



Making Grey Bruce Home for International Talent:

A Case Study Analysis of Opportunities and Challenges for Power Engineering Technology and Practical Nursing Students in the Grey and Bruce Region

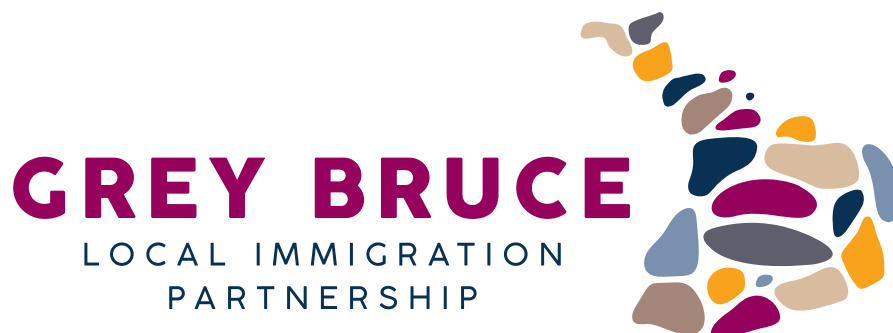
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Thank You / Partner Acknowledgement

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We thank everyone who contributed their time and thoughts to this project with a special thanks to interview participants who shared their experiences and recommendations.



Executive Summary

International students studying at the Owen Sound campus of Georgian College, present a great opportunity for the communities of Grey County and region. International students bring cultural enrichment and contribute their skills and experience on and off campus. Over the past five years, the number of international students studying at Owen Sound campus has been steadily increasing. This increase is a result of complex push and pull factors, that bring together a growing demand for international education, federal immigration policy and provincial labour force development strategies. This report explores the confluence of these policies and strategies, and the opportunities and challenges for international students, at the Owen Sound campus and the region. The case study builds an understanding of the structure of the college programs in which the students are enrolled, the economic and social context of the community and the political and regulatory controls related to international students' visas, work permits and immigration pathways.

The Making Grey Bruce Home for International Talents project was initiated by Welcoming Communities Grey Bruce, Georgian College– Owen Sound, Grey Bruce Local Immigration Partnership and Grey County. The project received short-term pilot project funding from the Ontario Ministry of Agriculture, Food and Rural Affairs under the Rural Economic Development Program. A steering committee and community partners supported the project through providing technical support, recruitment and conducting interviews.

Executive Summary (Continued)

Special thanks are extended to members of the steering committee:

Lisa Taylor – Executive Director, Owen Sound Campus, Georgian College
Stephanie Barry – Director, International Education, Georgian College Barrie
Kelly Watson – Manager, International Education, Georgian College Barrie
Azar Azad – Board Member, Welcoming Communities Grey Bruce
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The pilot project had two objectives, first to understand what resources and services international students need to support their settlement and integration into the community. Second, to understand the opportunities and challenges international students have finding in-program employment (co-op, work placement or practicum), part-time and post-graduation employment in the region. Two reports have been produced to present the findings:

- **Making Grey Bruce Home for International Talent: An evaluation of resources and services for international students at Georgian College Owen Sound campus**
- **Making Grey Bruce Home for International Talent: A Case Study Analysis of Opportunities and Challenges for Power Engineering Technology and Practical Nursing Students in the Grey Bruce Region**

A multi-methods data collection approach was used, reviewing web sites, policy documents, academic and industry reports, and by conducting key informant interviews with international students, Georgian College staff and regional employers.

This case study provides insight into global education, immigration and rural development. Federal and provincial government education, immigration and economic policies are pushing colleges and universities across Canada to attract more international students to support post secondary institutions, build a pool of Canadian trained applicants for permanent residency and strengthen the country's local, provincial and national economy. For the project partners, this case study the potential of retaining international student graduates, to support the long-term

Executive Summary (Continued)

sustainability of the region, by encouraging settlement and employment in the region. The following report first details the political and economic context of international student recruitment, explaining the various push and pull factors that influence the path students take upon arriving at the Owen Sound campus to pursue their studies. Secondly, the story continues, by zooming in on two specific programs of study, which currently have the highest enrollment of international students at the Owen Sound campus – Power Engineering Technology (PET) and Practical Nursing (PN). Understanding the structure of these two programs, coupled with an analysis of the students' experiences in the program, provide an important answer to the question is it possible for students to successfully find career advancing employment in the region?

