

# WHY POSTSECONDARY EDUCATION?



**Education** is a key indicator of labour market supply and demand. It plays a critical role in determining whether labour market needs can be met by an available or emerging workforce.

The Canadian federal government has estimated that 75% of new jobs in the coming decade will require postsecondary education.<sup>1</sup> Respectively, provincial and regional research supports similar findings.

The Sarnia Lambton Workforce Development Board (SLWDB), in its [Local Labour Market Plan 2014/2015](#) and its report on [Jobs and Education by Industry in Sarnia Lambton](#) has emphasized the link between postsecondary education and many of the career paths that fall within key sectors of our local economy.

This report will further explore the relationship between the requirement for postsecondary education and training as it is associated with employment opportunities in Sarnia Lambton. The report will:

- Examine typical occupations and job opportunities in Sarnia Lambton with regard to required education levels
- Review Statistics Canada data to provide an overview of educational attainment levels
- Outline reasons why postsecondary education may not be attained
- Provide strategies on how to possibly raise local postsecondary education attainment levels

**For the purpose of this report, postsecondary education includes: university, college (public and/or private career college programs) and apprenticeship.**



[www.slwdb.org](http://www.slwdb.org)

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## EMPLOYMENT ONTARIO

*The views expressed in this document do not necessarily reflect those of Employment Ontario.*

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This report is based on past research regarding educational attainment levels. End notes are used throughout and complete citations can be found on page 13. Data sources include Statistics Canada, National Household Survey, 2011, National Occupational Classification (NOC) Matrix, 2011, MDB Insight's Vicinity Jobs Data, 2014, SLWDBs Local Labour Market Plan 2014/2015 and SLWDB's EmployerOne Survey 2015. Nine stakeholders from the local education sector were consulted. SLWDB thanks those participants for their valuable input.



## Occupations in Sarnia Lambton:

There are close to 50,000 jobs held in Sarnia Lambton. The chart below shows twenty-two jobs\* which account for about half (51%) of the local workforce.

The chart also indicates the typical education and training pathway (skill level)\*\* required. Over half of the occupations listed show that university, college or apprenticeship training is the typical requirement for new job seekers.

Typical Occupations of persons living in Sarnia Lambton, 2011		
Occupation	# of Jobs Held	Skill Level
Retail salespersons	1990	C
Managers in agriculture, horticulture and aquaculture	1860	A
Secondary and elementary school teachers and educational counsellors	1550	A
Food counter attendants, kitchen helpers and related support occupations	1530	D
Cleaners	1375	D
Retail and wholesale trade managers	1335	A
Administrative and regulatory occupations	1305	A
Cashiers	1245	D
Paraprofessional occupations in legal, social, community & education services	1210	B
General office workers	1175	C
Office administrative assistants - general, legal and medical	1035	B
Other sales support and related occupations	1000	D
Professional occupations in nursing	950	A
Motor vehicle and transit drivers	950	C
Occupations in food and beverage service	915	C
Chefs and cooks	885	B
Customer and information services representatives	870	C
Central control and process operators in processing and manufacturing	840	B
Civil, mechanical, electrical and chemical engineers	820	A
Assisting occupations in support of health services	815	C
Machining, metal forming, shaping and erecting trades	700	B
Auditors, accountants and investment professionals	665	A

Source: Statistics Canada, *NHS, 2011*, custom tabulation.

\*Based on 3-digit National Occupation Code (NOC): NOC is defined by The Government of Canada as a four-tiered hierarchical arrangement of occupational groups. It is based on occupation skill type and level of specificity. The categories are: broad (1-digit NOC), major (2-digit NOC), minor (3-digit NOC) and unit groups (4-digit NOC). For more information on the NOC system see:

<http://www.statcan.gc.ca/pub/12-583-x/12-583-x2011001-eng.pdf>

\*\* Skill level: based on NOC Matrix, 2011: refers to the educational and training pathways usually required for an occupation: **A**=university education, **B**=college education or apprenticeship training, **C**=secondary school and/or occupation specific training, **D**=on-the-job training.

### Jobs in Demand:

The [SLWDB 2014/2015 Local Labour Market Plan](#) compared labour force participation rates and employment rates to determine which jobs could be considered in demand in Sarnia Lambton. Management across industries, engineers, computer and information systems professionals, finance and business occupations and health positions were among those listed. Most of these positions require either a university or college education. Some positions even require additional certifications.

