



COUNCIL OF
ONTARIO UNIVERSITIES

CONSEIL DES
UNIVERSITÉS DE L'ONTARIO

UNIVERSITY WORKS

2014 EMPLOYMENT REPORT

**Empirical data shows
Ontario university
graduates have the best
labour market outcomes.
A university education
leads to success.**

A black and white photograph of a young man with dark hair and glasses, smiling broadly. He is wearing a plaid button-down shirt with his sleeves rolled up and his arms crossed. The background is plain white. Overlaid on the center of the image is the text 'UNIVERSITY GRADS GET JOBS' in a bold, yellow, sans-serif font.

**UNIVERSITY
GRADS GET JOBS**

University graduates have low unemployment rates and the **highest life-time earnings** in Ontario.

University graduates experienced the **highest employment growth** of any educational attainment group over the last ten years.

Ontarians are **increasingly choosing a university education** over other types of postsecondary education and the labour market is absorbing this growth.



**UNIVERSITY
GRADS HAVE
HIGHER EARNINGS**

University graduates are
more likely to be **working at**
a job related to their studies
than college graduates.

University graduates'
earnings are significantly
higher than for any
other educational group,
and these **earning**
premiums start early
in graduates' careers.

A black and white photograph of a young man with short, dark hair, smiling broadly at the camera. He is wearing a dark suit jacket over a light-colored collared shirt. His arms are crossed over his chest. The background is a plain, light color.

**UNIVERSITY
GRADS WORK IN
THEIR FIELD**

The 2008 economic crisis led to rising unemployment rates in Europe and North America. In Ontario, where the once robust manufacturing sector was ravaged, economic recovery has been slow and the province's youth have borne the brunt of the crisis.

However, despite reports of unemployed and under-employed university students, empirical data shows that a university education leads to employment success. Using data from Statistics Canada and the Ontario Ministry of Training Colleges and Universities, the Council of Ontario Universities has tested challenges to the value of a university education for the province of Ontario and found that Ontario university graduates have higher employment rates and higher salaries than those with any other level of education.

Highest employment growth for university grads.

Ontarians are increasingly choosing a university education over other types of postsecondary education and the labour market is absorbing the growth of graduates well. In fact, university graduates experienced the highest employment growth of any group over the last decade.

University graduates are the only group in the 25 to 29 age range to increase their share of total employment over the last ten years. Even when one considers that the number of university graduates in this age group has grown dramatically over the last ten years, unemployment rates remained relatively low.

University graduates earn more.

In 2009, at the height of the crisis that began a year before, university and college graduate unemployment still remained relatively stable compared to unemployment amongst tradespeople and high school graduates. The data shows university graduates' earnings are significantly higher than for any other educational attainment group, and these earning premiums start early in a graduate's career.

More so than for college graduates, for university graduates these jobs are more likely to be in a field related to their study. In contrast with 2007 graduates, 2010 university graduates experienced a significantly smaller decrease in the relationship between their work and their program of study than did college graduates.

This report is structured as two parts. The first part provides an overview of employment indicators over a person's lifetime using data for the population 15 years of age and over. The second part concentrates on employment, earnings, and relationship between work and field of study for recent graduates.

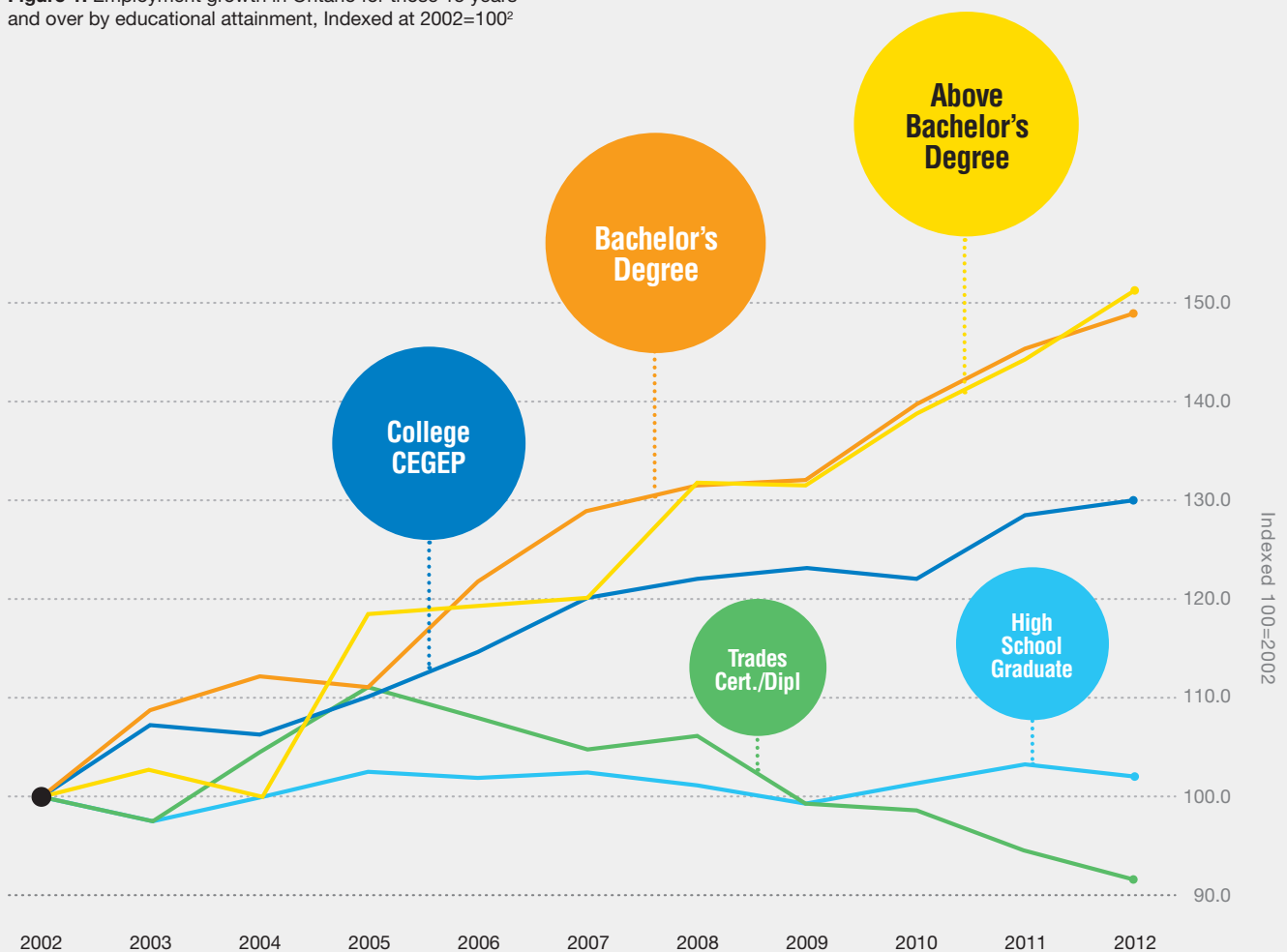
A lifetime of positive employment outcomes. University = Employment

There have been reports suggesting that the value of a university degree is not what it used to be and that university graduates are having a harder time finding work than other postsecondary graduates. The data, however, tells a very different story. Ontario university graduates experienced the fastest employment growth of all postsecondary graduates and today have the highest share of total employment by education. Unemployment rates for university graduates remain comparatively low and employment rates are the highest across the entire population.

Between 2002 and 2012, employment growth among university graduates was 49 per cent. This represents 680,200 net jobs. Growth among bachelor's degree holders was 49 per cent, while master's and PhD graduate employment increased by 51 per cent. In comparison, college graduate¹ employment grew by just 30 per cent and trades certificate and diploma graduates experienced a drop in employment.

Employment growth highest for university grads

Figure 1: Employment growth in Ontario for those 15 years and over by educational attainment, Indexed at 2002=100²



1. Statistics Canada, Labour Force Survey.

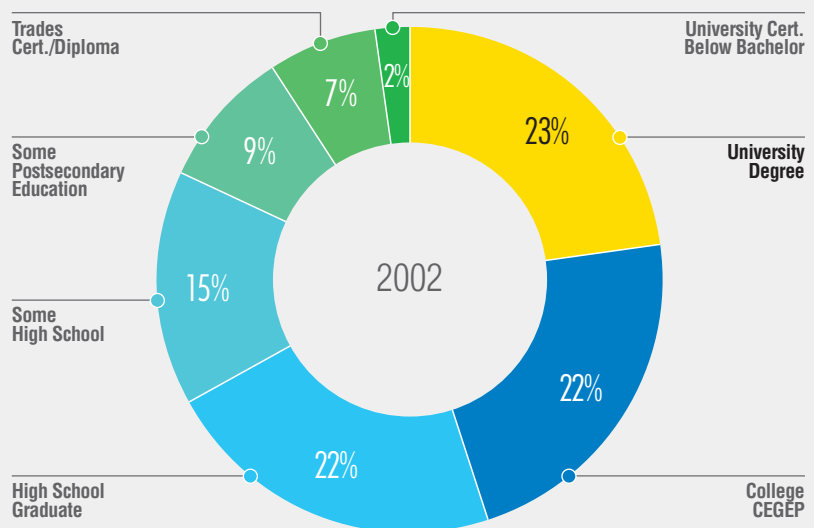
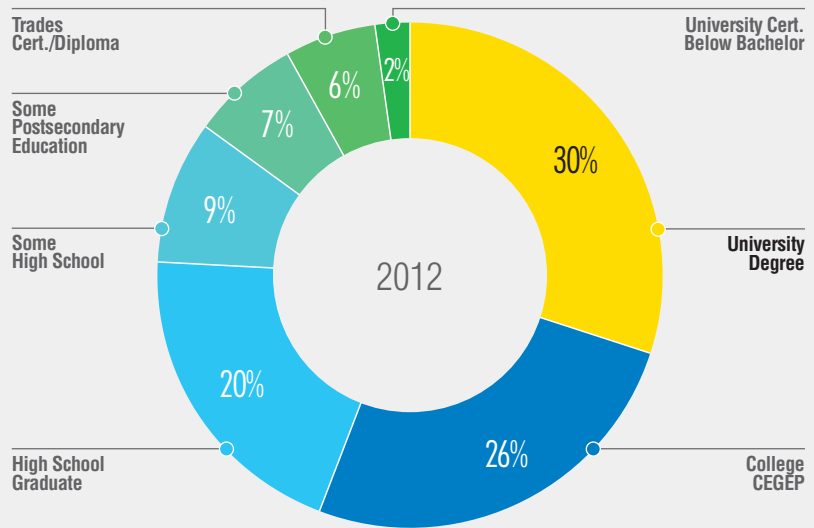
2. The Labour Force Survey reports combined community college graduates and CEGEP graduates who have migrated to Ontario from Quebec.

