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ONTARIO | ONTARIO

Graduates **IN THE ECONOMY**

ENVIRONMENTAL SCAN 2014

Graduates **IN THE ECONOMY** 2014

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HIGHLIGHTS

Educational attainment

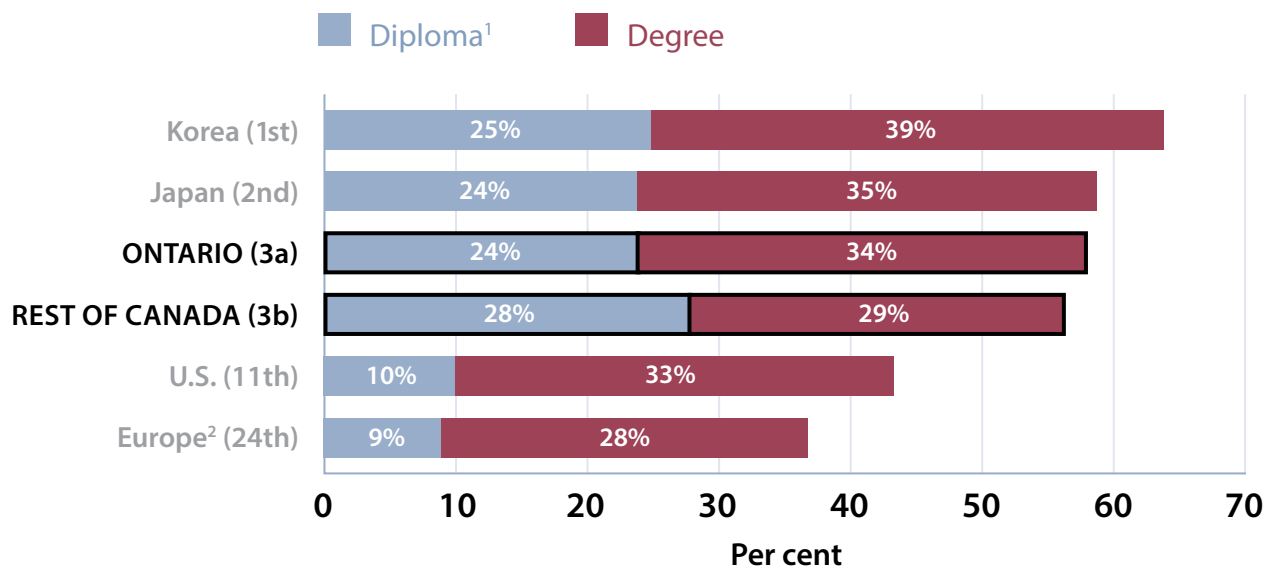
- Ontario has the world's third-highest post-secondary attainment rate for young adults (ages 25 to 34). It produces more degrees per capita than the U.S. and most other countries and up to three times as many career-oriented diplomas and trades certificates. Nonetheless, those with disabilities and aboriginal people have a lower share of degrees.
- While 28 per cent of Americans who attend post-secondary institutions eventually drop out without a credential, the Canadian rate is much lower (seven per cent).
- In 2012, Ontario certified 57 per cent as many tradespersons as a share of employment as the rest of Canada.
- Canada's essential skills ratings for young adults are better than the advanced country average, but behind the Nordic countries, Japan and Korea. However, only 15 per cent at the lowest literacy level are engaged in job-related adult education each year.

Matching skills to jobs

- Ontario's trades and diploma graduates play a key role in exports (manufacturing, resources and tourism), energy, infrastructure, real estate and health care. Typically, smaller communities rely more heavily on diploma and trades certificate holders – as business owners and employees.
- Ontario's ability to match skills to job opportunities is above the advanced country average. But it is behind three provinces and 10 countries, notably Switzerland and Germany, which are highly regarded for their ability to match educational programs with employer requirements.

Section 1: EDUCATIONAL ATTAINMENT

1.1 Educational attainment of the population, selected countries, ages 25 to 34, 2011



Note 1: This data exclude OECD-defined "post-secondary non-tertiary," i.e., post-secondary programs of one year or less, and many apprenticeship programs.

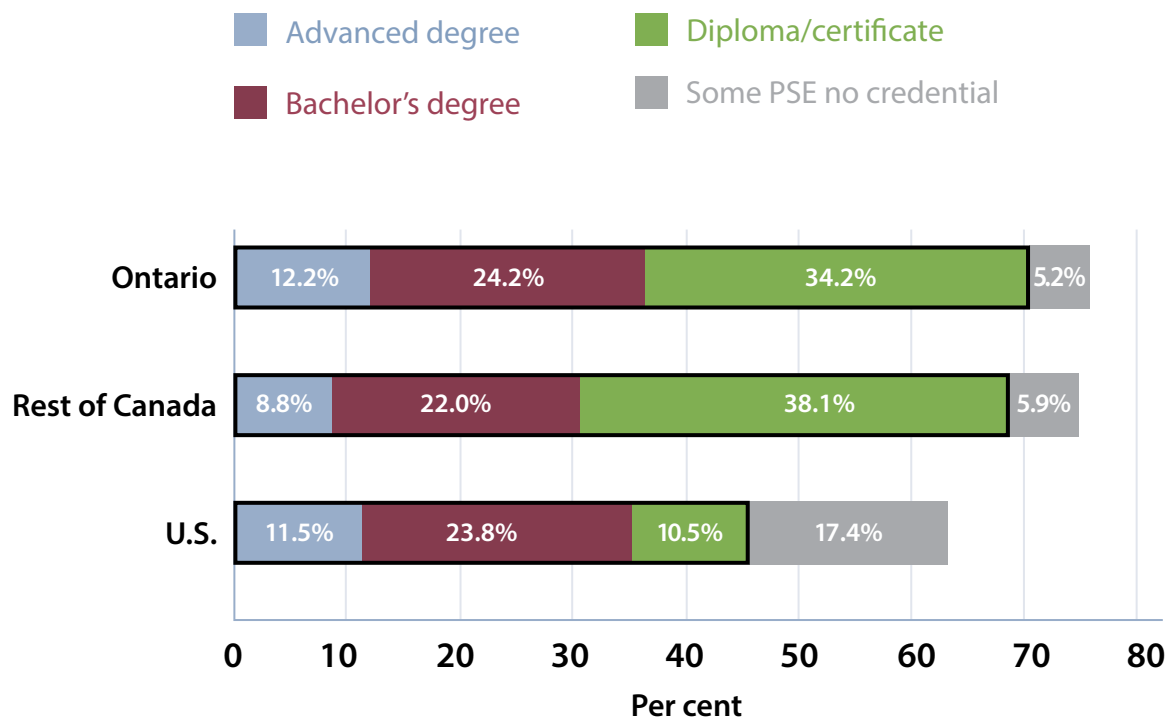
Note 2: Europe includes Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

Sources: Education at a Glance, 2013, table A1.3a, percentage of the population that has attained tertiary education, by type of program and age group (2011) and Colleges Ontario estimates based on a Statistics Canada special tabulation, National Housing Survey, 2011.