### Job Opportunities:

Online job postings can help to identify where job opportunities have occurred over time. It is important to note, however, that this data pertaining to recruitment for jobs is taken from online/internet sources only. Other recruitment methods such as print advertisements and word-of-mouth recruitment are not included in this report.

From January 2014 – December 2014 online job postings in Sarnia Lambton totalled 3,811. The 20 job titles\* most posted and their typical skill level\*\* are listed in the chart below. Ten of the 20 job titles which were posted usually require that new job seekers have a postsecondary education.

Job Titles	# of Online Postings	Skill Level
Retail and wholesale trade managers	173	A
Retail salespersons	148	C
Sales and account representatives - wholesale trade (non-technical)	96	C
Other customer and information services representatives	96	C
Transport truck drivers	93	C
Financial sales representatives	85	B
Automotive service technicians, truck & bus mechanics & mechanical repairers	79	B
Other sales related occupations	75	D
Store shelf stockers, clerks and order fillers	73	D
Home support workers, housekeepers and related occupations	53	C
Electrical and electronics engineers	52	A
Urban and land use planners	48	A
Cooks	47	B
Interior designers and interior decorators	45	B
Food and beverage servers	44	C
Cashiers	41	D
Mechanical engineers	40	A
Registered nurses and registered psychiatric nurses	38	A
Nurse aides, orderlies and patient service associates	38	C
Corporate sales managers	36	A

Source: *Vicinity Jobs, 2014*, custom tabulation.

\*Based on 4-digit NOC

\*\*Skill level: based on NOC Matrix, 2011: refers to the educational and training pathways usually required for an occupation. **A**=university education, **B**=college education or apprenticeship training, **C**=secondary school and/or occupation specific training, **D**=on-the-job training.

Online job postings data for Sarnia Lambton 2014 can also be grouped into broad occupational categories\*. The chart below indicates the number of jobs posted in each occupational category as well as the percentage of jobs for which employers indicated that postsecondary education or training was a requirement.

<b>Occupation Categories</b>	<b>Total # of postings in occupation category in 2014</b>	<b>% of job postings indicating university, college or apprenticeship training required</b>
Management occupations	412	100%
Business, Finance and administration occupations	291	55%
Natural and applied sciences and related occupations	339	100%
Health occupations	197	71%
Occupations in education, law & social, community, gov't services	139	62%
Occupations in art, culture, recreation & sport	127	100%
Sales & service occupations	963	22%
Trades, transport & equipment operators & related occupations	422	46%
Natural resources, agriculture & related production occupations	66	23%
Occupations in manufacturing & utilities	85	24%

Source: *Vicinity Jobs, 2014*

\*Based on 1-digit NOC

Note: of the 3,811 job postings in 2014, 770 did not identify an education or skill requirement in their job posting.

According to the above list, for Sarnia Lambton 2014, the majority of occupation categories indicated that at least half of the jobs posted in their category required applicants to have a postsecondary education. And notably, three occupation categories had 100% of their job postings requiring postsecondary education.

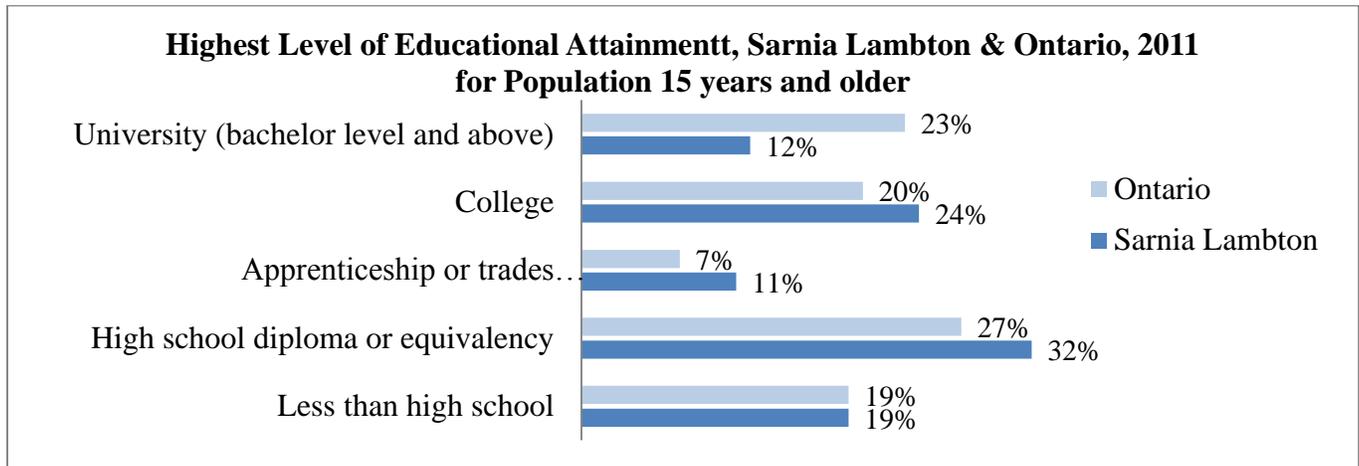
Results from the [SLWDB EmployerOne Survey 2015](#) also emphasized the importance that local employers place on postsecondary education. The EmployerOne Survey is an annual survey of local employers that helps to determine labour market needs. In 2015, 96 employers responded to the survey. Of those surveyed, 39% indicated having difficulty hiring for certain positions in 2014. The number one reason they reported difficulty filling all available jobs was because applicants were not meeting the requested education qualifications.



