study of Children and Youth (Statistics Canada).

Canadian Basic Education Scores are Above the International Average – But the Margin is Dropping

- Scores for international math (Grade 8), science (Grade 8) and reading tests (Grade 9) are routinely standardized, so that, for each cohort, the international average score is 500.
- Canadian scores were above the international average on an index of tests taken between 1995 and 2006. But scores progressively declined from a high of 533 in 1999 to 522 in 2006, the most recent test year.
- Canadian scores declined in each of the test areas from 1999 to 2006: in literacy from 534 to 527; in math from 531 to 523; and in science from 533 to 517.

Chart 6. Average Score of Canadian Children (Grade 8) in International Assessment of Science Skills

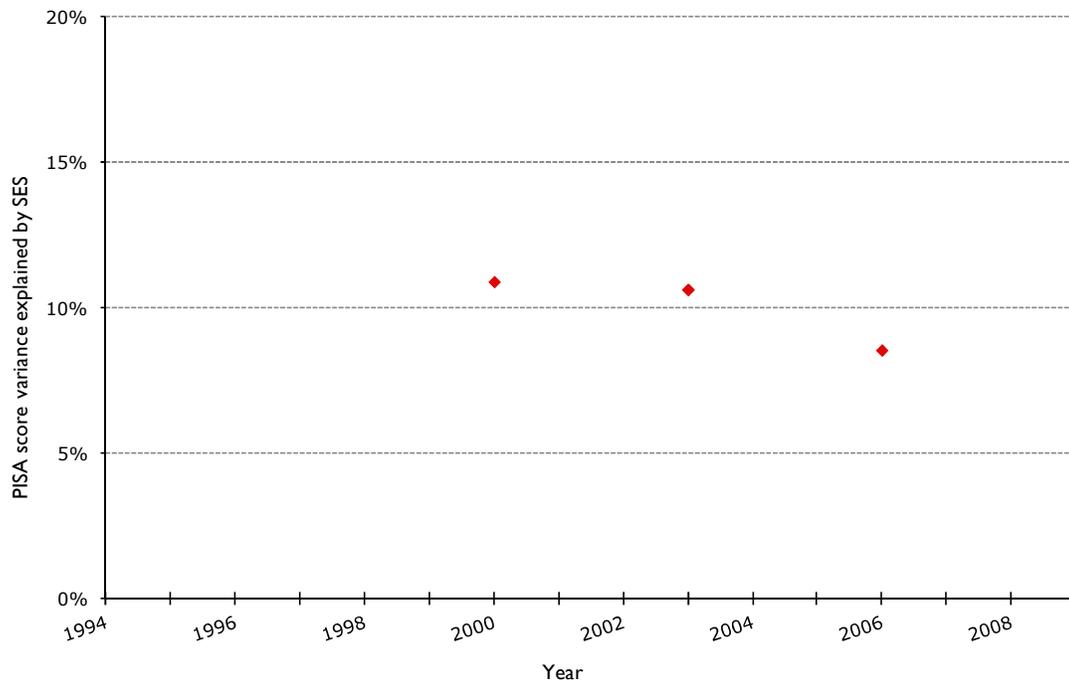


Source: Trends in International Mathematics and Science Study (TIMSS), National Center for Education Statistics, US Department of Education

Parental Socio-economic Status is Becoming Less Important to Student Performance

- The amount of variation in PISA Grade 9 literacy/reading test scores that can be attributed to differences in parental socio-economic background dropped from 11% in 2000 to 9% in 2006 for Canadian students.
- Canada is in the mid-range among OECD countries. In Germany, for example, the variation in scores related to parents' socio-economic status is about 25%, one of the highest relationships among OECD countries. In other countries (e.g., Finland, Korea), it is around 3% to 5% – much less significant than in Canada.

Chart 7. Variation in Student PISA Scores (Grade 9) Accounted for by Parental Socioeconomic Status