Ontario has one of the world's highest post-secondary attainment rates. This provides it with a strong educational advantage compared to the U.S. and an even stronger advantage compared to Europe.

- If Ontario were a country, its post-secondary attainment level for young adults (ages 25 to 34) would be in third place worldwide, somewhat behind Korea and Japan, but slightly ahead of the rest of Canada. In comparison, the U.S. is in 11th place, and the European average is in 24th place.
- Canada, Korea and Japan's high ratings are based largely on career-oriented programs more than twice the relative size of most other advanced economies.

1.2 North American post-secondary achievement rates, ages 25 to 44, 2013



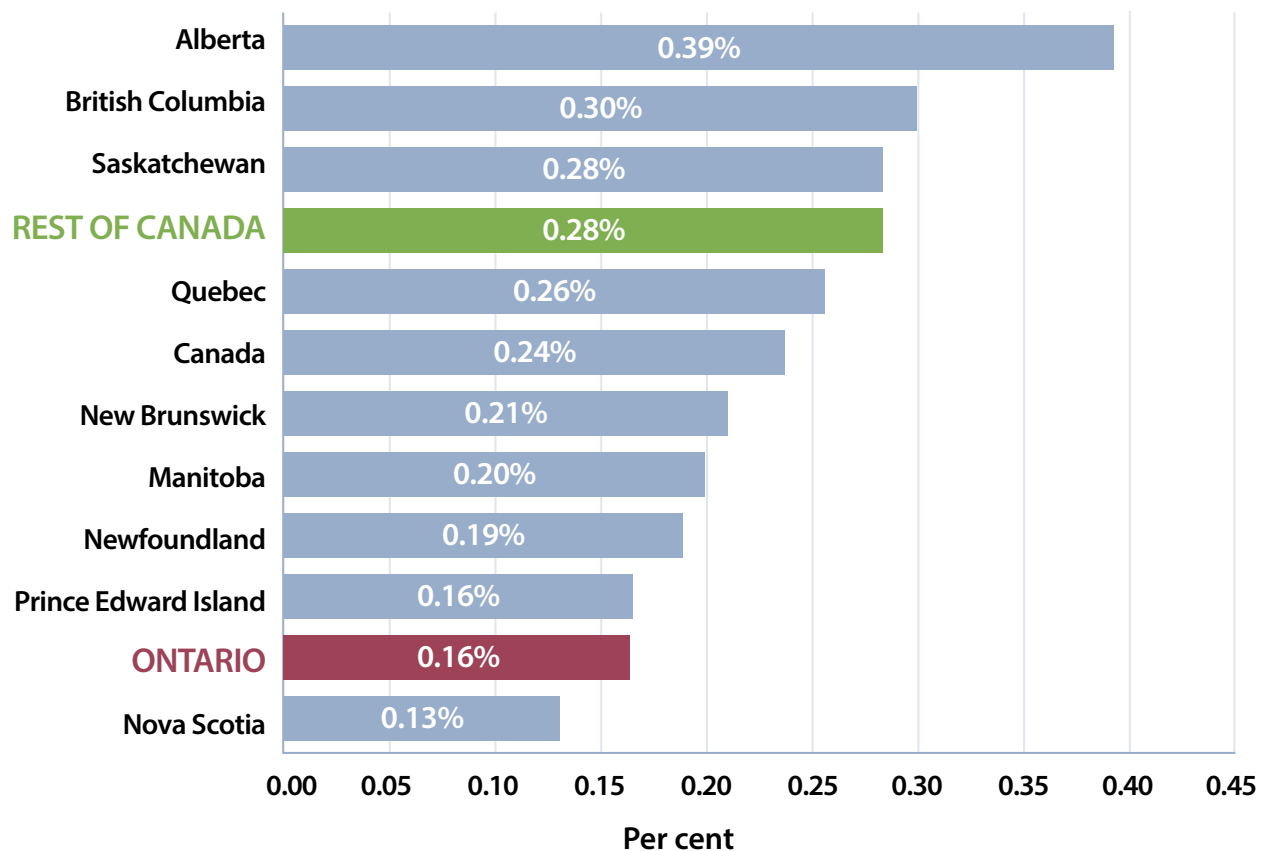
Sources: Statistics Canada, table 282-0004 (Labour Force data – 2013) and U.S. Bureau of Labor Statistics, table 10, Employment status of the civilian non-institutional population by educational attainment, age, sex, race, and Hispanic or Latino and non-Hispanic ethnicity, annual average 2013 (current population survey).

The extensive network of colleges across Canada, with their strong focus on access to career-oriented post-secondary education, provides the country with a large skills advantage compared to the U.S.

- Ontario's attainment rate for younger adults (ages 25 to 44) for diplomas and trades certificates is triple the U.S. rate, but it is below that for the rest of Canada.
- Ontario also has a higher attainment rate for degrees and advanced degrees than the U.S. or for any other Canadian province except British Columbia.

While 28 per cent of Americans who study at post-secondary institutions eventually drop out without completing a credential, the wide range of post-secondary opportunities in Canada results in a far lower dropout rate (seven per cent).