**Employers!**  
**Don't miss your opportunity to participate in the**  
**2016 Sarnia Lambton EmployerOne Survey.**  
**Contact us at 519-332-0000.**

### Statistical Review of Educational Attainment:

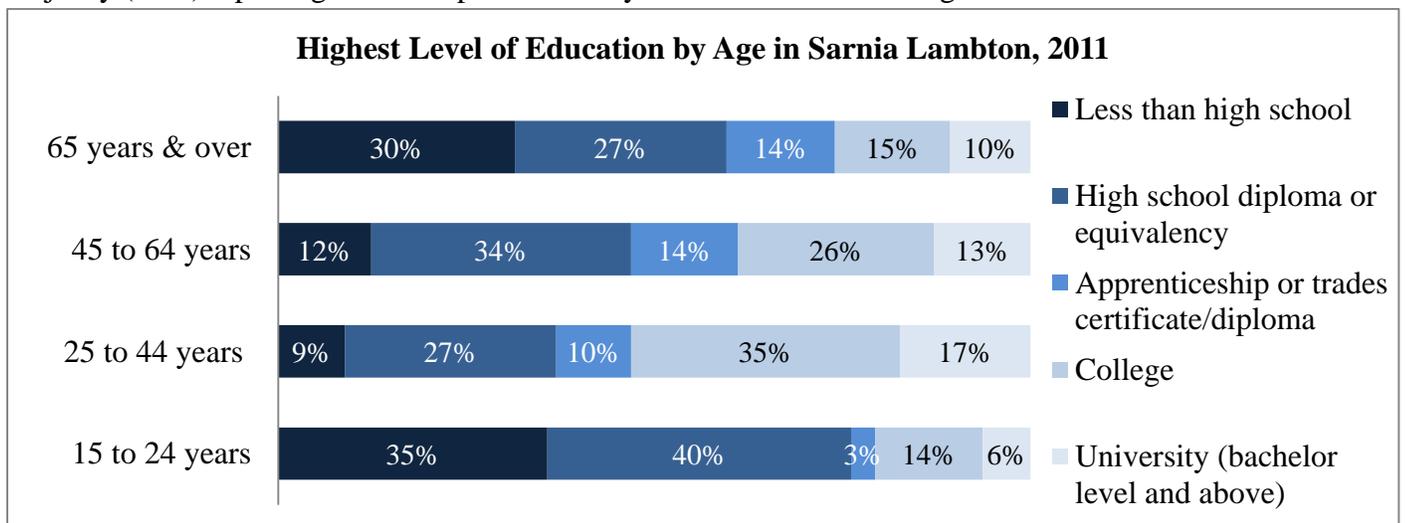
In 2011, about 47% of the Sarnia Lambton population aged 15 years and older had attained a postsecondary education. Sarnia Lambton had similar levels of overall postsecondary attainment when compared to the overall attainment levels for Ontario. The notable variance between the two occurred in the type of postsecondary education attained. Sarnia Lambton residents were more likely to have an apprenticeship or college education and less likely to have a university education compared to the province of Ontario.



Source: Statistics Canada. 2011 National Household Survey.

Note: University below bachelor degree was omitted due to its small number.

The age group most likely to have obtained a postsecondary education in Sarnia Lambton is that of those aged 25-44 (see chart below). About 62% of this age group holds postsecondary education, with the majority (35%) reporting that their postsecondary education is from college.