Developing a deeper understanding of the opportunities and challenges for international students to find career advancing employment in the region, allows for a more accurate assessment of the potential of retaining graduates. The findings of the case study analysis of the Power Engineering Technology and the Practical Nursing program, highlights how the structure of the program and profession, can create unforeseen challenges for students to complete experiential training and find employment in the region. The case study also highlights the importance of building the capacity of regional employers, to support the recruitment of international students before they complete their program and make plans to leave the region.

The greatest consideration, for the retention of international students in the region, after graduation is for the college and community to be thoughtful about the unique context in which international students live and study. For international students, factors such as timing, location, cost and immigration regulations impact their studies and their quality of life.

1. Project Overview

The goal of the research was to understand the opportunities available to students and the challenges experienced during their programs of study, to find employment (such as part-time work and co-op or work placements or employment after graduation), and to build social capital in the community and college. The following questions guided the data collection.

1) What opportunities and barriers exist for international students to complete their program of study, gain meaningful employment, develop a sense of belonging and community whilst studying at the Owen Sound campus?

2) What resources and partnerships are needed in Grey and Bruce Counties to support International Students living and studying at the Owen Sound campus?

3) What career advancing employment opportunities are available in Grey and Bruce Counties for international students?

A multi-methods data collection approach was used, reviewing web sites, policy documents, academic and industry reports, and by conducting key informant interviews with international students, Georgian College staff and regional employers. Data for the case study was collected from federal and provincial policy, strategic planning documents and press releases available from the Government of Canada and the Government of Ontario web sites. Specific immigration information related to study visas, co-op and graduate work visas, and pathways to permanent residency was sourced on the Immigration, Refugee and Citizenship web site. Regional labour market data was extracted from the Government of Canada LMI Explore web site and reports from the Four County Labour Market Planning Board. Existing research and analysis of trends and experiences of international students was sourced from reputable research institutes such as the Canadian Bureau of International Education and peer reviewed academic research publications. Information about Georgian College's strategic internationalization and recruitment of students and settlement services was found on the college web site and was gained from discussions with Georgian College staff. Details about each program of study was provided on the Georgian College web site and was cross referenced with key informant interviews with Georgian College program coordinators and staff.

Recruitment of international students and employers, for key informant interviews was done via email and postings on the college student portal. Interviews were conducted between February 26 to March 31, 2021. In total 27 key informant interviews were conducted over email, telephone or using online video calling.

1. Project Overview (Cont.)

Table 1: Key Informant Interviews

Key Informant Group	Number of Interviews
International Student Interviews	9
Employer Interviews	5
Georgian College Staff	13
TOTAL	27

International Students were asked questions under three themes: 1) experiences at Georgian College; 2) experiences living in the region; and 3) employment and career expectations. As will be explained further below, employer interviews were conducted with employers in the health sector who may or may not have experience recruiting international students or graduates from the Georgian College Practical Nursing (PN) program. The goal of these interviews was to gain a greater understanding of the type of supports for students or employers needed to help retain PN graduates in the region. Lastly, Georgian College staff were contacted to provide information and insights related to resources and services to international students and to assist in identifying gaps and recommendations.

A series of risk factors impacted the originally planned implementation of the pilot project. First, the pilot project funding was for only four months. Initially a project coordinator was hired who was to engage with students over the term break in December 2020. However, an initial situation analysis identified that Georgian College research policy required all human subject research in which Georgian College is a partner or that recruits Georgian students or staff using college resources must be approved by both the Georgian College Research and Innovation department and the Georgian College Research Ethics Board (REB) to apply for permission to conduct human subject research. Preparation and management of the REB application and approval process significantly delayed the recruiting interview participants. Final approval to commence participant recruitment was not gained until February 16, 2021.