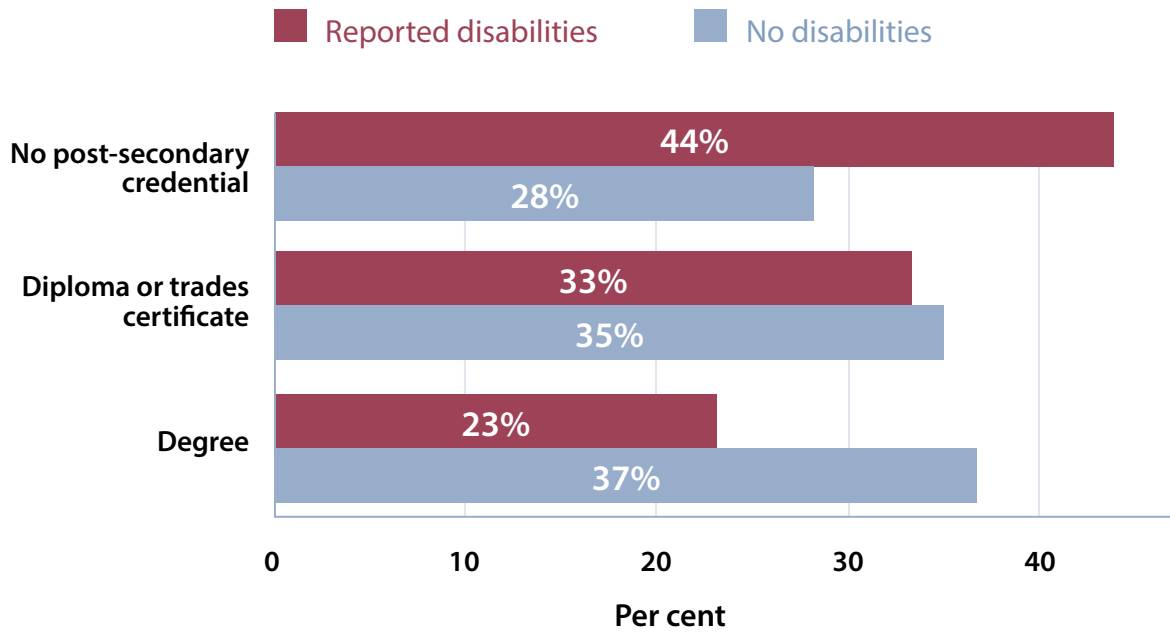
1.3 Certification of tradespersons¹ as a share of total provincial employment, 2012



Note 1: Number of apprentices who passed their certificate of qualification examinations in 2011 to become registered tradespersons.
Source: Colleges Ontario, based on Statistics Canada tables 282-0004 and 477-0054.

In 2012, Ontario had 57 per cent as many apprentices who succeeded in passing their certificate of qualification examinations (after completing both educational and workplace training requirements) to qualify as tradespersons as compared to other Canadian provinces, when measured against the size of the provincial workforce.

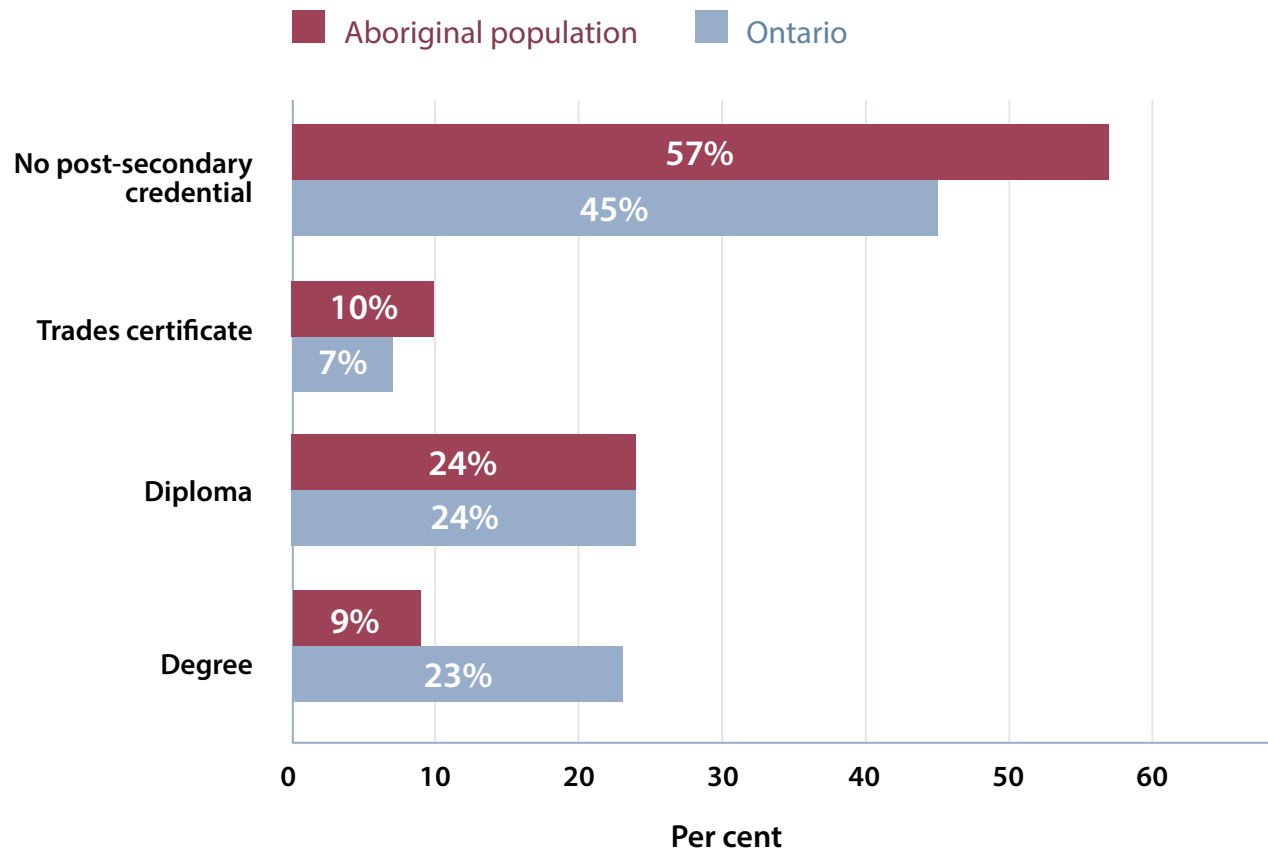
1.4 Educational attainment of the Ontario population with and without disabilities, ages 25 to 34, 2011



Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

While younger (ages 25 to 34) Ontarians with disabilities fall far behind in gaining degrees, they are as successful in completing college diplomas or becoming certified tradespersons as other Ontarians.

