COLLEGE GRADUATES IN THE ECONOMY

Environmental Scan 2010

AN ANALYSIS
OF TRENDS AND
ISSUES AFFECTING
ONTARIO



College graduates in the economy

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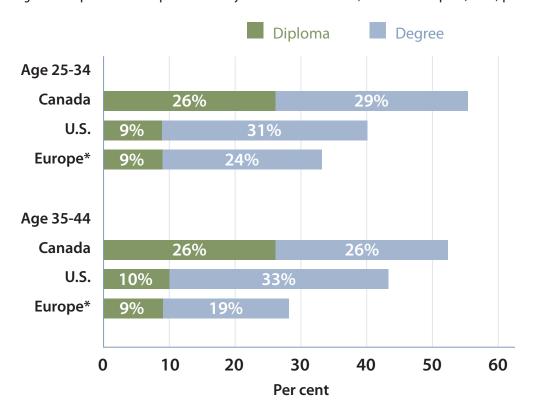
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1.0 HIGHLIGHTS

- Ontario's extensive college system provides the province with a key competitive advantage compared to the United States, and an even bigger advantage compared to Europe.
 - Ontario's overall employment rate is higher than the U.S. rate because of the success of its
 college graduates they are more likely to be employed than their American counterparts,
 and there are proportionately three times as many.
- However, Ontario's high-skill advantage is beginning to erode due to:
 - Huge gains in postsecondary education (PSE) enrolment in fast-growing developing countries;
 - Very low levels of job-related training for those without postsecondary credentials; and
 - Fewer tradespersons in Ontario (eight per cent) than in the rest of Canada (14 per cent).
- Ontario's college graduates, employed in communities across the province, play a critical role
 in export industries (manufacturing, resources and hospitality), electric power generation and
 transmission, real estate and insurance, infrastructure and health care. As well, small- and
 medium-sized firms are highly dependent on college graduates.
- In comparison, university graduates, especially those with advanced degrees, are far more prevalent in the public sector, and are geographically concentrated in Ottawa (federal government) and Toronto (head offices).
- Under-represented groups benefit from Canadian postsecondary credentials:
 - Canadian-born workers without postsecondary credentials struggle to find work, but immigrants without postsecondary credentials have a much harder time.
 - Immigrants with Canadian postsecondary credentials have greater success in getting jobs than those with foreign credentials.

1.1 INTER-JURISDICTIONAL COMPARISONS

Figure 1. Population with postsecondary education in Canada, U.S. and Europe* (2007, per cent)

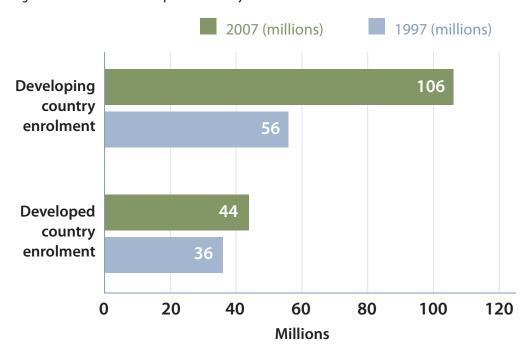


*Europe 19 countries - Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Spain, Sweden, United Kingdom.

Source: OECD. Education at a glance. 2009. Table A1.3a. Population with tertiary education. 2007.

- Canada's highly skilled population provides a strong and growing advantage compared to the U.S. and an even stronger advantage compared to Europe.
- In recent years, Canada's share of population with a university degree or higher has almost reached the U.S. level.

Figure 2. Increase in world postsecondary enrolment



Source: EFA Global Monitoring Report 2010. Reaching the marginalized. United Nations Educational, Scientific and Cultural Organization. Table 9A Participation in tertiary education, page 378.

 Canada's high-skill advantage is now beginning to erode due to huge increases in postsecondary enrolment (up 50 million or 89 per cent in a decade) in fast-growing developing countries (especially China and India).

Canadians with postsecondary vs OECD

Canadians with high school vs OECD

Canadians without high school vs OECD

Canadians without high school vs OECD

210

Figure 3. Lifetime hours of job-related training by educational attainment: Canada vs OECD, 2003

200

0

Source: OECD Education at a Glance. 2008. Table C5.1a. p. 407-8.

Canadians with limited education have only one-sixth as many hours of job-related training
(128 lifetime hours) as those with postsecondary education, while the Organization for Economic
Cooperation and Development (OECD) gap is only threefold.

400

600

• Countries with very high levels of job-related training for those with limited education include Denmark (719 lifetime hours), Finland (497 lifetime hours) and France (450 lifetime hours), (Source: OECD Education at a glance, 2008).