The share of total employment for those with university degrees rose to 30 per cent in 2012, from 23 per cent in 2002. The share of graduates from colleges showed a more moderate increase over the same period. Their share of total employment grew from 22 per cent to 26 per cent.

University grads have highest share of employment

Figure 2: Share of total employment, 15 years and over, 2012³ (top)

Figure 3: Share of total employment, 15 years and over, 2002⁴ (bottom)



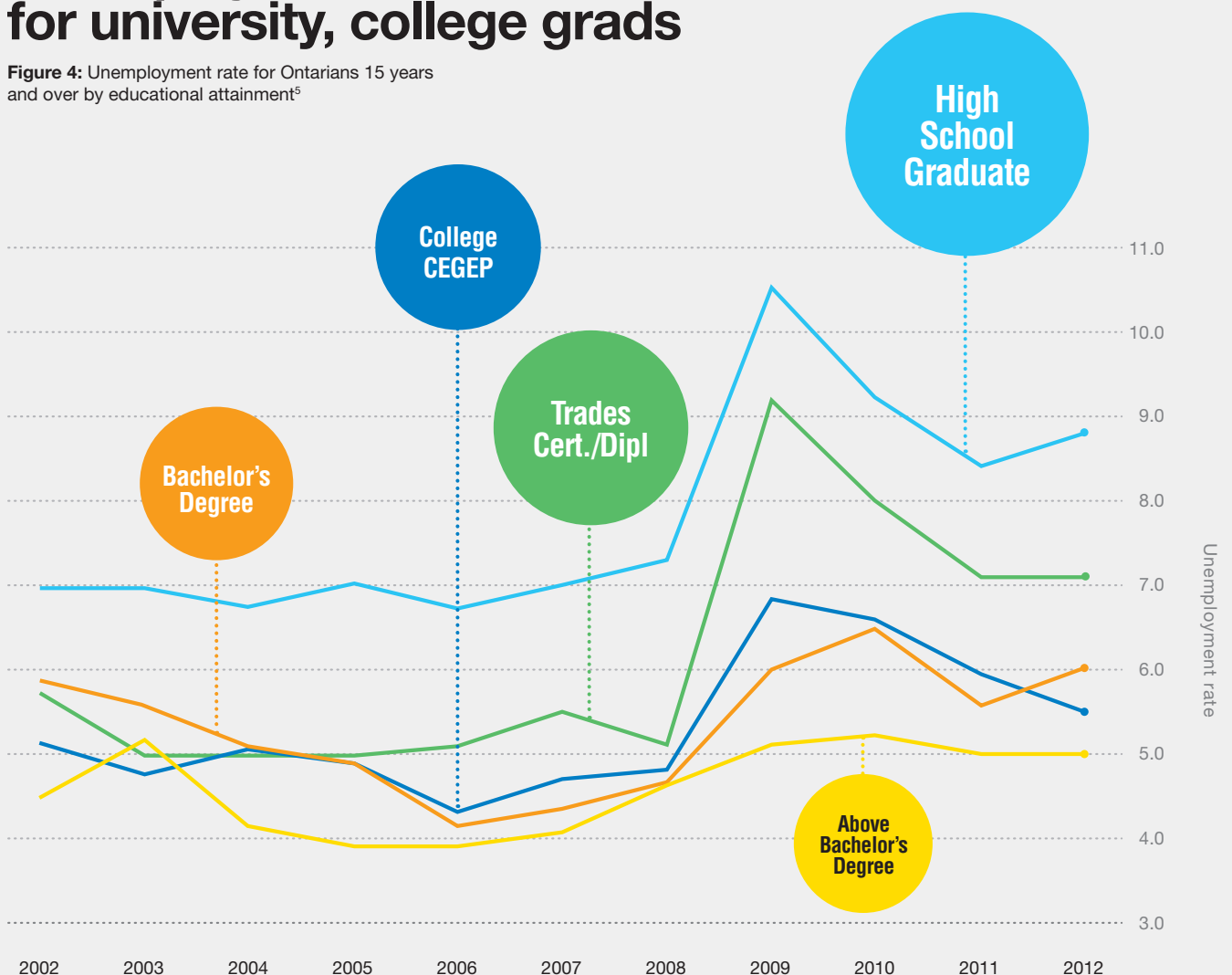
3. Statistics Canada, Labour Force Survey.

4. Statistics Canada, Labour Force Survey.

Unemployment rates for bachelor's degree and college graduates fluctuate far less than for others in Ontario's labour force. In 2012, the unemployment rates for these two groups were comparable at about six per cent. Both experienced an increase in unemployment as a result of the 2008 economic crisis, but graduates of trade programs and high school experienced a higher increase in unemployment and a slower recovery. Since 2004, master's and PhD degree graduates have had the lowest unemployment rate of the population. In 2012, as the economy felt some relief, it was five per cent. Unemployment rates for postgraduate university students remained low and stable even through the devastating 2008 recession. The data suggests that postsecondary graduates are more resilient to economic fluctuations than the population as a whole.

Unemployment rate lowest for university, college grads

Figure 4: Unemployment rate for Ontarians 15 years and over by educational attainment⁵



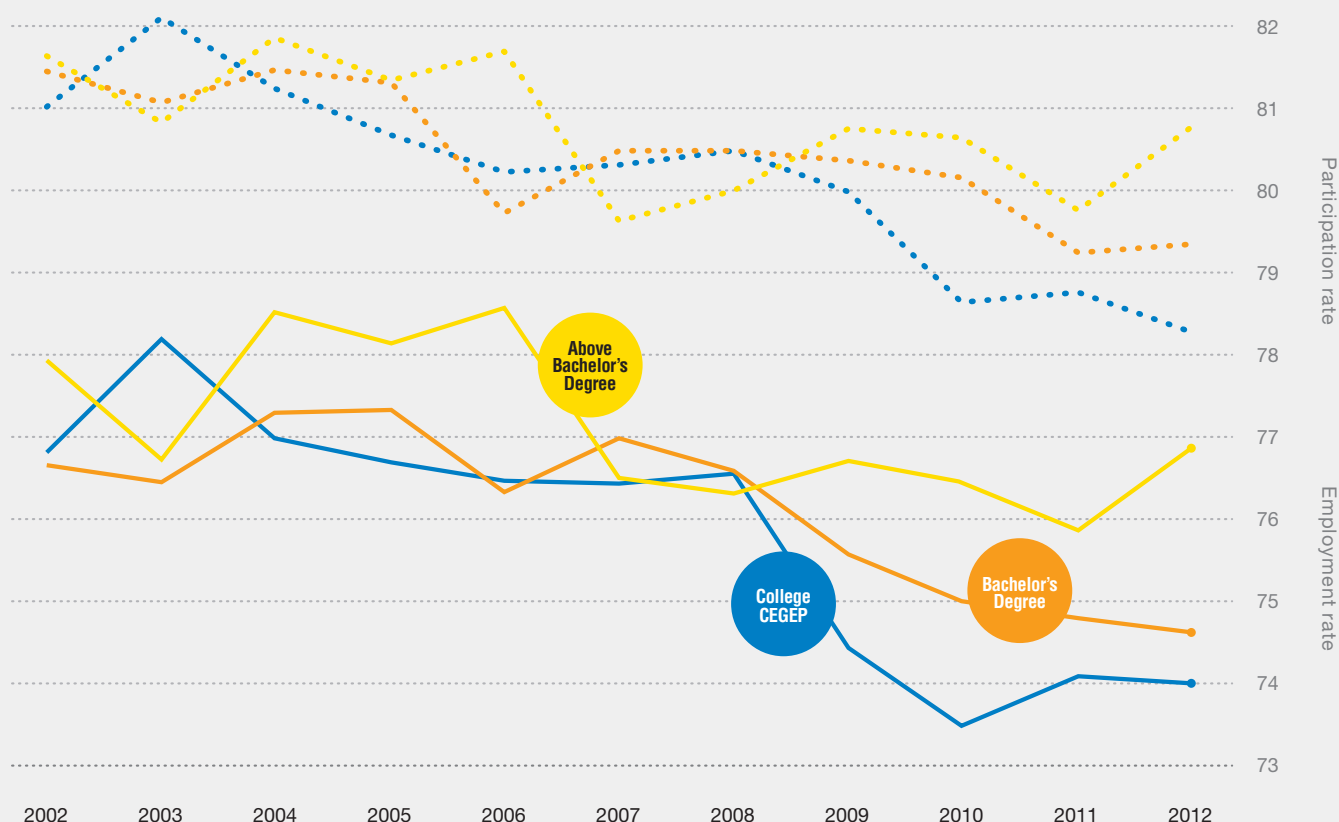
5. Statistics Canada, Labour Force Survey. For a particular educational attainment group, this is the number of unemployed people as a percentage of the labour force.

Employment rates tell a slightly different story than unemployment rates. Statistics Canada measures employment rates as the number of employed as a percentage of the total population, whereas the unemployment rate is a ratio of unemployed to the labour force. The employment rate thus measures the total number of graduates in each educational attainment level group who are employed.

In 2008, graduates of bachelor's degree and college programs had almost identical employment rates. The subsequent economic crisis led to a decline in employment rates for both these groups. By 2012, the decline was slightly greater for college graduates at 2.6 percentage points than it was for university graduates, at two percentage points. Master's and PhD graduates showed the most stable employment rates during this period.

Employment rate higher for university grads

Figure 5: Participation rate for Ontarians, 15 years and over⁶ (top)
Employment rate for university and college graduates 15 years and over⁷ (bottom)



6. Statistics Canada, Labour Force Survey. Statistics Canada defines the participation rate for a particular group as the total labour force in that group, expressed as a percentage of the total population in that group.