1. Project Overview (Cont.)

Secondly, in early February, the project coordinator left the project to pursue full-time employment in Toronto at which time Dr. Heisler assumed responsibility for the completing the research, analysis and report writing. Thirdly, during the project the province went into a six-week province wide stay-at-home order due to the COVID-19 pandemic. This created a series of restrictions on movement and delayed the beginning of the winter semester at Georgian College. Classes were restricted to online learning where possible and access to campus was limited to laboratory learning.

The following case study first presents a policy and program review to understand the push and pull factors related to international education and immigration. This multi-jurisdictional analysis is important for framing why there has been an increase in international students studying at the Owen Sound campus. Second, profiles of the Power Engineering Technology and Registered Nursing programs are presented exploring international student experiences and expectations of their programs of study, employment and immigration. In-program and graduate employment opportunities and challenges are discussed, by integrating the results of interviews with students, Georgian staff, and regional employers. The case study concludes with a discussion of what has been learned from the research.

2. International Students, Immigration & Economic Development

The goal of this contextual review is to provide a strong foundation for understanding why international students are coming to Canada to study, what federal and provincial strategies are facilitating the retention of international talent in Ontario and Canada, and what efforts are underway in the region to support the success of newcomers.

Colleges and universities across Canada attract thousands of international students every year. In 2020, Project Atlas (www.iie.org), a collaborative global research initiative, reported over half a million international students studying at Canadian post-secondary institutions. Many international students entering Canada on study permits have the intention to remain in Canada as permanent residents. Having a rural college campus in the region puts Grey and Bruce Counties in a very advantageous position, as the college brings groups of young people at the beginning their careers into the region. If this talent can be nurtured the benefits to the region will go beyond filling labour shortages, it will bring population renewal, social, cultural and political revitalization.

Central to the success of retention policies, is first attracting foreign students to study at Canadian schools. Attracting foreign talent is a highly competitive market. Canada competes with countries such as the United States, the United Kingdom, Australia, and France. The Canadian Bureau of International Education (CBIE) has conducted valuable research to advance Canadian international education. In 2018, CBIE published a report discussing the push and pull factors that have contributed to the increase in international student enrollment in Canada between 2014–2017. Factors pushing international students to choose to study in Canada include a decline in acceptance rates and changes to foreign policy in the United States and the United Kingdom and a lack of stability in post secondary opportunities and employment prospects in their home countries. Factors that pull students to Canada include the positive perception of Canadian culture as being welcoming and safe, the quality, and affordability of post secondary education (Canadian Bureau for International Education, 2018)

Immigration policy in Canada focuses attention on the retention of international students and recent graduates to support short and long-term economic growth. Federal government strategy has three key objectives: (1) to encourage Canadian students to study and work abroad; (2) diversify the countries from which international students come to Canada – field of study, level of study and location of study; and (3) increase Canadian education institutions to export services and explore new opportunities abroad (Government of Canada, 2019). Similarly, the objectives of the Government of Ontario strategy are to: (1) create global citizens through enhanced international experiences for Canadian students; (2) contribute to Ontario's communities and economies by promoting "balanced international growth across the province"; and (3) support the retention of international talent.

2. International Students, Immigration & Economic Development (Cont.)

These policies have presented significant opportunities for international students and recent graduates already in Canada. Since the onset of the COVID 19 pandemic, the Government of Canada has been rapidly shifting immigration regulations to make it easier for students and recent graduates already in Canada, to stay in the country and work towards applications for permanent residency. In January 2021, Immigration, Refugees and Citizenship Canada, announced a drastic cut in the number of points needed to qualify for permanent residency for Experience Class Express Entry program and expanded the graduate work visas for students who may be completing their program from a Canadian post-secondary institution online (Levitz, 2021). International graduates already in Canada or studying online at a Canadian post secondary institution are a valuable human resource. Students receive Canadian training, have proficiency in English or French and when in residence studying in Canada, learn about Canadian social norms and values.

