



EDUCATION AT A GLANCE 2013: HIGHLIGHTS FOR CANADA

Education at a Glance is an annual report on a set of internationally comparable indicators published by the Organisation for Economic Co-operation and Development (OECD).

These indicators enable educational policy makers and practitioners alike to see their education systems in light of other countries' performance and, together with the OECD's country policy reviews, are designed to support and review the efforts that governments are making towards policy reform.

Education at a Glance addresses the needs of a range of users, from governments seeking to learn policy lessons to academics requiring data for further analysis to the general public wanting to monitor how its country's schools are progressing in producing world-class students. The publication examines the quality of learning outcomes, the policy levers and contextual factors that shape these outcomes, and the broader private and social returns that accrue to investments in education.

Education at a Glance is the product of a long-standing, collaborative effort between OECD governments, the experts and institutions working within the framework of the OECD's Indicators of Education Systems (INES) programme and the OECD Secretariat.¹

Data submitted to the OECD for *Education at a Glance* are drawn from a variety of national surveys. Data for the indicators in Chapter D are collected from the provincial/territorial ministries/departments of education and aggregated to the Canada level through agreed-upon methodologies. Input to the OECD on issues relating to international comparability, as well as on the draft material for *Education at a Glance*, is provided by representatives of the Council of Ministers of Education, Canada (CMEC) and Statistics Canada.

Data will be available at a provincial/territorial level for some of the indicators in *Education at a Glance* in the publication called *Education Indicators in Canada: An International Perspective* which will be released in December 2013.

Indicator A1: To what level have adults studied?

- Canada has the highest proportion of 25 to 64 year olds with tertiary education (college and university) among OECD countries.
 - Canada has the highest proportion of college graduates (25%).

¹ Foreword, *Education at a Glance 2012: OECD Indicators*, p. 3, retrieved from http://www.oecd.org/edu/EAG%202012_e-book_EN_200912.pdf.

- Approximately one in four Canadians in this age group (27%) has university qualifications (tertiary-type A). With the exception of Norway (35%), the United States (31%), and Israel (30%), other countries are either similar to Canada (within 2 percentage points) or below the Canadian number of university qualifications.
- When it comes to younger age groups (ages 25 to 34), Canada ranks 15th in the percentage of younger people with university education. Together with Japan and Korea, Canada leads the OECD countries on college education.
- Among 25 to 34 year olds in Canada, significantly more women (65%) than men (49%) have tertiary qualifications. This is true in most OECD countries, though not necessarily to the same extent.

Indicator A2: How many students are expected to finish secondary education?

- The first-time graduation rate reported by the OECD corresponds to the percentage of people who obtain a secondary-school qualification for the first time in their life compared to the total population. It can be interpreted as the probability that an individual will graduate from secondary education during his or her lifetime, assuming that current conditions related to graduation all remain the same. It should not be confused with a graduation rate as the term is generally used in Canada, which reports on how many students who enter a program complete it successfully.
- International comparisons should be made with care because systemic differences, such as how the vocational programs are reported, can affect the percentages shown. In addition, some countries have two completion points in their secondary systems, allowing students who do not complete a full program to receive a qualification and become graduates. In Canada, only students who have graduated from Grade 12 (Grade 11 in Quebec) are included.
- At 85 per cent, Canada is above the OECD average, and at the average for European countries. The equivalent rate for the United States is 77 per cent.

Indicator A3: How many students are expected to finish tertiary education?

- The first-time graduation rate reported by the OECD corresponds to the percentage of people who obtain a tertiary qualification for the first time in their life compared to the total population. It can be interpreted as the probability that an individual will graduate from tertiary education during his or her lifetime, assuming that current conditions related to graduation all remain the same. It should not be confused with a graduation rate as the term is generally used in Canada, which reports on how many students who enter a program complete it successfully.
- Canada's rate for university graduates (tertiary-type 5A, first-time graduates) was 35 per cent, compared to 39 per cent for the United States, 40 per cent for the OECD average, and 41 per cent for European countries.