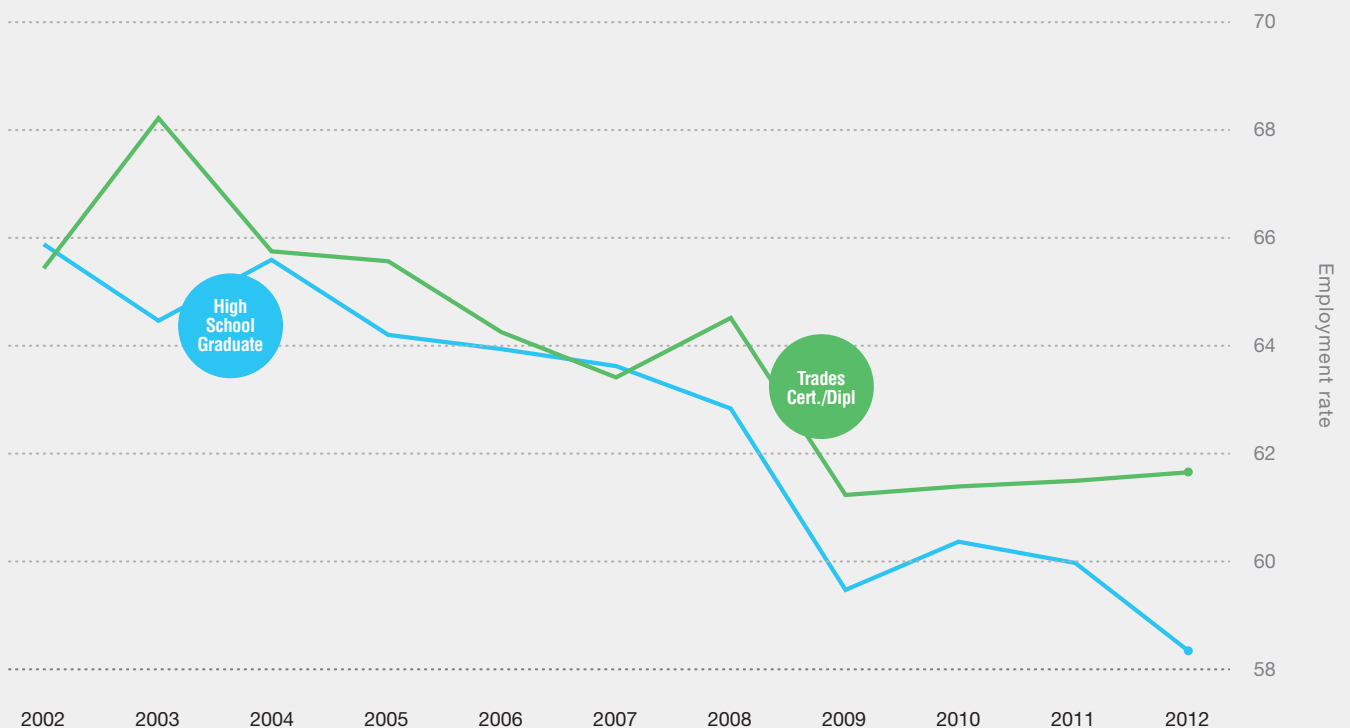
7. Statistics Canada, Labour Force Survey. The employment rate is the number of employed people as a percentage of the population in that educational attainment group.

University and college graduates have significantly higher employment to population ratios than high school or trades program graduates. In 2012, the employment to population ratios for high school graduates was 58.4 per cent. For trade program graduates, it was 61.6 per cent. The economic crisis affected these two groups significantly more than university and college graduates. High school graduates experienced an employment rate decline of 4.6 per cent compared to 2008. Trade certificate or diploma graduates experienced a 3 per cent drop over the same period.

In this report, the 15 and over age group is used to provide a life-time assessment of employment, however, this number includes students and retired individuals who are not in the labour force. As a result, the employment rate underestimates employment for university graduates during their most active employment years. In 2012, the employment rate for university graduates aged 25 to 64 was 82.4 per cent.

High school, trades grads affected most by economic crisis

Figure 6: Employment rate for high school and trades graduates 15 years and over⁸



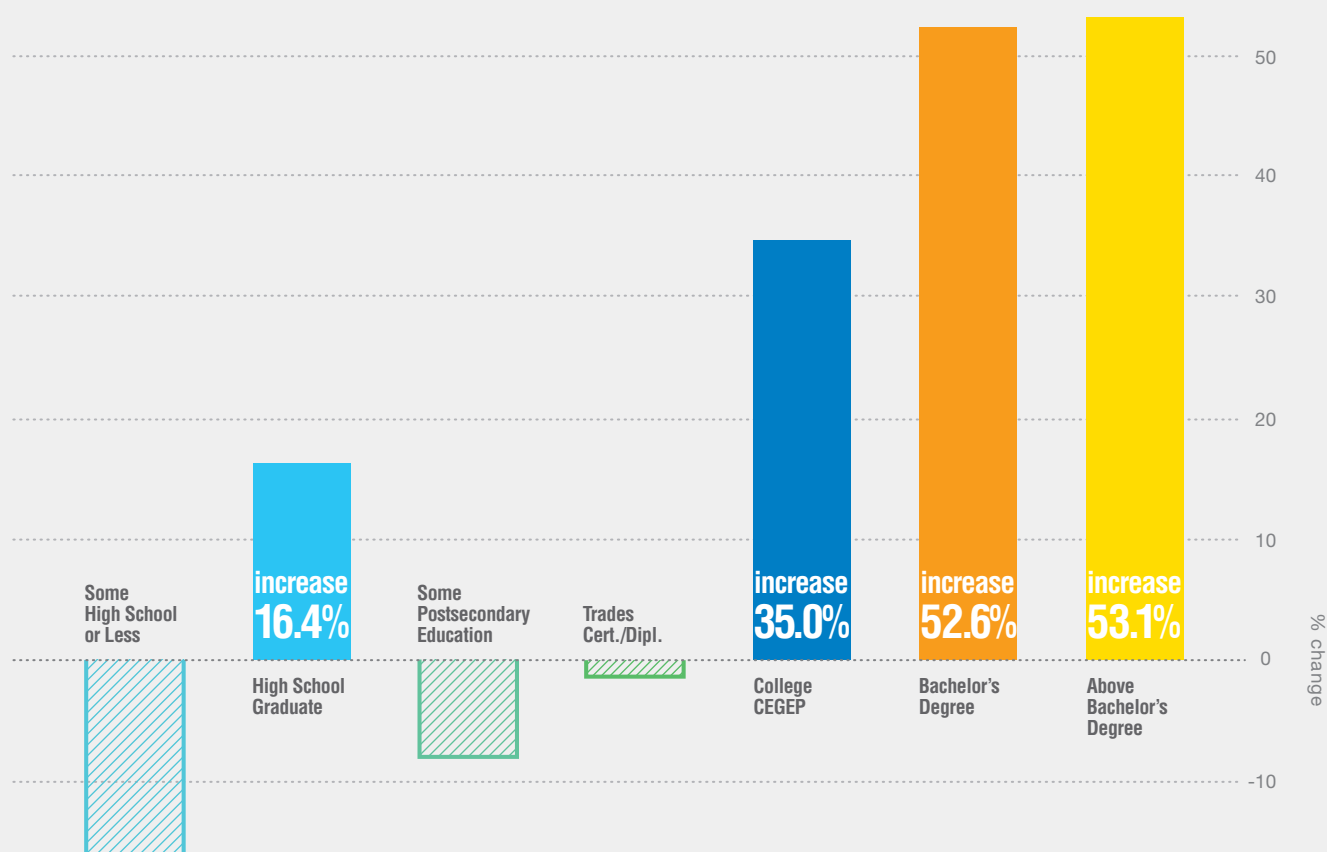
8. Statistics Canada, Labour Force Survey.

The number of university graduates in Ontario has increased by 950,000, or 53 per cent, over the last ten years. (See F.7) This is the fastest area of growth for any education level. The data shows the labour force has absorbed this growth and has welcomed this major increase in graduates. (See F.4 and F.5)

Today, university graduates have the highest employment rates across the population and the value of a bachelor's degree has remained strong despite the economic crisis. Indeed, the unemployment rate among bachelor's degree graduates in 2012 is only slightly higher than in 2002.

Demand for university education growing

Figure 7: Percentage change in the population, 15 year olds and over, by educational attainment, 2002-2012⁹