Attracting and retaining international talent to stabilize Canada's population growth and economic development, presents unique opportunities and challenges for rural campuses and rural communities. Regional organizations have undertaken a tremendous amount of work over the past five years conducting research and advocating for more resources to support newcomers in the communities of the Grey and Bruce counties.

In 2018, a *Newcomer Integration in Rural Ontario Forum* was hosted by Grey County, the Four County Labour Market Planning Board and the Rural Ontario Institute exploring newcomer integration in rural Ontario. The forum brought together stakeholders from four rural counties and experts in economic development, housing, and rural development to discuss opportunities and challenges facing newcomers. Attracting and retaining international students to become integrated into the regional labour force was identified as an important collaboration between post secondary institutions and businesses. Creating a "virtuous cycle", a positive experience for students at the college, at work and in the community was recommended to encourage international students to stay in the region (Four County Labour Market Planning Board, Grey County, Rural Ontario Institute, 2018).

2. International Students, Immigration & Economic Development (Cont.)

There has been concerted investment by government and non-government organizations in the region to build the capacity of existing agencies and create new services to support the settlement of vulnerable newcomers and refugees. In 2018, Welcoming Communities Grey Bruce and the United Way Bruce Grey, undertook initiatives to develop training toolkits for service agencies to help build capacity of support organizations in the region. Outcomes such as the development of the Newcomer Information Bruce Grey online database (www.newcomersbrucegrey.ca) a community information and support directory, and the opening of the Grey Bruce Settlement Services in collaboration with YMCA of Owen Sound Grey Bruce have strengthened the service infrastructure of the region.

This momentum continued with the Rural Pathways for Newcomer Women project in 2019/2020. The Success for Everyone: Rural Pathways to Employment for Newcomer Women in Grey Bruce Toolkit developed by the project offers many insights and practical methods of how to meet the needs of marginalized international newcomers in the region. Although the project focused on visible minority newcomer women many of the barriers to services and settlement challenges are reflected in the experiences of international students, such as access to social integration, language barriers and the lack of recognition of non-Canadian skills, experience, and qualifications (United Way Bruce Grey and Welcoming Communities Grey Bruce, 2021). In addition, the project identified cultural and social barriers to employment and engaged regional employers and employment services providers to discuss issues such as barriers to entry into the Canadian workforce, resources available to have non-Canadian skills, experience and qualifications recognized, legal work requirements for immigrants and strategies for supporting newcomers in the workplace.

2. International Students, Immigration & Economic Development (Cont.)

In 2020, Grey County received funding from Immigration, Refugees and Citizenship Canada to develop a Local Immigration Partnership (LIP) in the region. The network of LIPs across Canada “seek to make host communities more welcoming by engaging a range of stakeholders and enhancing collaboration at the community-level to improve settlement and integration of newcomers” (Grey Bruce Local Immigration Partnership, 2020). The LIP brings together stakeholders across Grey and Bruce Counties to share resources and best practices, provide opportunities to leverage existing resources and address gaps in the region.

These federal, provincial, and regional initiatives demonstrate a growing investment to attract and retain international students. The foundation has been set by regional organizations, to identify what type of supports newcomers need to help breakdown barriers that make it difficult for newcomers to integrate into the community and find employment in the region. Working together, organizations can help international students identify opportunities and overcome challenges to support graduate employment in the region.