1.5 Educational attainment of the Ontario aboriginal population, compared to total, ages 15+, 2011

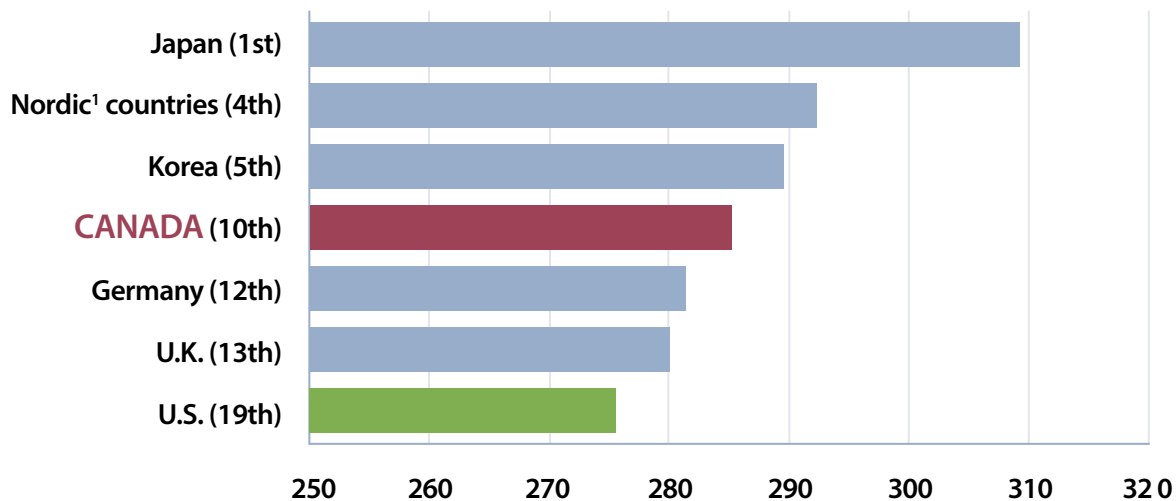


Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

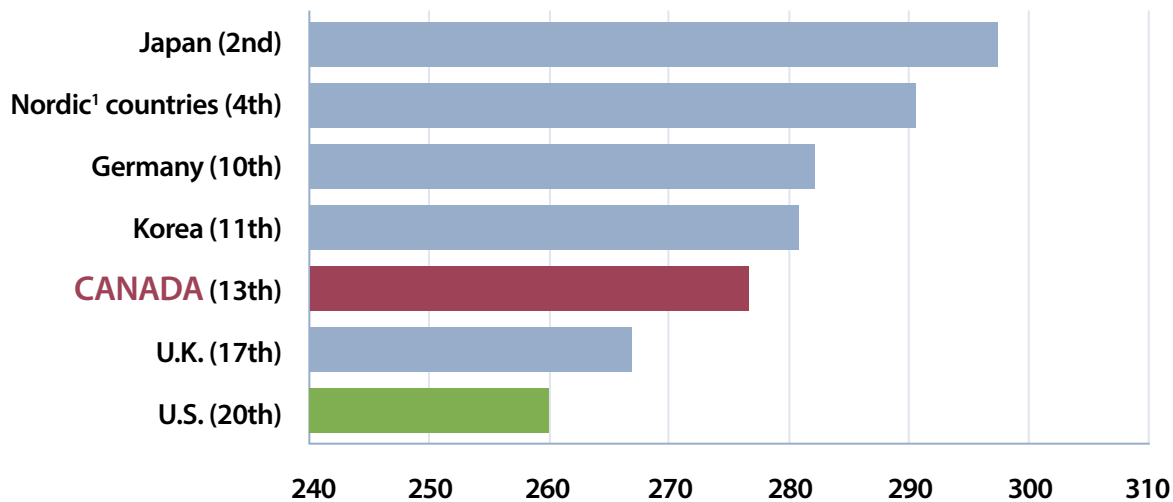
Statistics Canada data based on the National Housing Survey, 2011, show that the aboriginal population (ages 15+) was more likely than the general population of Ontario to have completed a trade or college credential, and much less likely to have completed a degree.

Section 2: ESSENTIAL SKILLS AND WORKFORCE TRAINING

2.1a Adult literacy rating for selected countries, ages 25 to 34, 2012



2.1b Adult numeracy rating for selected countries, ages 25 to 34, 2012



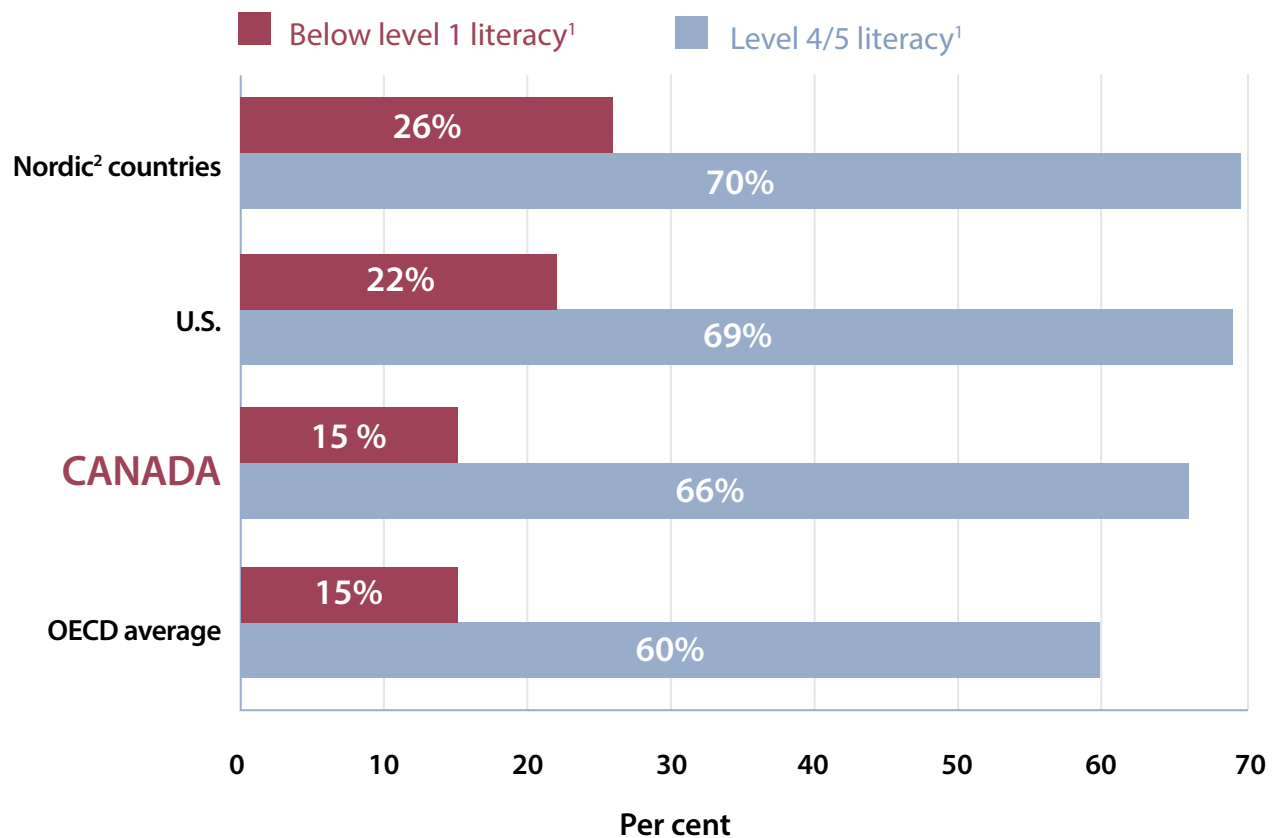
Note 1: Nordic countries include Denmark, Finland, Norway and Sweden.