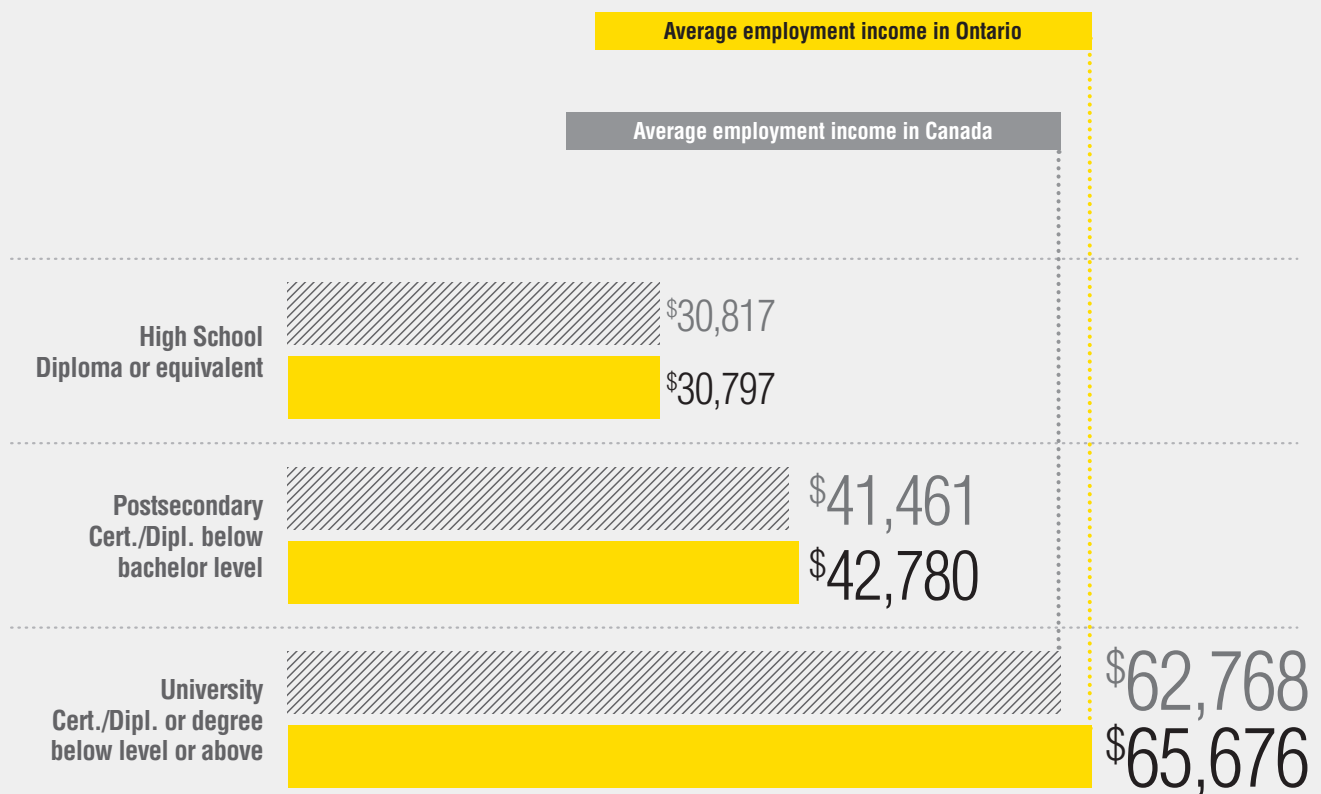


9. Statistics Canada, Labour Force Survey.

A university education pays off, literally. When evaluating the relative value of a university education, another key measurement is earnings. The data shows university graduates have the highest employment earnings of any educational group in the province. On average, they earned \$65,676 in 2010, 54 per cent more than college graduates and more than twice the amount for high school graduates. Over a 40-year period, a university graduate earns an average \$915,840 more than a college graduate and \$1.4 million more than a high school graduate.¹⁰

University grads have highest earnings in province

Figure 8: Average employment income, 15 years and over, by highest certificate, diploma or degree, 2010¹¹



10. Assuming constant prices and premiums remain stable.

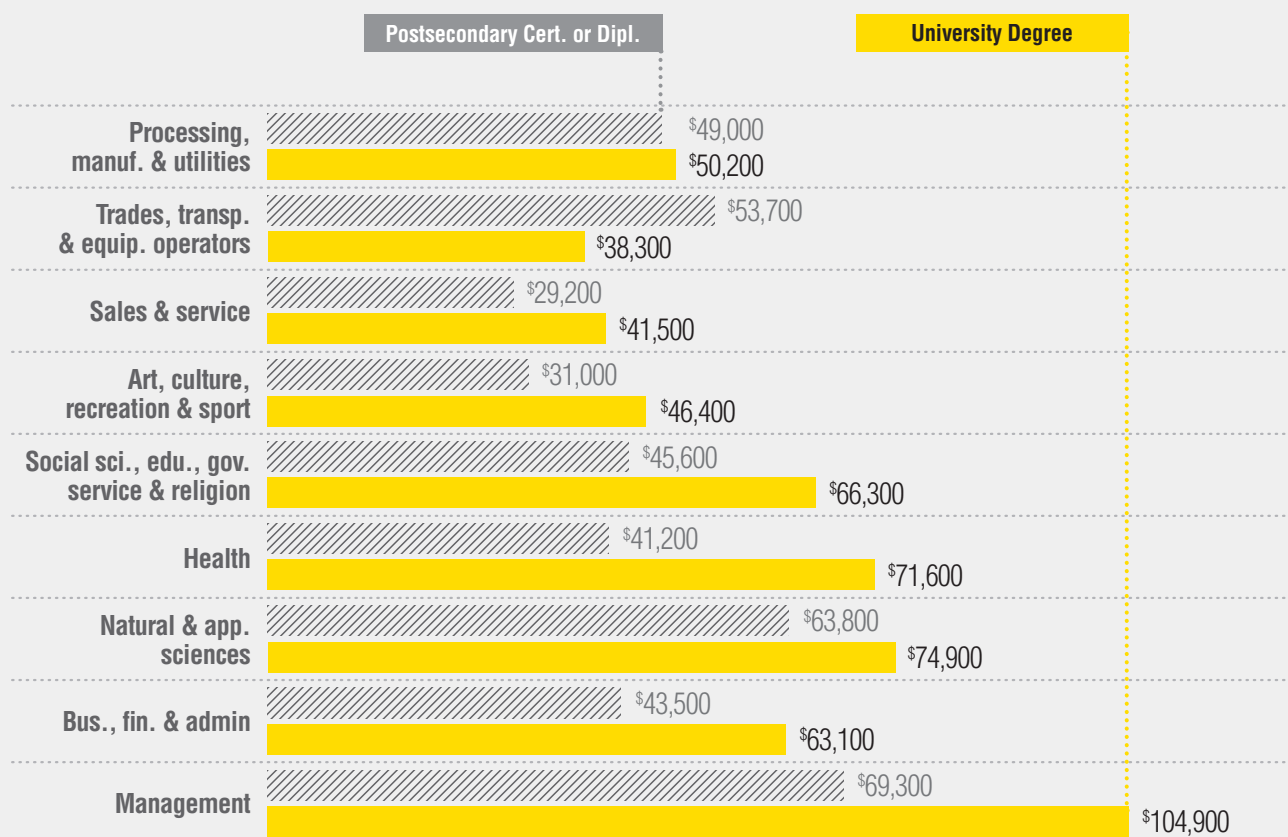
11. Statistics Canada, National Household Survey, 2011. This includes all types of employment: full time, part time, contract, etc.

Earnings for university graduates outpaced earnings for college graduates in all the major classification groups under Statistics Canada's National Occupational Classification for Statistics except the trades, transportation and equipment operators group. The highest premiums for a university education were found in the following groups: health; management, arts, culture, recreation and sport; business, finance and administration; social science, education, government service and religion.

According to a Statistics Canada report on the education of high-income Canadians, for 2010, "over two thirds (67.1 per cent) of the top one per cent had attained a university degree." The report also concluded that "nearly one in four (24.1 per cent) of those with a university degree were in the top 10 per cent" compared to one in ten for those who had other types of postsecondary education.¹²

Earnings for university grads outpace other earners in most occupations

Figure 9: Earnings of Ontarians, by educational attainment and NOC classification, 2011, constant dollars¹³



12. Statistics Canada, "Education and occupation of high-income Canadians", National Household Survey (NHS), 2011. Statistics Canada defines high income Canadians as those whose earnings are in the top 10 per cent, or those earning more than \$80,400. The top 1 per cent earns more than \$191,100.

13. Statistics Canada, Income Statistics Division.

14. Historically only a marginal number of university students have graduated before the age of 19. For example, Statistics Canada's Labour Force Survey does not register any university graduate between the ages of 15 and 19 since 2009. Only 15 per cent of the 20 to 24 year old cohort has a university degree compared to about 35 per cent for those between the ages of 25 and 34.

15. At 7.9 per cent, this cohort has a much lower unemployment rate than 15 to 24 year olds.

High employment rate for recent university graduates

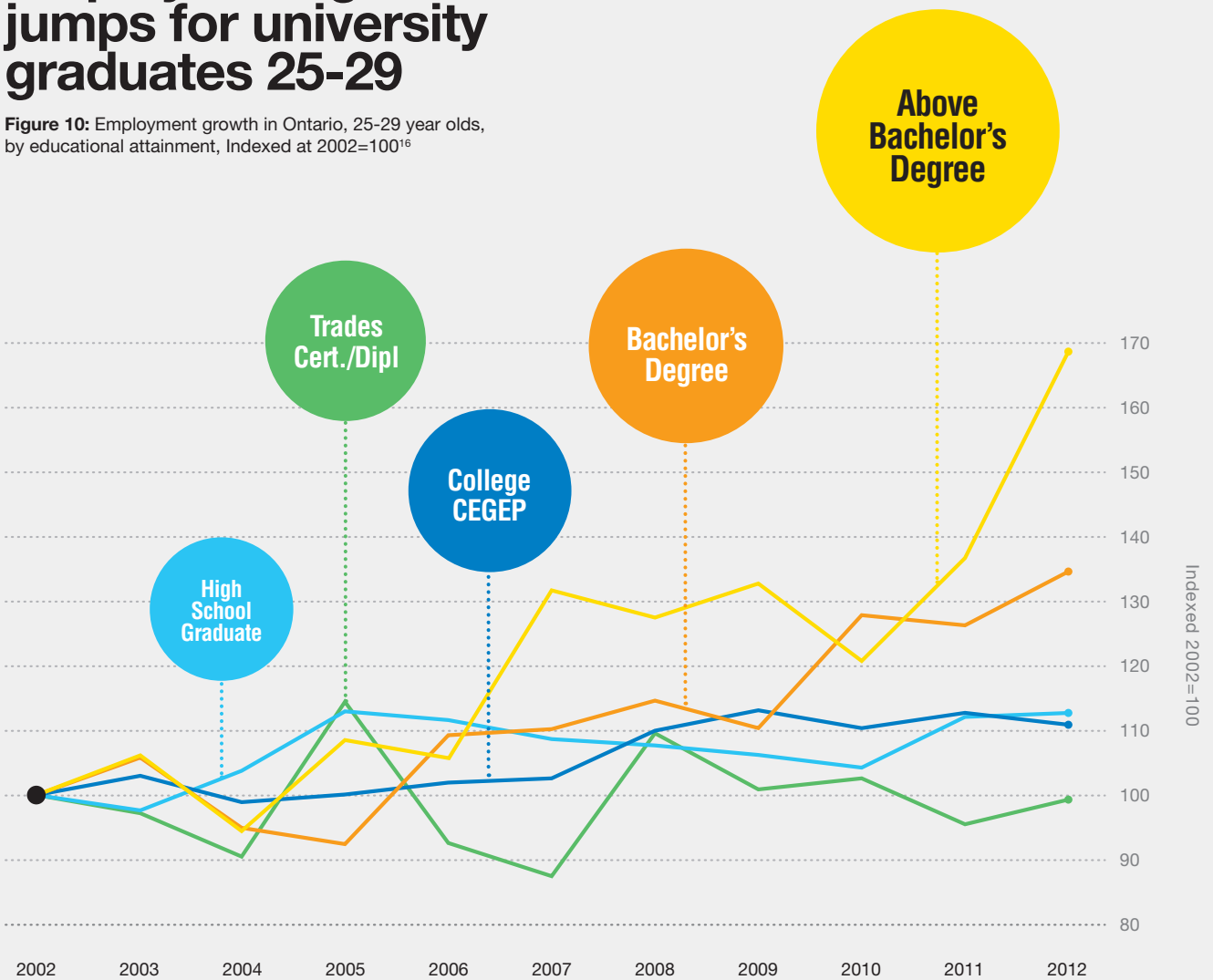
Ontario's youth has been significantly affected by the economic downturn. In 2009, unemployment among 15 to 24 year-olds reached 17.5 per cent, the highest since the recession in the early 1990s. Five years after the 2008 crisis, unemployment in this cohort remains above 16 per cent. Although youth employment indicators generally report on 15 to 24 year-olds, this age group does not adequately represent university graduates. Almost 15 per cent of this cohort has not finished high school; a large portion of them because they have yet to complete the normal course of their studies. A quarter of them have only a high school diploma, partly because a number of them have yet to start their postsecondary education. Students who enrol in university at the age of 18 will likely graduate four to five years later, between the ages of 22 and 23. University graduates therefore represent only eight per cent of the population and 11 per cent of the labour force within the 15 to 24 age group.¹⁴