Source: Statistics Canada. 2011 National Household Survey.

Note: University below bachelor degree was omitted due to its small number.

## **Reasons Why Postsecondary Education May Not Be Attained:**

Much research has been done in an effort to explain why individuals may not attain a postsecondary education. This report examines the following four reasons:

1. Parental Influence
2. Financial Risk
3. Career Uncertainty
4. Academic Requirements

### **1. Parental Influence**

Research suggests that the most influential determinant in youth continuing on to postsecondary education is whether their parents attended postsecondary education.<sup>ii</sup>

As seen on the previous page, older age groups in Sarnia Lambton (particularly those 65 and over) demonstrated relatively low levels of postsecondary attainment (39%) in 2011. The local attainment level of postsecondary education, for the population aged 15 to 64 was about 46%. This relatively small increase in postsecondary education attainment at the younger age groups supports the finding that individuals are influenced by their parents' level of education attainment. Recognize, however, that for older populations, postsecondary education was not necessarily a requirement for as many jobs as it is today. Some local stakeholders suggest that for individuals whose parents did well in a career without having obtained a postsecondary education, may unknowingly influence the education choice of their child.

In addition to whether a parent has attended postsecondary education, other parental factors influence a postsecondary decision. Parents who are personally involved with their children's schooling, especially during the elementary years (i.e. they communicate supportively with their children) have a more positive impact on their children's academic outcome.<sup>iii</sup>

Local stakeholders noted that parents who understand the postsecondary process for university, college and apprenticeship, are able to communicate the linkage between different types of postsecondary education and potential career fields.

### **2. Financial Risk**

The cost of postsecondary education in Ontario is increasing. It is estimated that the cost of university with tuition and compulsory fees may triple from 1990 to 2017.<sup>iv</sup>

Financial planning for those wanting to attend postsecondary education has become essential. Individuals need to determine where financial supports will come from. Will family members be able to contribute to their education? Will the student be able to receive any bursaries or scholarships? Will the student take out loans or be required to work while attending school?

Discussions with local stakeholders indicate that with the high financial costs of postsecondary education, some individuals may feel that education simply is not affordable. Others may question the return on investment (i.e. they may have observed some friends/family who have attended postsecondary education and have not been able to immediately enter their career field).

Provincial research has taken a look at this financial concern. Reports consistently show that those with postsecondary degrees, diplomas or certificates have a distinct advantage in the labour market.<sup>v</sup> Postsecondary education increases lifetime earnings and allows for more stable employment.<sup>vi</sup> Statistics Canada Data indicates that for the ages 25-44 in Ontario, the unemployment rate in 2010 for high school graduates was 10.9% versus 6.3% for those with postsecondary credentials.<sup>vii</sup>

Furthermore, those with postsecondary education possess a set of transferable skills that allow them to adapt to a changing labour market and the unknowable future.<sup>viii</sup> Transferrable or “soft skills” such as communication, teamwork, integrity, intellectual and organizational ability, among others have been shown to be the most important skills and capabilities that employers look for.<sup>ix</sup> Results from the 2015 SLWDB EmployerOne Survey confirmed that surveyed local employers felt that the three most important essential skills for employees they hire are: work ethic & dedication, customer service and communication (oral & written).

Conclusively research indicates that participating in postsecondary education may be a costly investment, but one which proves to hold great benefit for individuals in the long term.

### **3. Career Uncertainty**

Young people often decide not to apply to postsecondary education because they are unsure of what career they want to pursue.<sup>x</sup>

Uncertainty regarding career choice may be affected by social, geographic and/or economic factors.<sup>xi</sup> Some key considerations that youth may struggle with: which career do I think I would be happy in? Which careers are expected to have good employment opportunities in the geographical area that I want to live? Will I be satisfied that my career choice was worth the financial investment? Studies show that young people today, even more so than past generations, are faced with higher expectations, more choices, greater financial demands and the understanding that an ever changing labour market means that there is no certainty that a “good job”, or even steady, permanent employment, awaits after graduation.<sup>xii</sup>

Local stakeholders have indicated that along with career uncertainty, some students express hesitation about their readiness to leave home (which often coincides with enrolling in postsecondary education). Students are graduating high school around the age of 18 or younger, and some report that they “feel too young” to be on their own and/or to attend postsecondary instruction

when they are unsure about a career commitment. Each of these considerations can lead to uncertainty when it comes to decisions regarding careers and postsecondary education.