Source: OECD Skills Outlook 2013, tables A3.2 (L) mean literacy proficiency and (N) mean numeracy proficiency, by 10-year age groups.

Canada's average literacy and numeracy ratings for young adults (ages 25 to 34) are better than the average for the advanced countries assessed by the OECD, and better than the average for its major competitors – the U.S. and the U.K.

- In 10th place, Canada's literacy average is behind all the Nordic countries, Japan and Korea.
- In 13th place, Canada's numeracy average is behind all the Nordic countries, Japan, Germany and Korea.

2.2 Job-related adult education in selected countries, annual participation rates, by low and high literacy levels, 2012



Note 1: OECD defines six proficiency levels for literacy (levels 1 - low to 5 - high, plus "below level 1").

Note 2: Nordic countries include Denmark, Finland, Norway and Sweden.

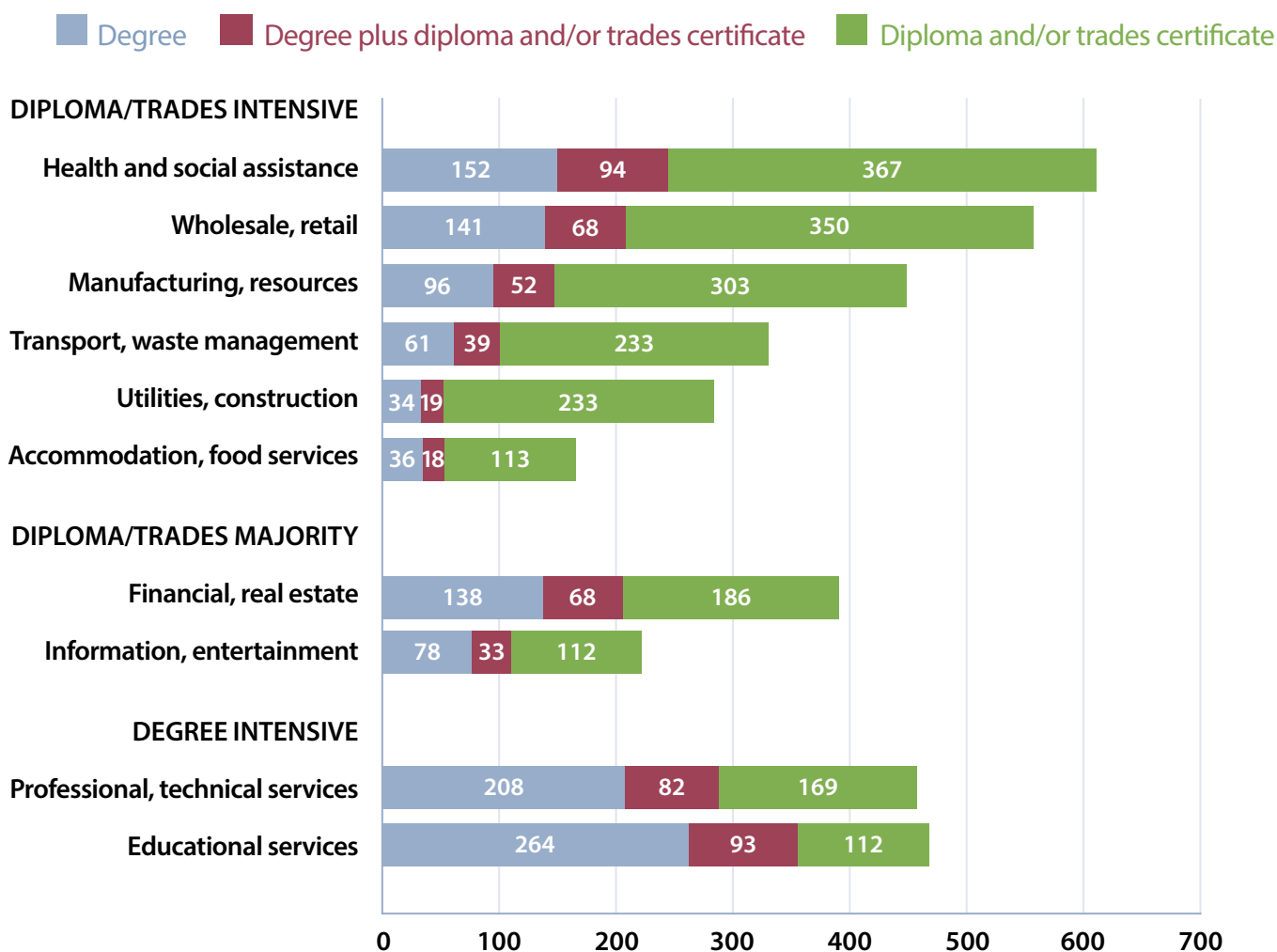
Source: OECD Skills Outlook 2013, figure 5.7 (L) participation rate in adult education, by literacy proficiency levels.

In all advanced countries assessed by the OECD, a far higher per cent of adults at the highest essential skills levels participate in job-related adult education each year than those at low levels of essential skills.

- On average, across the OECD, 60 per cent of adults at the highest literacy level are engaged in job-related adult education each year, while only 15 per cent of those at the lowest level are engaged.
- In Canada, the spread is wider – 66 per cent at the highest literacy level are engaged in job-related adult education each year, with 15 per cent at the lowest level engaged.
- The Nordic countries (at 26 per cent) and the U.S. (at 22 per cent) are more successful in providing job-related training to those at the lowest levels of essential skills.