- Canada’s rate for college graduates (tertiary-type 5B, first-time graduates) was 18 per cent, compared to 12 per cent for the United States, 11 per cent for the OECD average, and 9 per cent for European countries. The rate dropped between 2009 and 2010 due to an improvement in the mapping of Canadian programs into ISCED, which led to some programs being counted at the ISCED 4 level rather than ISCED 5B. (ISCED is the International Standard Classification of Education, which the OECD uses for international comparability.)

Indicator A4: How many students complete tertiary education?

- This indicator does not include data for Canada.

Indicator A5: How does educational attainment affect participation in the labour market?

- Across OECD countries, employment rates are highest among people who have a tertiary education and these individuals are also most likely to be employed full time. Gender differences in employment rates are smallest among tertiary-educated individuals and largest among individuals who do not have an upper-secondary education. These trends are also true in Canada.
- Data for 2008 to 2011 show that unemployment rates in Canada for 25 to 34 year olds increased from 4.3 per cent to 5.4 per cent for those with tertiary education, and from 12.9 to 15.5 per cent for those with less than high school. This indicates that higher educational attainment offers a significant “protection” against growing unemployment.
- The high educational attainment in Canada, noted in indicator A1 (57% of this age group have tertiary qualifications), means that many young people in Canada were less affected by the recession than in other OECD countries where the proportion with tertiary education is smaller.

Indicator A6: What are the earnings premiums from education?

- Compared to high-school graduates’ incomes, earnings for tertiary-educated adults in Canada, the Czech Republic, Finland, France, New Zealand, Portugal, the Slovak Republic, Slovenia, Sweden, and the United Kingdom declined between 2000 and 2011. In Canada, the earnings premium has been stable since 2007 at around 39 per cent higher for tertiary-educated adults.
- In Austria (16%), Canada (18%), and Greece (28%) over 15 per cent of those with a tertiary-type A or advanced research program degree are found in the lowest-earnings category (at or below half of the median). In the United States, Denmark, Finland, Germany, Ireland, and Italy the same situation applies to between 13 and 14 per cent of the same group.

Indicator A7: What are the incentives to invest in education?

- This indicator assesses the economic benefits of education for an individual by estimating the net monetary value of higher levels of education over a lifetime, taking into consideration the direct and indirect costs and benefits of attaining those education levels. This is a complex indicator, and OECD notes that returns on education in different countries should be assessed with caution.
- The private benefit to a Canadian man of obtaining a tertiary education compared to a high school or vocational credential is \$169,217; the private benefit to a Canadian woman is \$130,780. The public benefit is \$69,283 for a man and \$53,433 for a woman. (All amounts are in US dollars, based on purchasing-power parity.)

Indicator A8: What are the social outcomes of education?

- In Canada, the Czech Republic, Estonia, Hungary, New Zealand, Poland, the United Kingdom, the United States, and Norway adults with at least a tertiary education are half as likely to be currently smoking compared to those with below upper-secondary education.
- Adults with tertiary education are also much less likely to be obese than those with below upper-secondary education.

Indicator B1: How much is spent per student?

- In Canada in 2009 expenditure per primary student was \$8,933, \$9,774 per secondary student, and \$22,475 per tertiary student, all of which are higher than averages for the OECD and European countries. (All amounts are in US dollars, based on purchasing-power parity.)
- Expenditure per tertiary student by educational institution (from public and private sources combined) ranges from USD 7,000 or less in Estonia and the Slovak Republic to more than USD 20,000 in Canada, Switzerland, and the United States.
- Universities carry out significant amounts of research and development (R&D) in Canada. When R&D costs are excluded, expenditure per tertiary student is \$16,300 in Canada, compared to \$22,744 in the United States. All other countries show an expenditure per tertiary student of below \$12,000.

Indicator B2: What proportion of national wealth is spent on education?