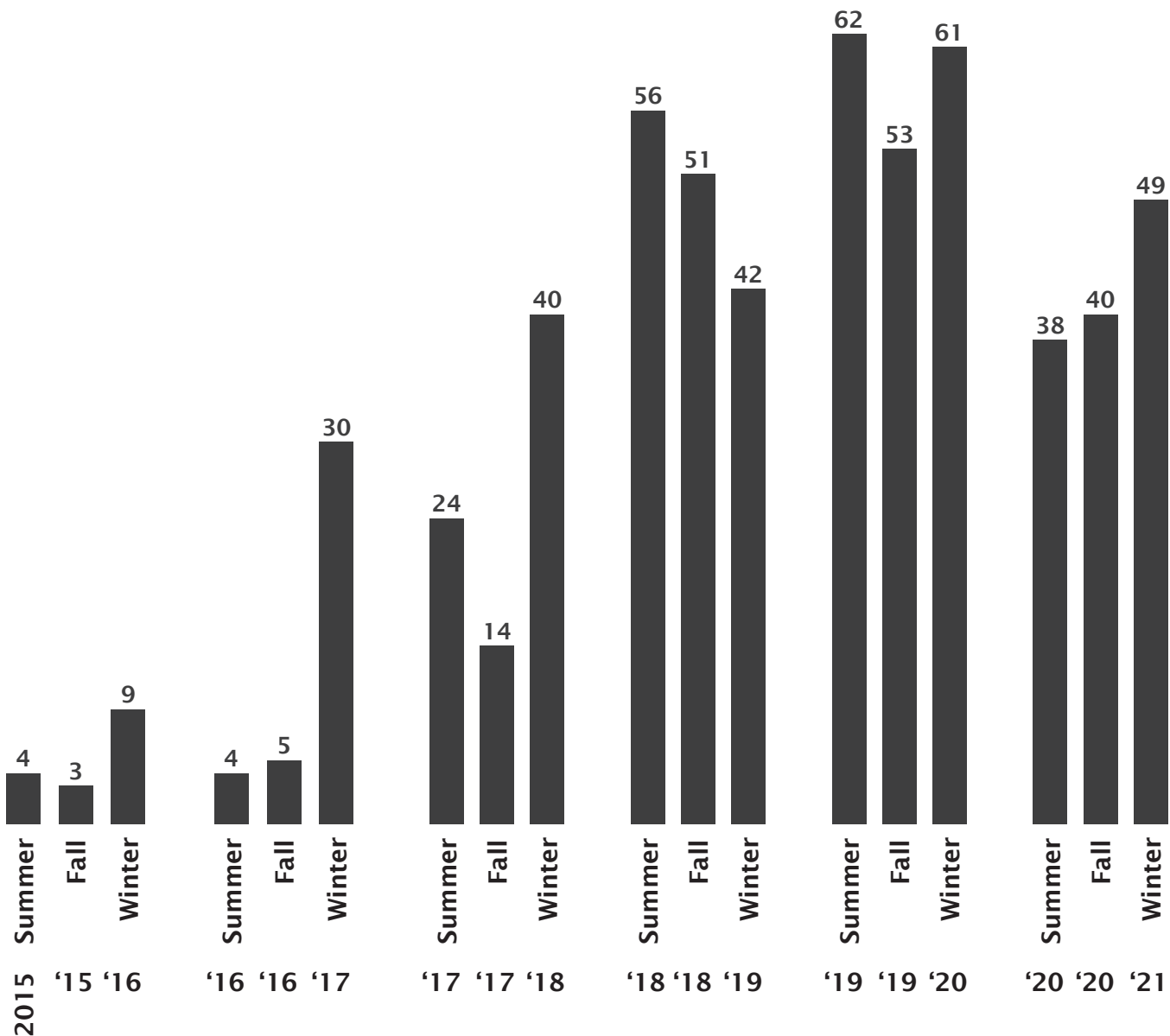
3. International Students Georgian College – Owen Sound

Georgian College currently has over 4500 international students enrolled in programs delivered at seven campuses. The Owen Sound campus has experienced a significant increase in international student enrollment over the past five years. In 2015, there were only 9 international students by 2019 there were over 60 (Figure 1). The Segal International Centre (SIC) at the Georgian College Barrie campus works with international students from recruitment to settlement and provides students with support for health insurance, study permits and visa, Georgian services, and resources (Georgian College, 2021).

To further explore the potential of retaining these students in the region after graduation, a detailed profile of the two programs has been analysed to identify in-program and graduate employment opportunities in the region– Power Engineering Technology and Practical Nursing. These programs currently have the highest enrollment of international students at the Owen Sound campus and provide a detailed examination of the potential pathways for employment for students and graduates in the region.