This section addresses employment among recent graduates by analyzing statistics from the Labour Force Survey for the 25 to 29 age group. University graduates represent 35 per cent of the population and 37 per cent of the labour force in this group.¹⁵ This demographic more accurately represents students early in their careers while also giving graduates enough time to transition to the labour market after graduation. Recent graduate surveys performed by universities and colleges are also used to provide another indicator of graduate employment outcomes.

Over the last ten years, university graduates have experienced the highest employment growth when compared to their peers. For those with bachelor's degrees, employment jumped by 35 per cent. Master's and PhD students had the highest growth, at 68 per cent. In comparison, employment among college and high school graduates grew by just 11 and 13 per cent, respectively.

Employment growth jumps for university graduates 25-29

Figure 10: Employment growth in Ontario, 25-29 year olds, by educational attainment, Indexed at 2002=100¹⁶



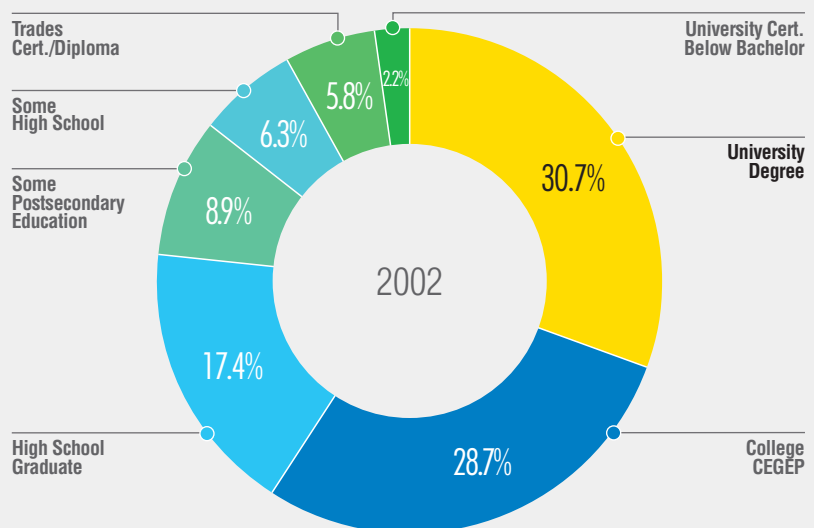
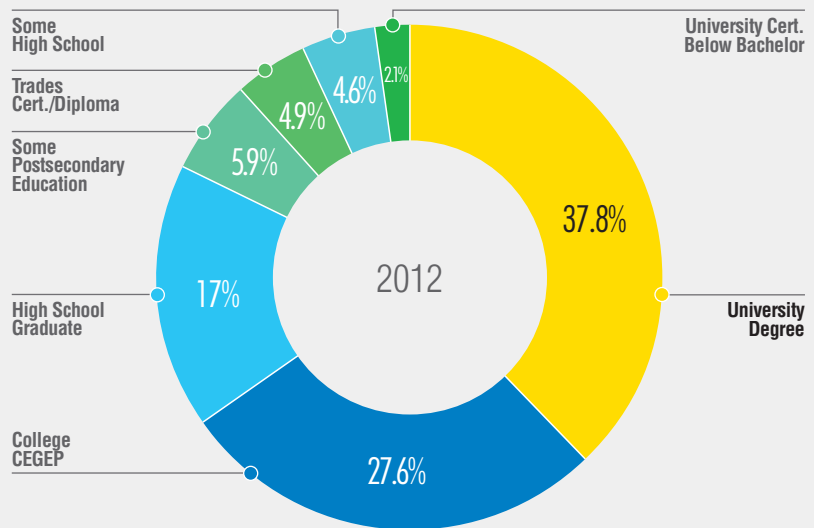
16. Statistics Canada, Labour Force Survey.

University graduates between the ages of 25 and 29 saw their share of total employment rise to 37.8 per cent in 2012. This represents a seven percentage point increase over 2002. University graduates are the only group in this age group to see an increase in share of employment over the last ten years.

Only university graduates increased employment share in last decade

Figure 11: Share of total employment, 25-29 year olds, 2012¹⁷ (top)

Figure 12: Share of total employment, 25-29 year olds, 2002¹⁸ (bottom)



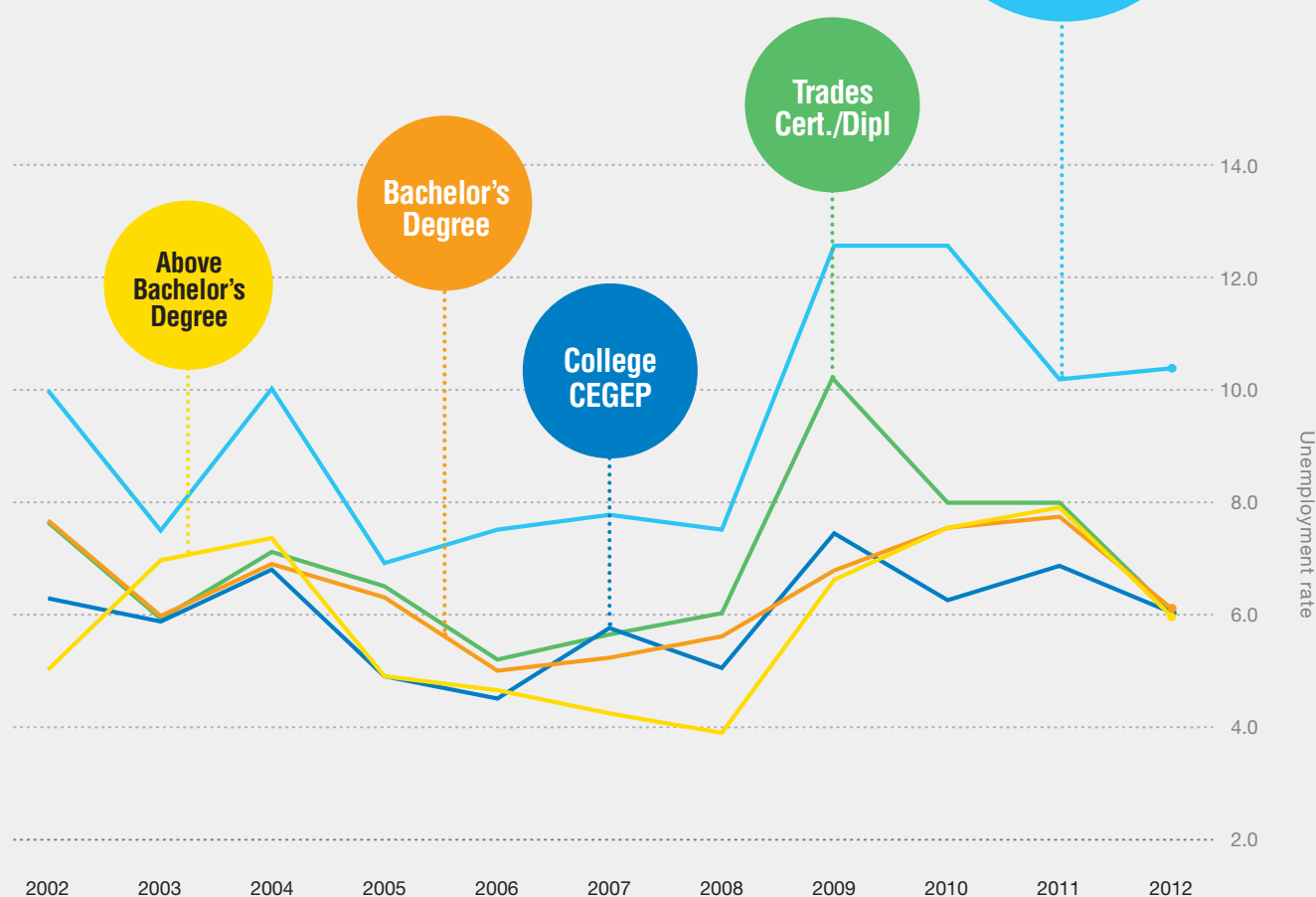
17. Statistics Canada, Labour Force Survey.

18. Statistics Canada, Labour Force Survey.

The unemployment rate among university and college graduates between the ages of 25 and 29 years is comparable, at about 6.2 per cent.