- Combined public and private expenditure on education in Canada in 2009 as a percentage of GDP was 6.6 per cent. The OECD average was 6.3 per cent, the European average was 5.9 per cent, and the United States spent 7.3 per cent of GDP on education. (Note that the comparison point for other countries is 2010.)

- Expenditure on tertiary education amounts to more than 1.5 per cent of GDP in more than half of all countries, and exceeds 2.5 per cent in Canada (2.7%), Korea (2.6%), and the United States (2.8%).

Indicator B3: How much public and private investment in education is there?

- The share of public and private funding varies widely among countries. Comparing expenditure on all levels of education, the share of private funds exceeds 19 per cent in Canada, Israel, and Mexico, 25 per cent in Australia, Japan, the United Kingdom, and the United States, and 35 per cent in Chile and Korea.
- Because the growth rate of private expenditures exceeded the growth rate of public expenditures, the share of public funding for educational institutions decreased by at least 4 percentage points in Canada, Italy, Mexico, and Portugal and by more than 10 percentage points in the Slovak Republic and the United Kingdom.
- The proportion of expenditure on tertiary institutions covered by individuals, businesses, and other private sources, including subsidized private payments, ranges from 5 per cent or less in Denmark, Finland, and Norway (tuition fees charged by tertiary institutions are low or negligible in these countries), to more than 40 per cent in Australia, Canada, Israel, Japan, and the United States, and to over 70 per cent in Chile, Korea, and the United Kingdom.
- In Australia, Austria, Canada, the Czech Republic, Israel, Japan, Korea, the Netherlands, the Slovak Republic, Sweden, the United Kingdom, and the United States 9 per cent or more of expenditure on tertiary institutions is covered by private entities other than households. The actual proportion for Canada is 23.9 per cent.

Indicator B4: What is the total public spending on education?

- On average, public expenditure devoted to *tertiary* education amounts to less than one-quarter (23.6%) of total public expenditure on education in OECD countries. In OECD and G20 countries, the percentages range from less than 16 per cent in Korea (15.8%) to over 30 per cent in Canada (35.4%) and Finland (31.8%).
- Between 1995 and 2005, public expenditure on education as a percentage of total public expenditure dropped slightly in Canada from 12.7 per cent to 11.8 per cent, unlike many other OECD countries, which saw increases over the same period. By 2009, public expenditure on education represented 13.2 per cent of total public expenditure, compared to 13 per cent for the OECD average and 11.4 per cent for European countries. (Data for Canada are for 2009, not 2010.)

Indicator B5: How much do tertiary students pay and what public support do they receive?

- In 2011, Canadian public universities charged an average of \$4,288 in undergraduate tuition for each year in the program as a full-time student pursuing their first degree, compared to Ireland (\$6,450), Chile (\$5,885), and the United States (\$5,402).

Indicator C1: Who participates in education?

- In 2011, 82 per cent of 15- to 19-year-old boys and 85 per cent of girls the same age were enrolled in education. In most countries, enrolment rates were higher for girls than for boys of this age group. Canada (boys: 78%; girls 83%), Israel, Slovenia, the Russian Federation, and the United States each shows a gender gap in enrolment rates of at least five percentage points or more in favour of girls.

Indicator C2: How do early childhood education systems differ around the world?

- Enrolment rates for early childhood education among four year olds vary from over 95 per cent in Belgium, Denmark, France, Germany, Iceland, Ireland, Italy, Mexico, the Netherlands, Norway, Spain, and the United Kingdom, to less than 60 per cent in Brazil, Finland, and Turkey. Canada and Switzerland also fall into this group (of less than 60% enrolment), but because enrolment in integrated programs is not reported for those countries, the true enrolment rate cannot be calculated and is likely higher than what is reported here.
- For countries with programs that combine education with child care (“integrated” programs), the education/child care boundary becomes more challenging to identify. OECD countries with integrated early childhood education and care programs often also have stand-alone programs that are purely educational. Over half of OECD countries are unable, in practice, to distinguish between early childhood education and child care in integrated programs. Of these, most, including Italy, Denmark, and the United States, choose to report all of the information under ISCED 0. A minority of countries do not include integrated programs under ISCED 0 for reporting on personnel (Australia, Norway), expenditure (Korea), or overall reporting (Canada, Greece, Switzerland). These differences should be taken into account when drawing conclusions from international comparisons.