3. International Students Georgian College – Owen Sound (Cont.)

Figure 1: Change in international Student Enrollment Owen Sound Campus 2015 - 2021*

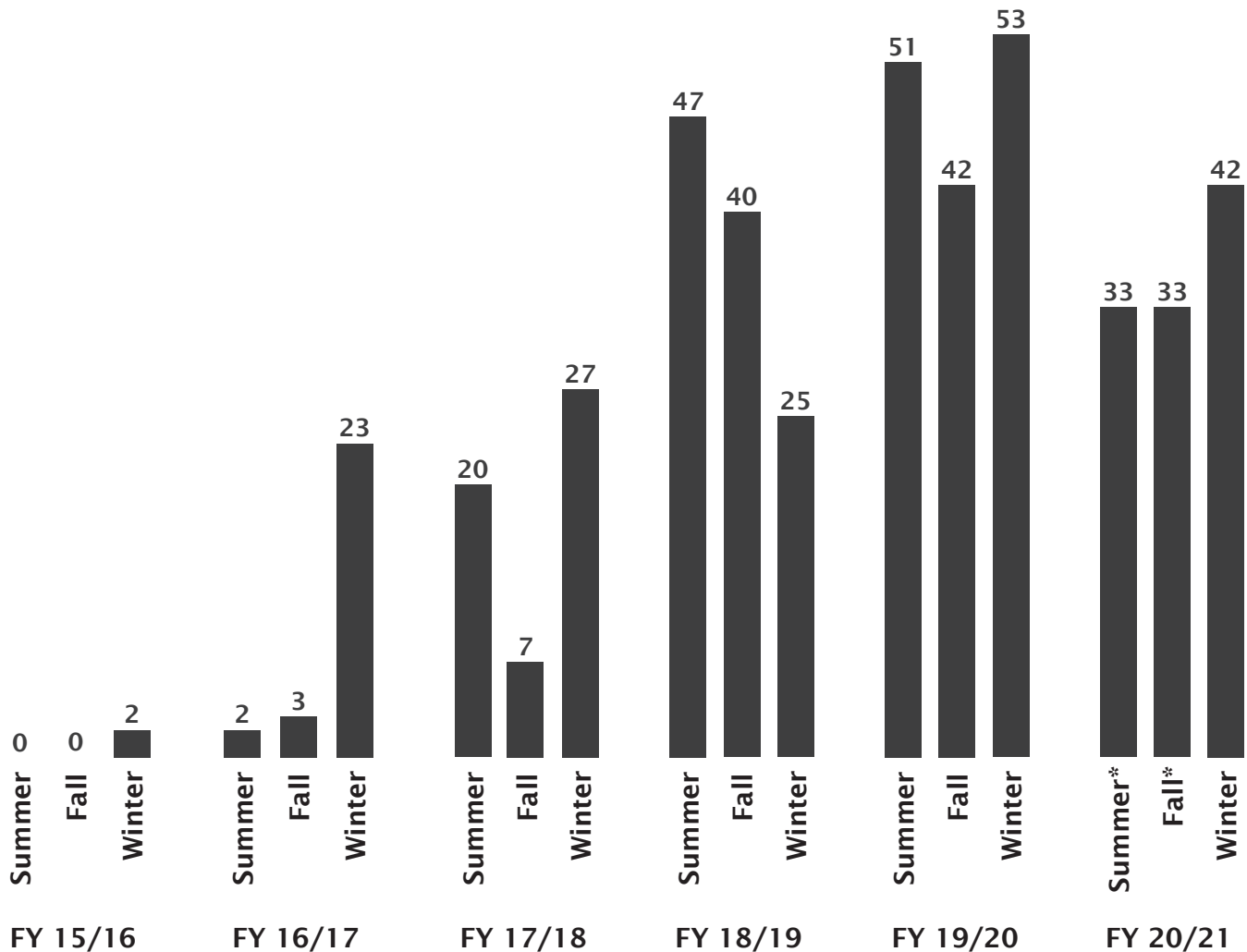


*Based on the change of Winter semester enrollment in 2016 and 2021, students are enrolled in each semester. The graph represents the total number of international students enrolled in each semester Summer – May to August, Fall – September to December and Winter – January to April. Please note the Summer 2020 intake of new students was suspended due to the Covid-19 Pandemic.