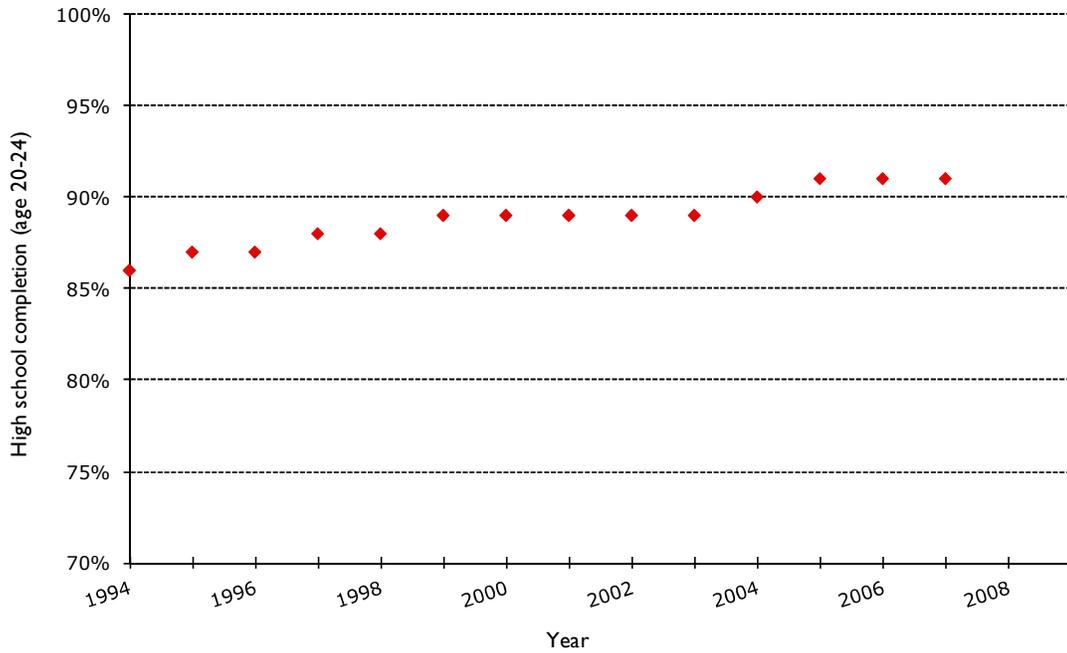
Source: Programme for International Student Assessment (PISA), Organization for Economic Co-operation and Development (OECD).

- Students whose parents have completed high school or less are only 70% as likely to participate in the post-secondary education process as students whose parent(s) has/have completed university.
- Looking at Canada as a whole may disguise large variation across specific groups. It must be noted that some Aboriginal children attend schools that fall under the jurisdiction of the provincial ministries of Education, and that others attend schools that fall under the jurisdiction of the First Nations. First Nation schools have been systematically under-funded by the Canadian government and Aboriginal children have historically been segregated, disadvantaged, and disempowered by the Canadian education system.

High School Completion Rates are Up

- The percentage of the Canadian population between 20 and 24 years old that reported having completed high school has gone up slowly but steadily from 86% in 1994 to 91% in 2007.

Chart 8. High School Completion Rates (age 20-24)

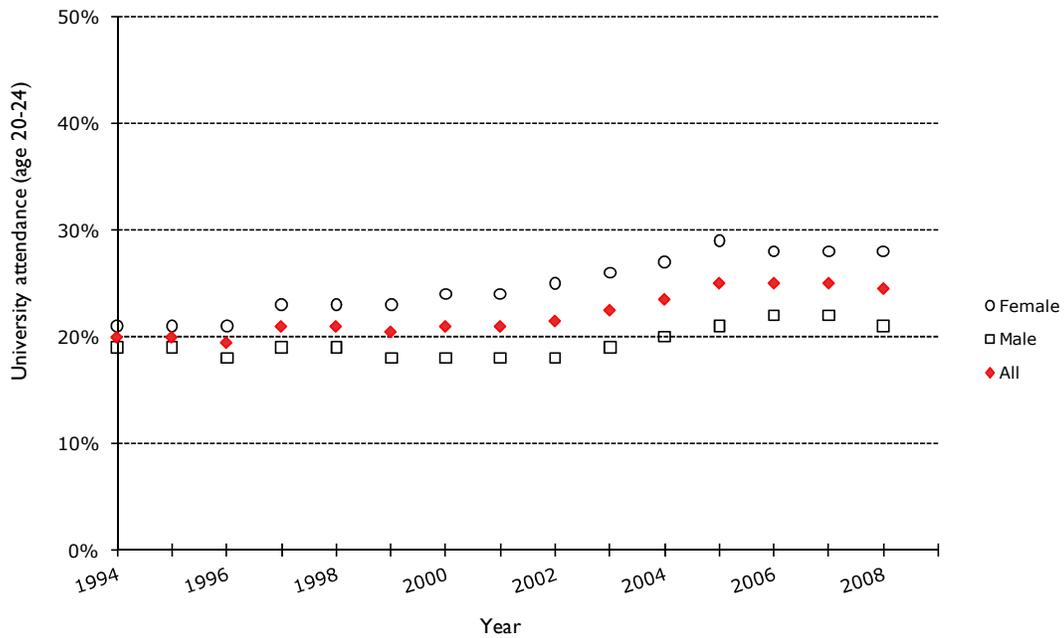


Source: *Labour Force Survey (Statistics Canada)*

University Participation and Completion Rates are Up

- The percentage of the Canadian population between 20 and 24 years old that reported having attended university during a given year has gone up slowly but consistently from 20% in 1994 to 25% in 2008. The growth is primarily driven by increased participation rates of women.

Chart 9. University Participation Rates (age 20-24)



Source: Labour Force Survey (Statistics Canada)

- University graduation rates among 25-64 year-olds have gone up steadily from 19% in 1994 to 28% in 2008.