800

1000

^{*}Expected hours in non-formal job-related education and training between the ages of 25 and 64. (2002 for Canada, 2003 for the OECD average)

Advanced degree Bachelor's degree Diploma/certificate U.S. 10.1% 22.6% 9.6% **Ontario** 34.9% 10.4% 22.6% 10 20 30 40 50 60 70 0 80

Figure 4. Population with a postsecondary education, Ontario vs U.S. (2008, age 25-44)

Sources: Statistics Canada 282-0004 (2008) and US Census Bureau, Current Population Survey, Table 1. Educational Attainment of the Population 18 years and Over, by Age, Sex, Race or Hispanic Origin, 2008.

Per cent

- Ontario's extensive college system provides the province with a large postsecondary competitive advantage compared to the U.S.
 - Sixty-eight per cent of Ontario's population aged 25 to 44 has a postsecondary credential compared to 42 per cent of the comparable U.S. population.
- Ontario's share of degrees and advanced degrees is comparable to the U.S. share for those aged 25 to 44.

U.S. Ontario 100% 90% 86% 86% 80% 84% 82% 79% 70% 75% 75% 60% 50% 40% 30% 20% 10% 0% College No PSE University **TOTAL POPULATION**

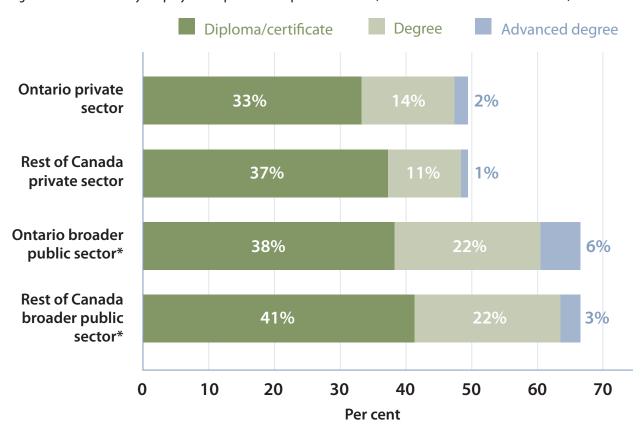
Figure 5. Employment rates for the U.S. and Ontario by educational attainment (age 25-44, 2006)

Sources: Statistics Canada 282-0004 (2006) and U.S. Census Bureau. Current population survey. Educational attainment of civilians 16 years and over by labor force status, age, sex, race and Hispanic origin. 2006

- In both Ontario and the U.S., a postsecondary credential increases employability substantially.
 - About 86 per cent of those age 25-44 with postsecondary credentials are working;
 while only 75 per cent of those without PSE credentials are working.
- Ontario's overall employment rate (82 per cent) is higher than the U.S. rate (79 per cent) because of the success of its college graduates who are more likely to be employed than their American counterparts, and of whom there are proportionately three times as many.

1.2 WHERE ARE COLLEGE GRADUATES EMPLOYED?

Figure 6. Postsecondary employment: private and public sectors. (Ontario and rest of Canada - 2006)

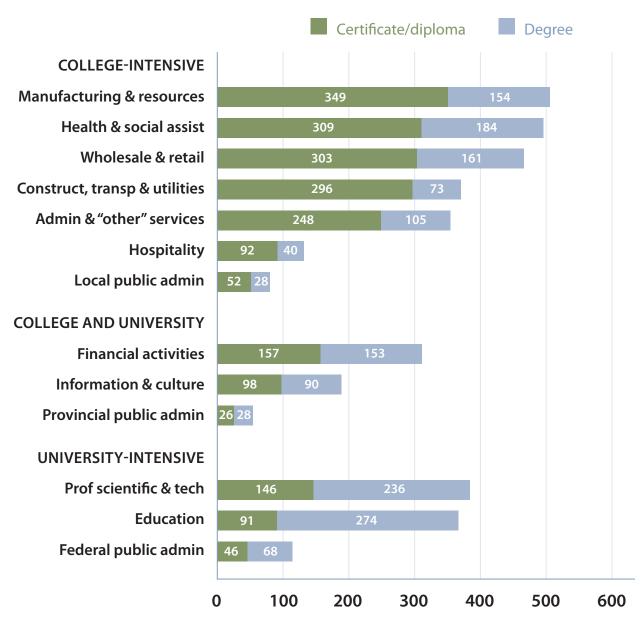


^{* &#}x27;Broader public sector' includes educational services, health and social services, and public administration.

Source: Statistics Canada. 2006 Census. North American Industry Classification System vs educational attainment.

- The broader public sector (educational services, health and social services, and public administration) employs a higher proportion of postsecondary graduates than the private sector – almost twice the concentration of degrees and three times the concentration of advanced degrees.
- According to the 2006 Statistics Canada census, the number of tradespersons in Ontario
 (eight per cent) is much lower than in the rest of Canada (14 per cent). This difference is visible
 in both private and public sectors.