Unemployment rate similar for university, college grads

Figure 13: Unemployment rate for Ontarians, 25-29 year olds, by educational attainment¹⁹



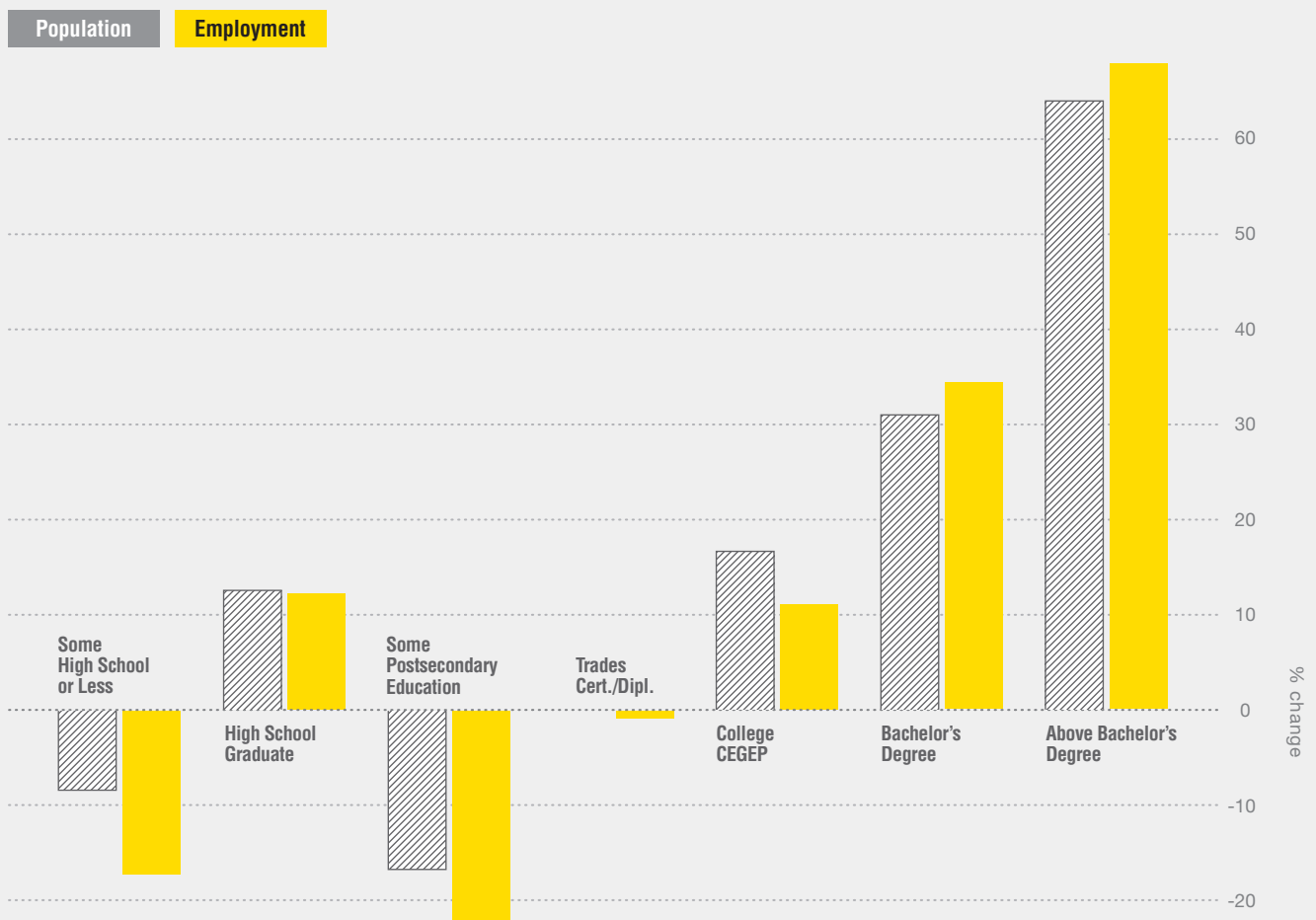
19. Statistics Canada, Labour Force Survey. For a particular educational attainment group, this is the number of unemployed people as a percentage of the labour force. The trade certificates and diploma line starts in 2004 because of a missing 2003 value.

Ontario's youth are increasingly choosing university over any other type of post-secondary education. Over the last ten years, the number of university graduates in this cohort has increased by 39 per cent, or nearly 94,000. In contrast, the number of college graduates has increased by only about 17 per cent, or 35,000.²⁰

The labour force has been well able to absorb the dramatic increase in university graduates. Indeed, university graduates are the only group to experience a higher percentage increase in employment than in population. Employment among those with bachelor's degrees has jumped by 34.8 per cent since 2002, higher than the 31.3 per cent increase in the number of bachelor's degree graduates. Master's and PhD graduate employment, meanwhile, increased by 68 per cent. This is higher than the 64 per cent increase in their numbers.

University grads only group with higher increase in jobs than population

Figure 14: Percentage change in population and employment, 25-29 year olds, 2002-2012²¹



20. Population for all education groups grew by 17 per cent between 2002 and 2012.

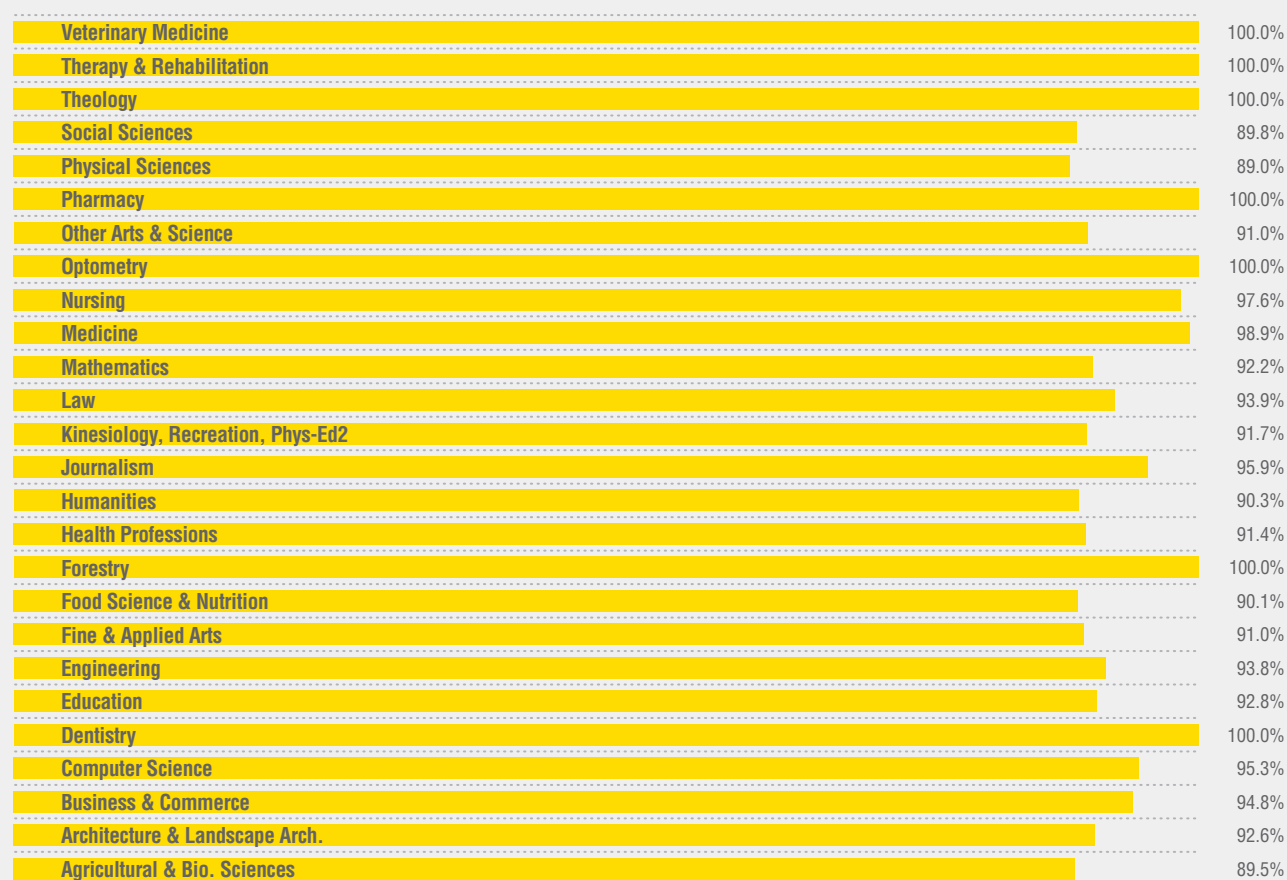
21. Statistics Canada, Labour Force Survey.

The government's Ontario University Graduate Survey provides another way to measure employment outcomes. For students who graduated in 2010, the employment rate six months after graduation was 86 per cent. This number increased to 92.2 per cent after two years. In contrast, the employment rate for college graduates was 83 per cent six months after graduation.²²

The survey also provides employment rates by field of study. Two years after graduation, 23 of 26 disciplines had an employment rate of over 90 per cent.

23 of 26 disciplines had employment rate of over 90%

Figure 15: University graduates employment rate two years after graduation, 2010²³



Note: These surveys define the employment rate as the number of people employed as a percentage of the labour force.