#### 4. Academic Requirements

Another barrier to pursuing postsecondary education may be the academic difficulty in meeting the requirements of entry into the desired program and further, once accepted, students may struggle to maintain the necessary marks to continue on in a program.<sup>xiii</sup> In the 2009 report, *Who Doesn't Go to Post-Secondary Education, Faculty of Education, Queen's University*, it concluded that “the lower the average secondary school marks, the less likely that students enrolled in postsecondary education”.<sup>xiv</sup>

“For some post-secondary programs, advance knowledge of the entrance requirements is critical to gaining entrance to a program at a later date. If sufficient planning is not done well in advance of applying to post-secondary education, individuals may not meet the entrance requirements for some programs”.<sup>xv</sup>

Much research has also been conducted on the reasons why individuals drop out of postsecondary programs. Statistics Canada, *Youth in Transition Survey*<sup>xvi</sup> conducted 1999-2009, found that a positive experience in the first year of study is crucial to whether students will eventually graduate from a program. Students who drop out tend to struggle in their first year with deadlines, academic performance, and study patterns.<sup>xvii</sup>

In addition, academic performance and engagement at both the high school and postsecondary level are indicators of who will persist in their postsecondary education. Academically weaker and less engaged students are more likely to leave postsecondary education; however it should be noted that high achieving students in high school may also struggle with a drop in overall grades in their first year of a postsecondary program which might also lead to dropping out of that program.<sup>xviii</sup>

Academic challenges are one of many reasons individuals may choose not to apply to postsecondary education or complete a program. These challenges may also be a result or a symptom of other factors such as programs that were not what students expected or simply there was a lack of interest in a program. Many different factors may influence an individual's ability to meet the academic requirements needed for postsecondary completion.

The four factors outlined above: parental influence, financial risk, career uncertainty, and academic requirements may also have an even greater impact for several population groups that have been found to be particularly underrepresented in postsecondary attainment. Underrepresented groups may include low income, rural students, those identifying as Aboriginal, or having a disability, among others.<sup>xix</sup> Underrepresented groups may struggle with multiple financial, informational and motivational barriers, and the interplay between these barriers can contribute significantly to their underrepresentation.<sup>xx</sup>

## **Strategies to Consider to Possibly Raise Postsecondary Levels:**

The previous information outlined the reasons why individuals may not attain postsecondary education. Given the importance of postsecondary education in current and projected employment opportunities, past research and local stakeholders have identified the following two possible strategies for increasing local postsecondary attainment levels.

### **1. Increasing Awareness at a Young Age**

Local school boards have already identified that educating students regarding careers and career pathways is an important component of the educational system. As such, online resources have been introduced (i.e. “myBlueprint” and “Career Cruising”) to help both intermediate and senior students understand career choices and the corresponding educational requirements.

Additionally, a career studies course is mandated as part of the secondary school curriculum.

In recent years, Ontario educators have been expressing a need for more postsecondary education information to be provided at earlier ages, and to be integrated into regular coursework.<sup>xxi</sup> It is recognized that student experiences in elementary school play a major role in influencing future postsecondary education choice.<sup>xxii</sup> Specifically, early introduction and integration of awareness programs which focus on school engagement, self-esteem, academic preparation and financial planning can inform and educate students with regard to future choices.<sup>xxiii</sup>

Local stakeholders agree that earlier and more regular integration of career related information would be helpful to encourage postsecondary options. Some suggestions for achieving this include:

- SLWDB could create and distribute labour market reports and promotional materials relevant to grade 7/8 students and secondary school students.
- Encourage scheduling of speakers for elementary classrooms (e.g. speakers from different career fields, representatives from postsecondary schools and apprenticeship programs).
- Career fairs or “carousel workshops” for grades 7/8.
- Facilitate increased interaction between postsecondary and elementary educators (e.g. tours of colleges, visits to elementary schools, meetings with representatives from the Ontario College of Trades).
- Parents to continually encourage open communication with their children regarding school/career choices (e.g. discussions on university, college, apprenticeship destinations, job prospects, financial costs of postsecondary education, emotional readiness to leave home, etc.).

### **2. Provide More Information Through Collaboration**

Careers and career paths look a lot different today than in the past. There are new types of jobs that have emerged and education and training has changed significantly.<sup>xxiv</sup>

With a changing world of work, it is increasingly important that educators, parents and the local community collaborate in order to ensure that individuals are engaged and understand the role of postsecondary education in the labour market.