Indicator C3: How many students are expected to enter tertiary education?

- Data for Canada are not included in this indicator.

Indicator C4: Who studies abroad and where?

- In 2011, more than one in two foreign students was enrolled in tertiary education in Australia, Canada, France, Germany, the United Kingdom, or the United States. In

absolute terms, the United States hosted most of these students, with 16 per cent of all foreign students, followed by the United Kingdom (13%), Australia (6%), Germany (6%), France (6%), and Canada (5%).

- Students from France (2.0%), Germany (3.9%), and Korea (4.4%) are the largest groups of international OECD students enrolled in OECD countries, followed by students from the United States (1.6%), Canada (1.5%), Italy (1.4%), Japan (1.2%), and the Slovak Republic (1.2%).

Indicator C5: Transition from school to work—Where are the 15 to 29 year olds?

- Some countries are more successful than others in providing employment for 15 to 19 year olds. In Australia, Austria, Brazil, Canada, Denmark, Germany, Mexico, the Netherlands, New Zealand, Norway, Sweden, and Switzerland at least one young adult out of two who is no longer in education is employed. In Denmark and Iceland employment rates among 15 to 19 year olds no longer in education remain relatively high, despite the drops that occurred between 2008 and 2011. Conversely, in Greece, Hungary, Israel, Korea, and Spain fewer than one young adult in four who is no longer in education is employed.
- While some people choose to work part time, others pursue involuntary part-time work because they cannot find full-time employment. Of the 15 countries with available data on involuntary part-time work, Belgium, Canada, Chile, Italy, Poland, Spain, and Sweden report more than half of all part-time work as involuntary.
- In Australia, Belgium, Canada, Denmark, France, Iceland, Ireland, Japan, the Netherlands, New Zealand, Norway, the United Kingdom, and the United States between 6 per cent and almost 10 per cent of 15 to 29 year olds worked part time after education.

Indicator D1: How much time do students spend in the classroom?

- Primary students in Canada had an average of 919 hours per year of total compulsory instruction time in 2011. The OECD average was 791 hours and the European average was 768 hours.
- Lower secondary students in Canada had an average of 923 hours per year of total compulsory instruction time in 2011. The OECD average was 907 hours and the European average was 881 hours.

Indicator D2: What is the student-teacher ratio and how big are classes?

- The ratio of students to teaching staff in secondary education in Canada was 15.3 in 2011. At the public university level, the ratio was 17.7. Both ratios are higher than the respective OECD and European countries' averages.

Indicator D3: How much are teachers paid?

- Canadian primary teachers at the beginning of their careers earned an average annual salary of \$35,534 in 2011, compared to \$28,854 in OECD countries as a whole and \$29,123 across European countries. Beginning primary teachers in the United States earned an average annual salary of \$37,595. After 15 years of experience, Canadian primary teachers earned \$56,349 compared to \$46,130 for the United States, \$38,136 for the OECD average, and \$38,602 for European countries. While salaries do not vary much by level in Canada, they do in many other countries. (All amounts are in US dollars, based on purchasing-power parity.)

Indicator D4: How much time do teachers spend teaching?

- Primary-school teachers in Canada have 799 hours of net statutory contact time with students, compared to an average of 790 across OECD countries, 766 among European countries, and 1097 in the United States.
- Upper-secondary-school teachers in Canada have 747 hours of net statutory contact time with students compared to an average of 664 across OECD countries, 635 among European countries, and 1051 in the United States.