22. Source: MTCU, Employment Profile, 2011; Ontario University Graduate Survey, 2010.

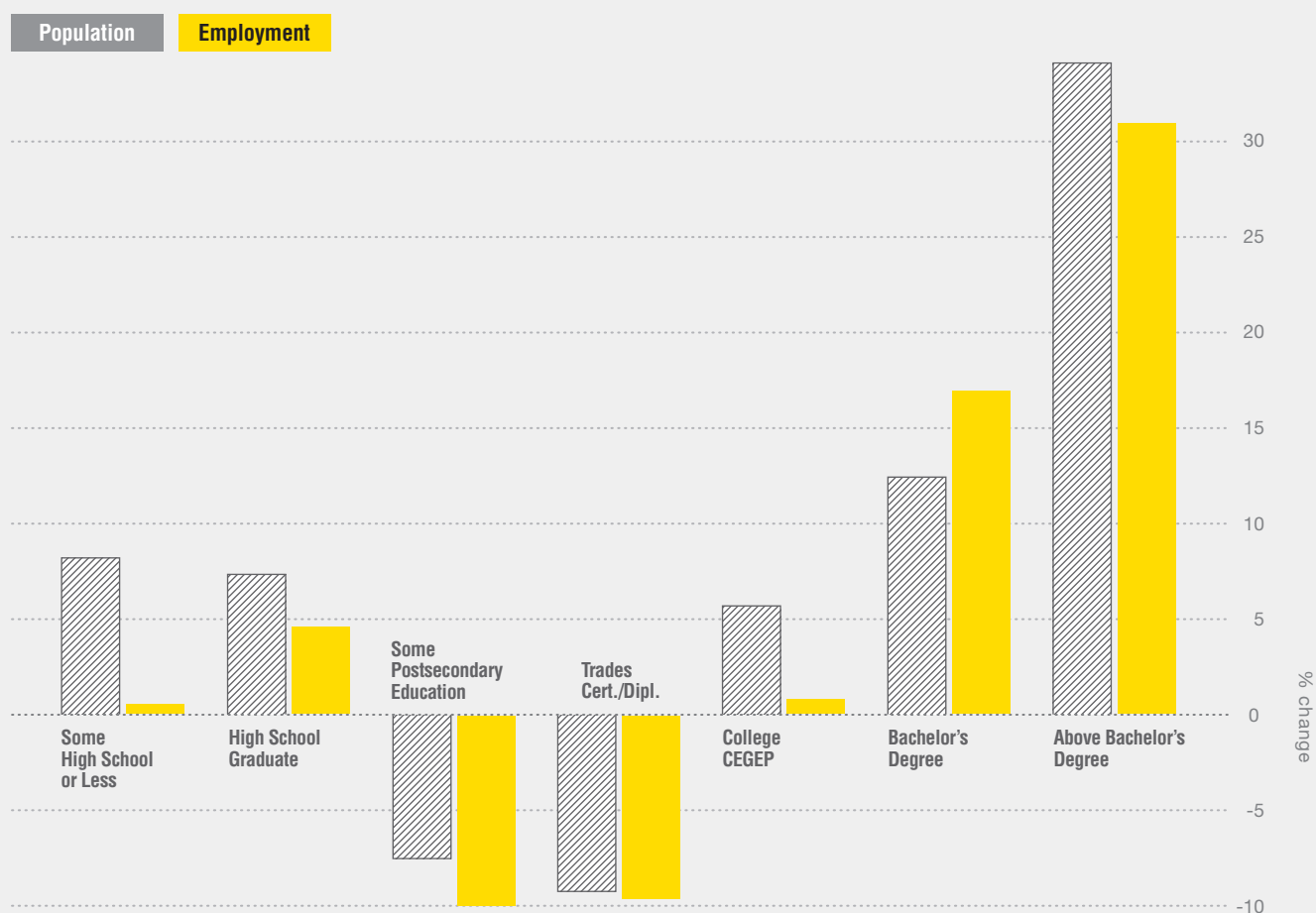
23. Ontario University Graduate Survey, 2010. The disciplines "therapy and rehabilitation" and "forestry" had fewer than 10 respondents and were therefore not included in the graph. Therapy and rehabilitation had two respondents. One was employed and the other one was unemployed. Forestry had nine respondents and a 100 per cent employment rate.

Youth employment and the 2008 world economic recession. Ontario's youth bore the brunt of the 2008 economic crisis. However, in 2009, at the height of the crisis, university and college graduate unemployment remained relatively stable compared to tradespeople and high school graduates. By 2012, things significantly improved for all postsecondary graduates. Unemployment among university graduates, college graduates and tradespeople aged 25 to 29 was comparable and about 6.2 per cent. (see F.13)

Ontario university graduates' employment in 2012 was 21 per cent higher than before the crisis, the highest increase by educational attainment. PhD and master's graduates experienced a 31.9 per cent increase in employment while bachelor's degree graduates saw a 17 per cent increase. In contrast, employment among college graduates increased by only one per cent since 2008. Bachelor's degree graduates experienced a higher increase in employment than in population over the period.

21% increase in employment for university grads after crisis

Figure 16: Percentage change in population and employment, 25-29 year olds, 2008-2012²⁴

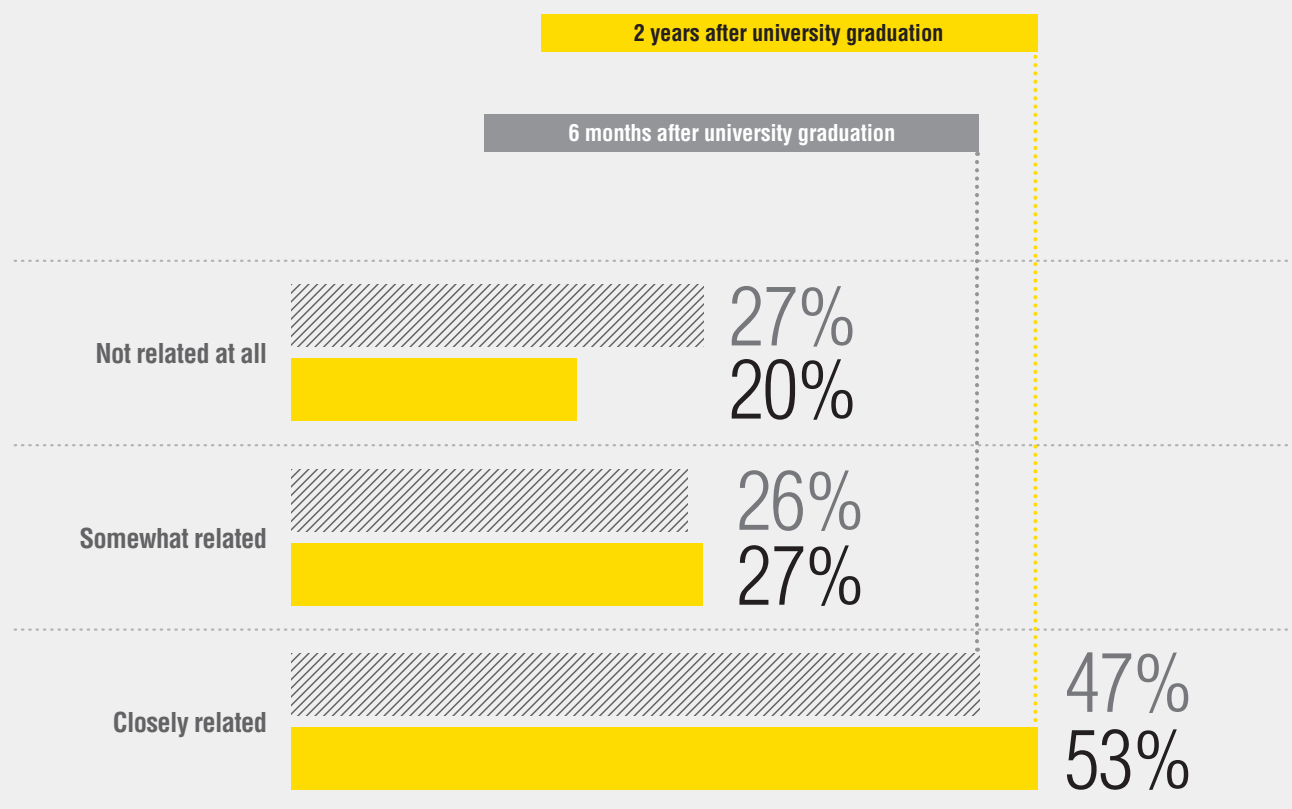


24. Statistics Canada, Labour Force Survey.

Jobs in their fields. The data discredits reports that university graduates are less likely than other postsecondary graduates to get jobs in their fields of study. Indeed, university graduates are more likely to be working at a job related to their studies than college graduates. University and college surveys separately gather data on the degree to which programs are related to employment after graduation. The methodology is different and so the results are not perfectly equivalent. For example, university graduates are asked to choose between “closely related,” “somewhat related,” “not related,” and “don’t know,” while college graduates choose between “related,” “partially related,” and “not related.” The option “closely related” implies a high degree of relatedness while “related,” the equivalent choice for colleges, is likely to be interpreted more loosely. However, if “closely related” and “somewhat related” are combined for the university survey and “related” and “partially related” for the college survey, any degree of relatedness is measured.

University grads more likely to be working in their field than college grads

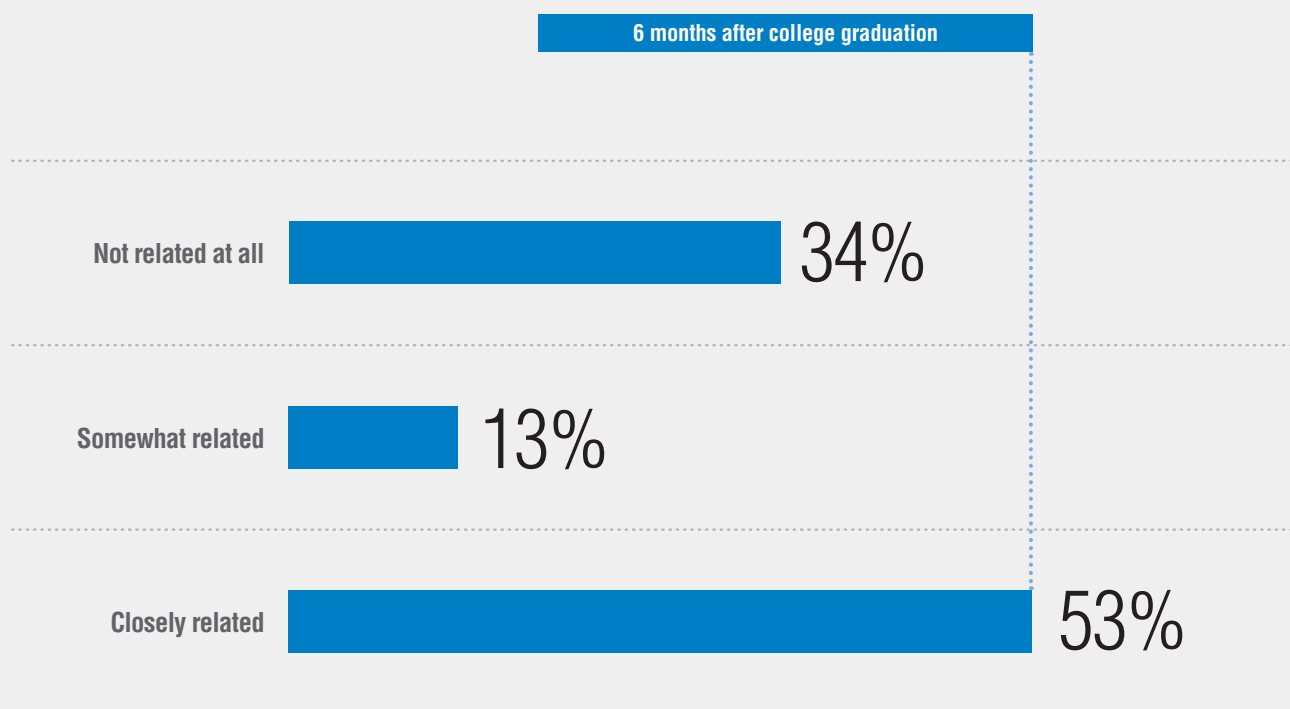
Figure 17: Percentage of 2010 university graduates who report that their work, six months after graduation, is related to their program of study²⁵