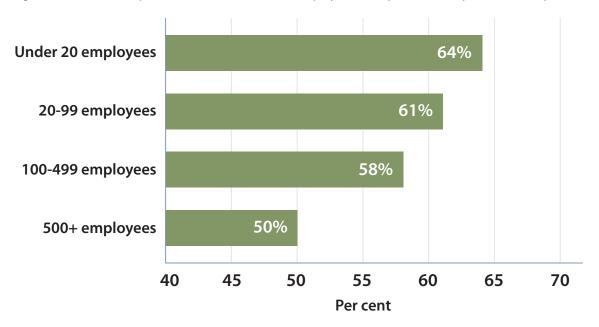
Figure 7. Postsecondary employment by sector. Ontario, 2006 ('000)



Source: Statistics Canada. 2006 Census. Employment by industry and educational attainment.

- Ontario's college graduates play a critical role in export industries (manufacturing, resources and hospitality), electric power generation and transmission, real estate and insurance, infrastructure and health care.
- Thirty per cent of university graduates, and 46 per cent of those with advanced education, are found in the broader public sector, compared to 23 per cent of those with certificates or diplomas.

Figure 8. Certificate/diploma holders as a share of employees with postsecondary credentials by firm size



Source: Statistics Canada, 2006 special tabulation (labour force) and Colleges Ontario. Private sector employers, excluding professional and scentific services.

• Small- and medium-sized firms are highly dependent on college graduates.

Certificate/diploma Trade Degree Advanced credential AGE 25-34 28% 30% Ottawa **Toronto** 5% 26% 27% Rest of CMAs* 7% 31% 17% **Rest of Ontario** 32% 9% 11% AGE 35-44 24% Ottawa 9% 27% **Toronto** 7% 22% **Rest of CMAs*** 31% 14% 10% **Rest of Ontario** 31% 12% 8% 0 20 40 60 80 Per cent

Figure 9. Postsecondary employment by Ontario urban area, 2006

*CMA = Census Metropolitan Areas

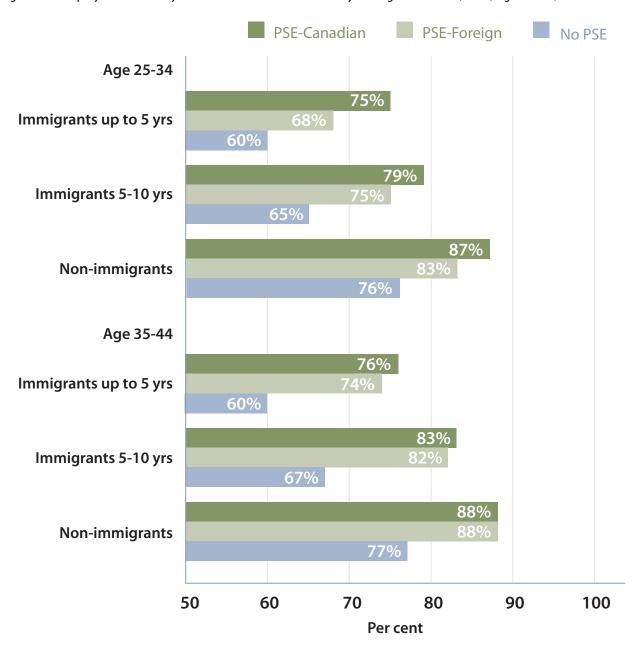
Source: Statistics Canada. 2006 Census. Employment by industry and educational attainment.

- Outside of Toronto and Ottawa, college graduates, including tradespersons, constitute the largest proportion of skilled employees in the province.
- Due largely to the requirements of the federal government, Ottawa has the greatest concentration of employees with degrees and advanced credentials among Ontario urban areas, and this gap is wider amongst young Ontarians.
- Toronto, due largely to its concentration of head offices, also has a high level of degree and advanced credential holders.

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1.3 EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS FOR UNDER-REPRESENTED GROUPS

Figure 10. Employment rates by educational attainment and by immigrant status (2006, age 25-44)



Source: Statistics Canada Census 2006. Immigrant and non-immigrant population.

- Canadian-born workers without postsecondary credentials struggle to find work, but immigrants without postsecondary credentials have a much harder time.
- Immigrants with Canadian postsecondary credentials have greater success in getting jobs than those with foreign credentials. Both groups have less success than Canadian-born workers with postsecondary credentials.

Age 25-34
Aboriginal
Total population
Age 35-44
Aboriginal
Total population
Total population
Total population
Total population

40

60

80

100

Figure 11. Employment rates by educational attainment, aboriginals and total population (Ontario, age 25-44)

Source: Statistics Canada Census 2006. Aboriginal and non-aboriginal.

0

• Ontario's aboriginal employment rate is lower than that for the overall population.

20

• Employment success for aboriginals with postsecondary credentials is fairly close to that of other Ontarians with similar credentials.

Per cent

 However, aboriginals without postsecondary credentials fare worse than the low rates for other Ontarians without postsecondary credentials, and the gap is greater for aboriginals age 35 to 44.