Section 3: POST-SECONDARY GRADUATES AND THE ONTARIO ECONOMY

3.1 Post-secondary graduates employed in Ontario industries, '000s, 2011



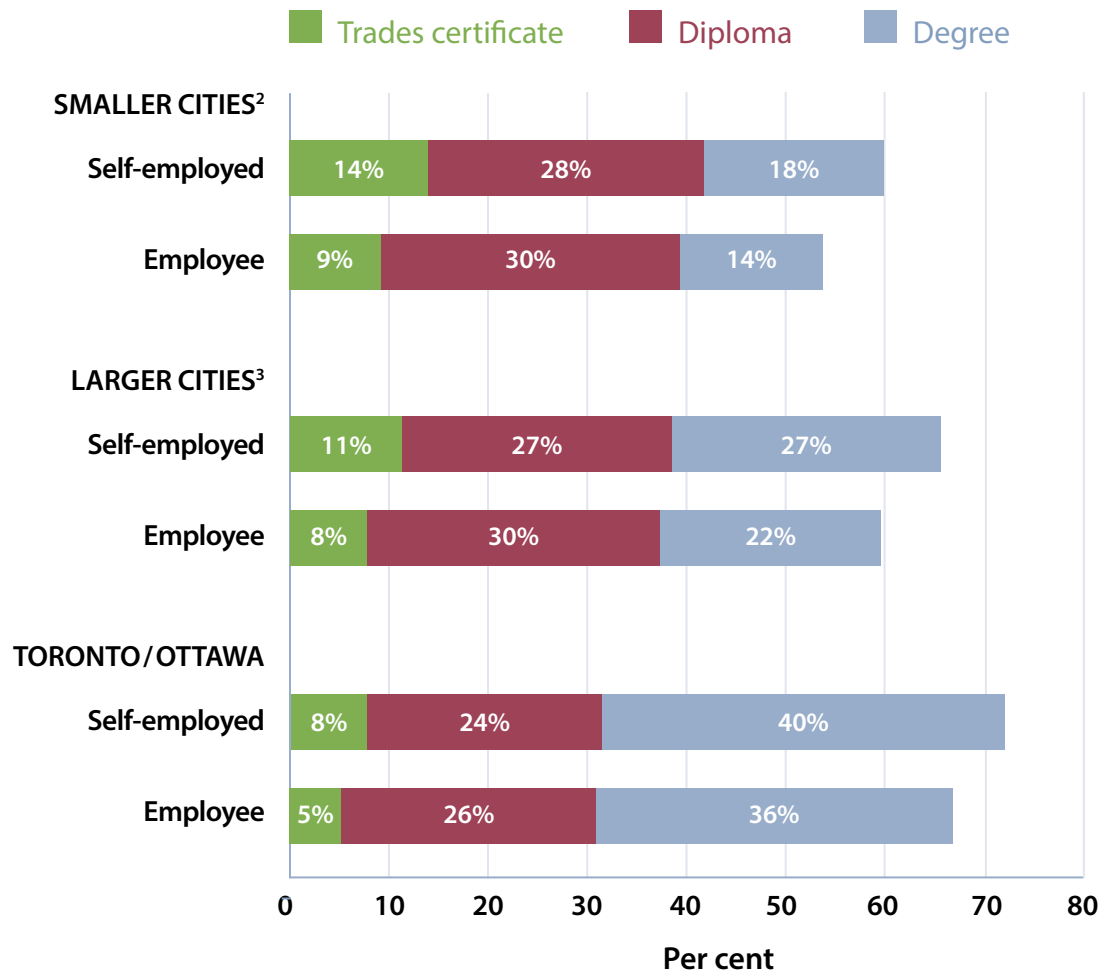
Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

Ontario's diploma and trades graduates play a critical role in export industries (manufacturing, resources and tourism), electric power generation and transmission, infrastructure, real estate and insurance, and health care. A recent survey of more than 1,500 employers, which employ 13.5 per cent of Ontario's workforce, found that "smaller firms (one to 19 employees) have the greatest need for two- or three-year college diplomas, followed by trades and four-year degrees."²

The broader public sector (educational services, health and social services, and public administration) and the professional, scientific and technical services sector each employ twice the concentration of degrees as the private sector.

² The Conference Board of Canada, The Need to Make Skills Work: The Cost of Ontario's Skills Gap, 2013, p. 20.

3.2 Educational attainment of self-employed¹ and employed in Ontario communities, ages 15+, 2011



Note 1: Self-employed includes those with and without employees.

Note 2: Smaller cities refers to Ontario Census Areas (average).

Note 3: Larger cities refers to Ontario Census Metropolitan Areas (average), excluding Toronto and Ottawa.

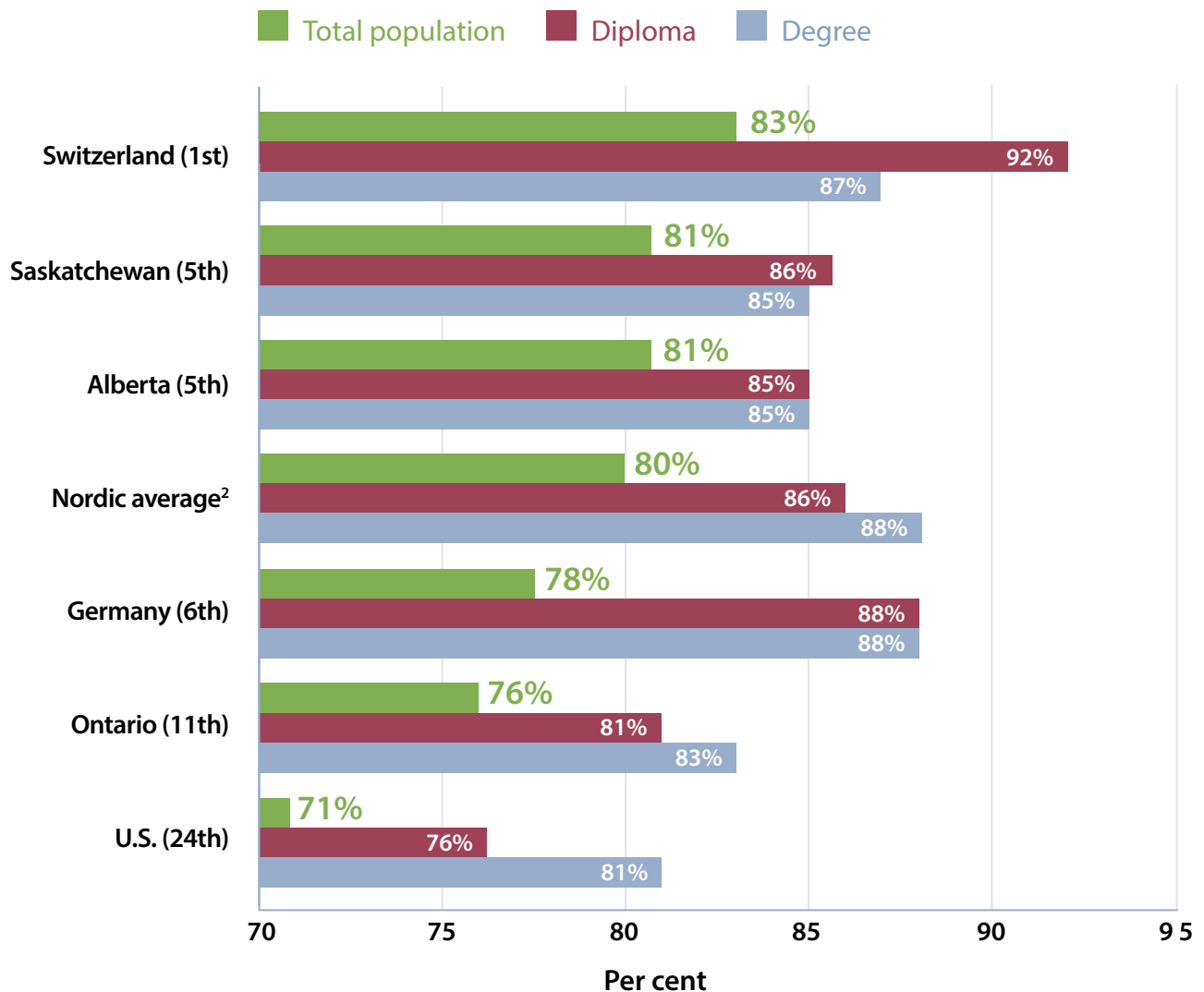
Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