25. Ontario University Graduate Survey 2010.

Six months after graduation, 73 per cent of university graduates said their work was closely (47 per cent) or somewhat (26 per cent) related to the skills acquired in university. Among college graduates, the number was lower; 66 per cent said that their program was related (53 per cent) or partially related (13 per cent) to their program of study. University surveys also report that relatedness increases to 80 per cent two years after graduation.²⁶

Figure 18: Percentage of 2010 college graduates who report that their work, six months after graduation, is related to their program of study²⁷



26. Colleges do not report relationship between employment and program of study two years after graduation.

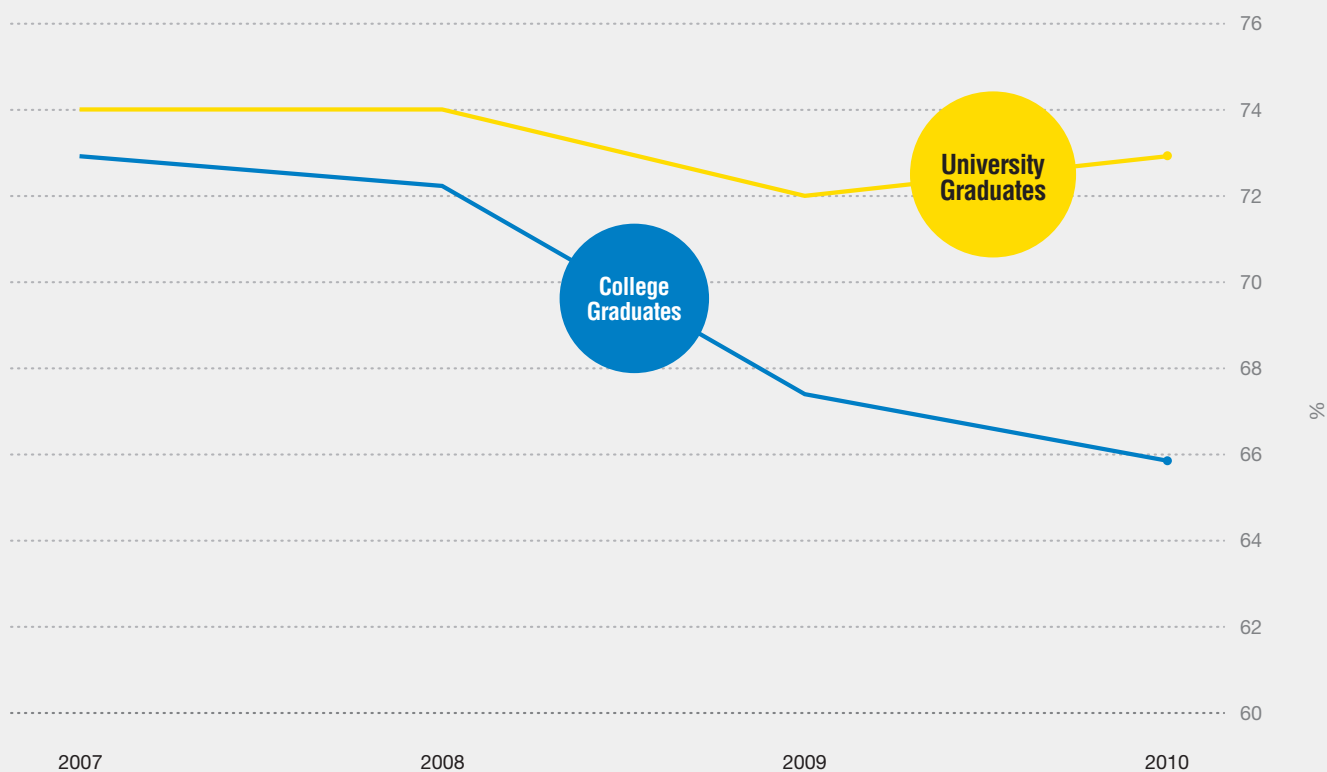
27. MTCU, Employment Profile, 2011. The college report also contains separate relatedness indicators for full-time employment and part-time employment. Full-time related and partially related constitute 69.1 percent, still below comparable university data. Part-time related and partially related responses are 53.6 per cent. Universities do distinguish between full-time and part-time employment when measuring relatedness.

Although the 2008 economic crisis made it more difficult for recent postsecondary graduates to find a job related to their field, the change for university graduates was comparatively lower than for college graduates.

The number of 2009 university graduates who reported that their work and program study was related was two per cent lower than for 2008 university graduates; for college graduates it was five per cent lower. Relatedness for 2010 university graduates was one per cent lower than 2007 graduates; for college graduates the difference was 6.4 per cent.

Dip in work related to study is less for university grads

Figure 19: Percentage of graduates who report that their work, six months after graduation, is related to their program of study²⁸

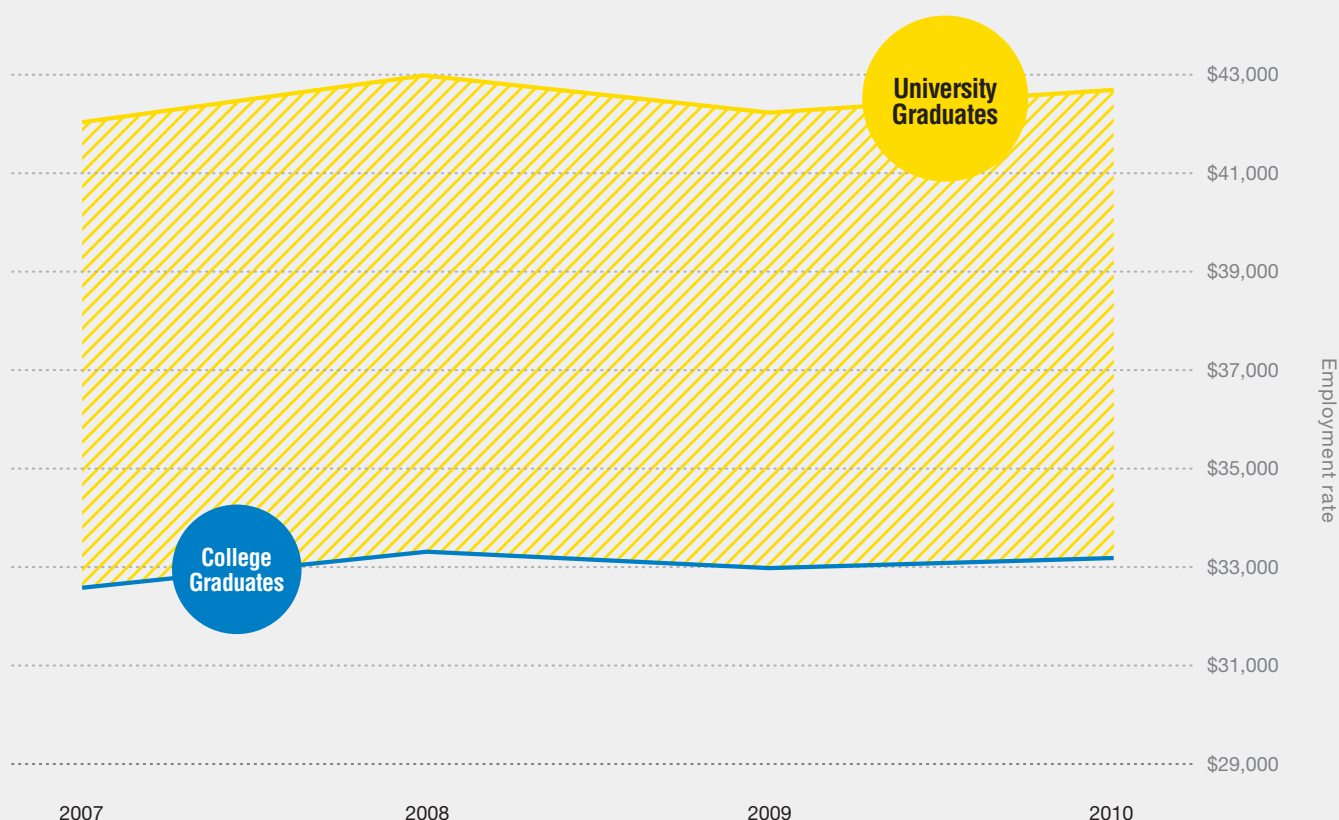


28. Ontario University Graduate Survey and MTCU, Employment Profile.

Earnings of recent graduates. A university education begins to pay off in terms of salary from the outset. In fact, earning premiums for university graduates are experienced shortly after graduation. The average salary for university graduates who work full time is \$42,668 six months after graduation. In contrast, the average salary for college graduates who work full time is \$33,061 six months after graduation.²⁹ Two years after graduation, average earnings for university graduates increase to \$49,277.

University grads earn more, quickly

Figure 20: Average earnings of university and college graduates employed full-time six months after graduation³⁰



29. MTCU, Employment Profile, 2011. Data is for the 2009-2010 graduating class.

30. MTCU, Ontario University Graduate Survey. Data is for 2010 graduates. MTCU, Employment Profile, 2012. Data is for the 2010-11 graduating class. College data does not include records when gender information has not been collected.

University works.

A university education is the surest path to a well-paying job in a graduate's field of study. Empirical data collected by Statistics Canada and the Ontario Ministry of Training, Colleges and Universities reinforces the value of a university education and debunks anecdotal reports that university graduates are not equipped with the skills demanded by the evolving labour market.

While economic recovery in Ontario is sluggish, graduates from Ontario's 21 publicly funded universities are finding jobs in record numbers. University graduates have the highest employment levels and highest earnings compared to others with any other level of educational attainment. The return on investment for a university education is swift and lasting. University graduates earn 30 per cent more six months after graduation than college graduates, and \$1.4 million more over a 40-year career. A university graduate is more likely to find work in a job related to his or her program of study than is a college graduate. And more Ontarians are choosing a university education than any other kind of postsecondary education.

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