Suggestions for collaboration include:

- Engage parents with labour market information at school events where parents are present such as parent-teacher interviews, grade 9 orientation nights (e.g. SLWDB can be present to provide information on the local labour market & education, e.g. job profile sheets for careers in local industry).
- Engage all educators, career studies teachers, guidance counsellors and subject specific teachers with career related information on an ongoing basis.
- Engage parents and educators in encouraging students to become involved with co-curricular activities. Co-curricular programs can create opportunities of learning and building transferrable skills. Postsecondary institutions are beginning to look at the integration and assessment of academic programs and co-curricular programs.<sup>xxv</sup>
- Distribute accessible, easy to read labour market information throughout classrooms and within guidance departments for sharing with students and their families.
- Provide multimedia or “digital bursts” of labour market facts or information to high school students.
- Schools could increase opportunities for postsecondary students to come into high schools to talk about what life is like at postsecondary education settings.
- Ongoing collaboration with schools and community programming (e.g. Tensions to Triumph program developed through Lambton College) to create awareness among high school seniors about potential postsecondary challenges and available support resources.
- Engage community members to share experiences with students (e.g. have career experts come into schools to talk about their careers).
- Host special events (e.g. women in non-traditional careers day or apprenticeship nights) to highlight careers and their education pathway.
- Parents could provide additional encouragement and support to students by attending school functions/ events/ councils where labour market information and postsecondary issues are discussed.

### **Concluding Remarks:**

Education is a key indicator of labour market supply and demand. As jobs become increasingly more technical and skilled, the need for postsecondary education is growing.

Data for Sarnia Lambton, regarding jobs held by the local labour force and regarding local online job opportunities, concurs with the need for individuals to attain a postsecondary education.

By examining the educational achievement levels of the population in Sarnia Lambton, this report has explored possible reasons why approximately half of the Sarnia Lambton population aged 15 and up has not attained a postsecondary education. It has also looked at possible ways to increase the level of postsecondary education attainment locally.

With the continued support of parents, educators and the community as a whole, the importance of postsecondary education in today's labour market can be highlighted further to ensure that all individuals are aware of the relationship between education and jobs in Sarnia Lambton.



**Please give us your feedback on this report by answering a 3 question survey. Survey link:**  
<https://www.surveymonkey.com/r/RKLTGCW>



## Endnotes

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- <sup>i</sup> Habib, M. (2013, September 11). “University tuition rising to record levels in Canada”. CBC News.
- <sup>ii</sup> Cassidy, K.J. (March 2015). *Barriers to Post-Secondary Education Perspectives from Niagara*, NCO Policy Brief #22. Brock University.
- <sup>iii</sup> Canadian Education Association. (2014). *The Facts on Education. How does parent involvement in education affect children’s learning?* Simon Fraser University.
- <sup>iv</sup> Habib, M. (2013, September 11). “University tuition rising to record levels in Canada”. CBC News.
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- <sup>vii</sup> HEQCO Community Report. (2011). *Informing the Future of Higher Education*. Higher Education Quality Council of Ontario.
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- <sup>xiii</sup> Malatest, R.A and Associates, Class of 2003. (2007) Canada Millennium Scholarship Foundation. Montreal.
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- <sup>xvi</sup> Statistics Canada, “Youth in Transition Survey (YITS-B Cohort)”, June 27, 2011 data release.
- <sup>xvii</sup> Millar, Erin. (2007, November 20). “More students go to post secondary, but one in seven drop out”, Maclean’s.
- <sup>xviii</sup> Parkin, A & Baldwin, N. (2009). *Persistence in Post-Secondary Education in Canada: The Latest Research, 2009, Research Note #8*. <http://www.millenniumscholarships.ca>
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- <sup>xx</sup> College Student Alliance, Ontario Undergraduate Student Alliance & Ontario Student Trustees’ Association. (2011). *Breaking Barriers: A Strategy for Equal Access to Higher Education*. Toronto.
- <sup>xxi</sup> Ibid.
- <sup>xxii</sup> Cassidy, K.J. (March 2015). *Barriers to Post-Secondary Education Perspectives from Niagara*, NCO Policy Brief #22. Brock University.
- <sup>xxiii</sup> Ibid.
- <sup>xxiv</sup> Ibid.
- <sup>xxv</sup> Higher Education Quality Council of Ontario. (2015, October 29). Webinar. “Assessing the Student Experience: Student Affairs Learning Outcomes”.