Educational attainment tends to vary by the size of the community:

- Typically, smaller communities rely more heavily on diploma and trades certificate holders – both as business owners and as employees.
- Toronto – due to its concentration of head offices, post-secondary institutions and government – has a high level of degree and advanced degree holders.
- Due largely to the requirements of the federal government, Ottawa has the greatest concentration of degrees and advanced degrees among Ontario communities.

Section 4: MATCHING SKILLS TO JOBS

4.1 Employment rates¹, by post-secondary credential, selected jurisdictions, ages 25 to 64, 2011



Note 1: Ranked by employment rate for total population.

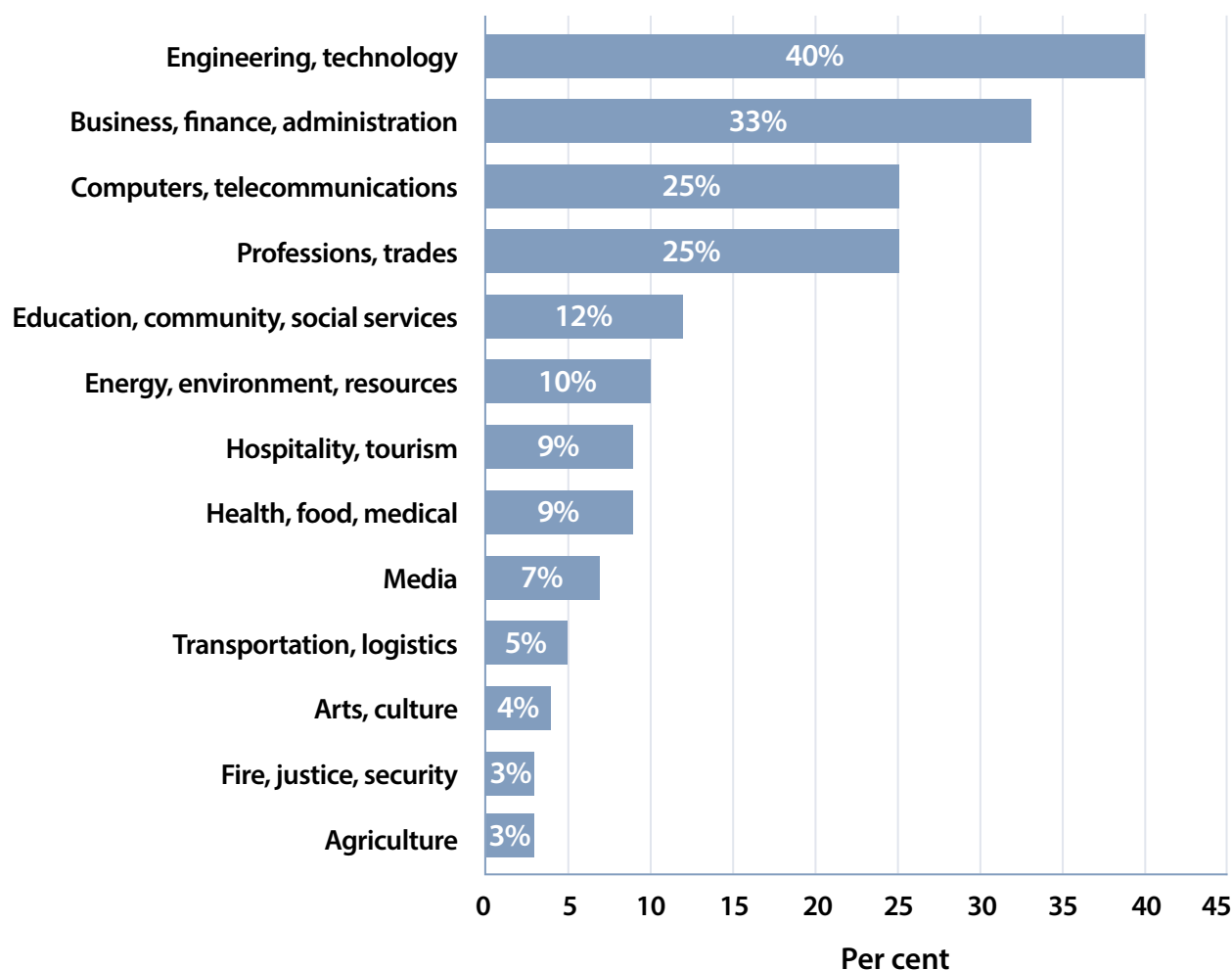
Note 2: Nordic countries include Denmark, Finland, Iceland, Norway and Sweden.

Sources: OECD Education at a Glance, 2013, table A5.1a, employment rates among 25 to 64 year-olds, by educational attainment (2011 data), and Statistics Canada Labour Force Survey, table 282-0004 (2011 data).

For every country in the OECD, employment levels for those (ages 25 to 64) with post-secondary credentials are higher than for those without.

- Ontario's ability to match skills to job opportunities (76 per cent employed) would rank in 11th place among advanced economies if it were a country.
- Ten countries, notably Switzerland (83 per cent) and Germany (78 per cent), both highly regarded for their ability to match educational programs with employer requirements, are better at addressing skills mismatches.
- Within Canada, Saskatchewan (81 per cent) and Alberta (81 per cent) are the most successful and would rank in 5th place if they were countries.

4.2 Ontario employers' plans to hire diploma graduates as the economy recovers¹, 2013



Note 1: The Conference Board of Canada conducted an Ontario employer skills survey of 1,500 employers, which represent 15.5 per cent of Ontario employment. The table lists the top priorities for the 57 per cent of employers who planned to hire employees with two- or three-year college diplomas.



Source: The Conference Board of Canada, The Need to Make Skills Work: The Cost of Ontario's Skills Gap, 2013.

As the chart shows, Ontario employers plan to hire a wide range of college graduates as the economy recovers. The Conference Board² further notes that:

- Three-quarters of Ontario employers expect to upgrade skill requirements over the next decade.
- The inability to hire specialized skills will have significant consequences, ranging from reduced productivity, quality and sales to less innovation and lower profits.

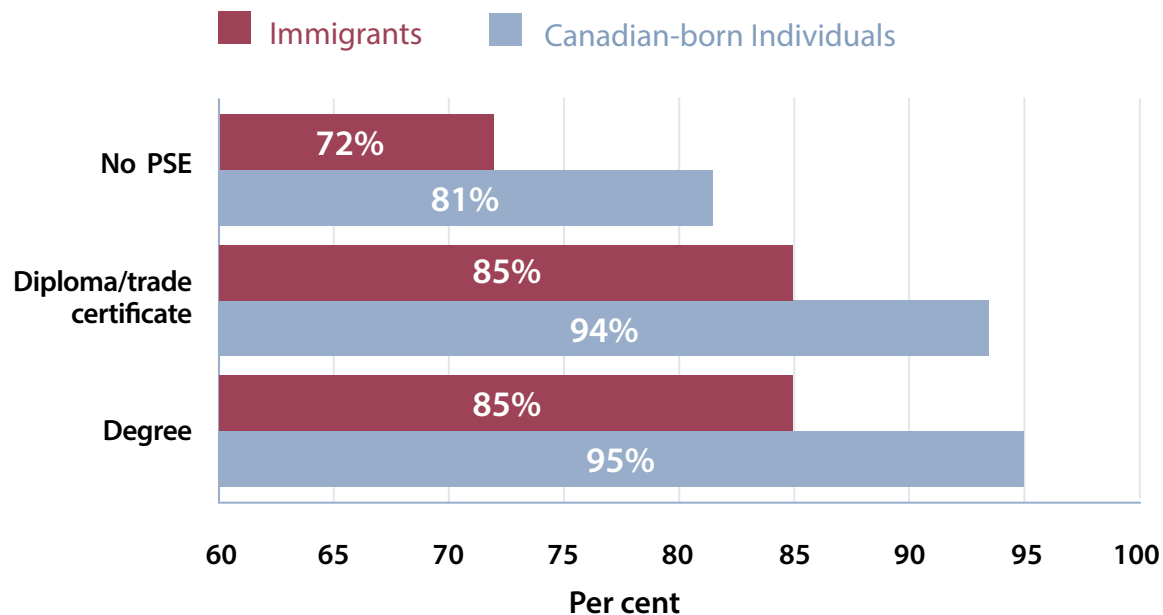
This challenge is worldwide: lack of skills is the main reason for entry-level vacancies for almost 40 per cent of employers in nine countries,³ and worldwide, "Many employers are nearing a point at which it will be extremely difficult to meet the demand for skilled employees."⁴

² The Conference Board of Canada, The Need to Make Skills Work: The Cost of Ontario's Skills Gap, 2013.

³ McKinsey Center for Government, Education to Employment: Designing a System that Works, 2013.

⁴ The Boston Consulting Group, Turning the Challenge of an Older Workforce into a Managed Opportunity, 2011.

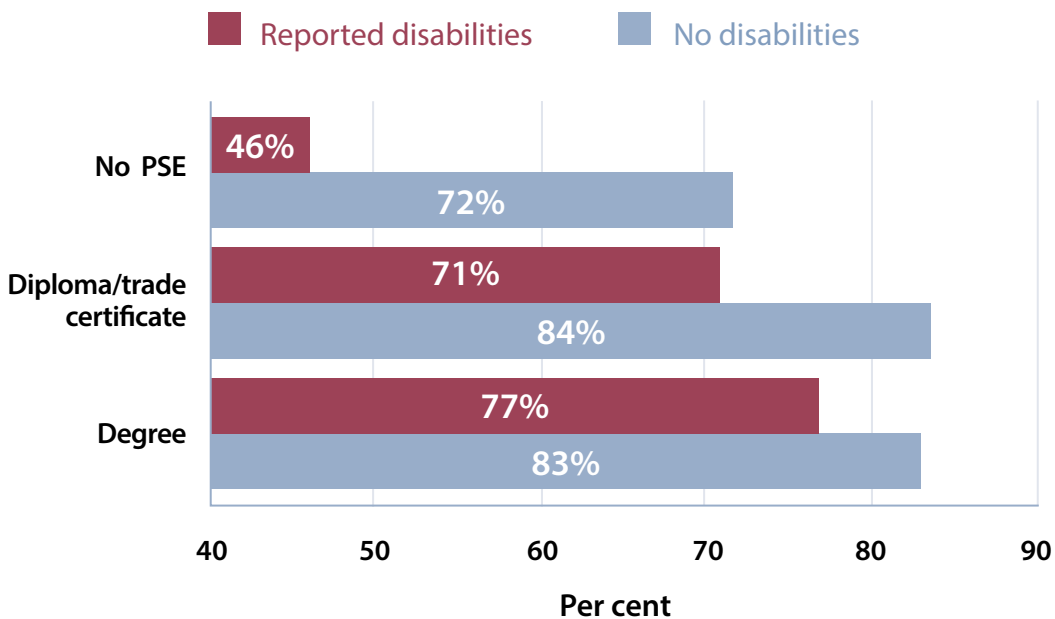
4.3 Ontario employment rates for immigrants and Canadian-born individuals, by educational attainment, ages 25 to 34, 2011



Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

Immigrants make up 30 per cent of the Ontario population, ages 25 to 34. However, they make up a larger share of the 'not working' population. In each educational attainment category, their employment rate is nine or 10 percentage points lower than for young Canadian-born individuals.

4.4 Employment rates for Ontarians with and without disabilities, by educational attainment, ages 25 to 34, 2011



Source: Colleges Ontario, based on a Statistics Canada special tabulation, National Housing Survey, 2011.

Young Ontarians with disabilities constitute a tenth of the population ages 25 to 34; however, they are substantially less likely to be employed than those without disabilities in all educational attainment categories.

The difference is especially great for young adults without post-secondary credentials. Only 46 per cent of those with disabilities are working, compared to 72 per cent of those without disabilities.