4. Profile: Power Engineering Technology

The Power Engineering Technology (PET) program is a five semester, full-time Ontario College Advanced Diploma, Co-op program offered exclusively at the Owen Sound campus. For the 2020/2021 academic year, students can begin the program in the Fall, Winter or Summer semester. There are few PET programs available in southern Ontario and the PET is only offered at Georgian's Owen Sound campus.

Figure 2: Power Engineering International Student Enrollments at the Owen Sound Campus



* The Summer and Fall 2020 intakes were restricted due to the COVID-19 pandemic

4. Profile: Power Engineering Technology (Cont.)

Appendix A outlines the program requirements and provides a description of the type of work and positions often held by Power Engineering Technology graduates.

Students complete course and laboratory training, and one co-op work term and one field work placement. Co-op work terms generally occur after the completion of the second semester of enrollment and the field placement occurs in the fifth semester. The PET program is approved by the Technical Standards & Safety Authority (TSSA) and graduates are qualified to write the TSSA examination to become 4th or 3rd class Power Operating Engineers. Students must work sequentially work through the course requirements and gain work experience hours through the co-op placements to qualify to write TSSA exams. The final work placement hours provide the students with the supervised work experience hours that make them eligible to write the final TSSA examinations resulting in earning a 4th or 3rd class license. Students may graduate from the program without completing their TSSA hours or exams, but they will not be licensed to work as a power engineer in Ontario.

According to the Government of Canada Labour Market Information System, there are approximately 1,180 people were working as power engineers and power systems operators (NOC 9241) in the region, primarily in the utilities sector (Government of Canada, 2021). The employment outlook for power engineers and power systems engineers was predicted as fair between 2019–2021 in the region and in Ontario. Labour market data analysis anticipates there will be a moderate number of new positions created, with limited new positions becoming available due to retirements.

This outlook is an improvement when compared to the analysis presented in the In-demand Skilled Trades Report (2019), published by the Four Counties Labour Market Board, a government funded labour market research organization serving Bruce, Grey, Huron and Perth Counties (Four Counties Labour Market Board, 2019). When analysing the change in labour market demand for Power Engineers and Power System Engineers between 2011–2016, they report –18.5% decline in the change of employment and a low unemployment rate 1.5%. This suggests that there was limited growth in opportunities for jobs under this category, however those looking for work were employed.

4. Profile: Power Engineering Technology (Cont.)

The highest demand for power engineers and power systems operators will be for nuclear power station equipment mechanics, because of the Bruce Power Nuclear Generating Station located in Bruce County. The highly regulated nature of the nuclear power industry introduces complications for international students to access these positions as students and as recent graduates. Interviews with Georgian staff and students indicated that many international students coming into the PET program expect they will be able to do their co-op terms at Bruce Power but very few have been hired. Structural barriers in both the Georgian PET program and Bruce Power hiring procedures make it difficult for international students to participate in the co-op placements and in the entry level recruitment program. For example, the nuclear power industry is federally regulated, and control room operators require special licensing through the Canadian Nuclear Power Safety Commission which is outside of the TSSA licensing program. Students who seek to complete their co-op or final work placement at Bruce Power will not gain qualifying hours to move forward in the TSSA examinations. In this scenario, a student will gain experience and training in nuclear power, which may aid in an application to the Nuclear Operators Training Program, but they will not qualify to work in other sectors as a licensed power engineer.

In 2016, Bruce Power announced a partnership with four Ontario colleges “to ensure a steady flow of qualified candidates for the company’s workforce” (Bruce Power, 2016) . The Georgian College PET program was listed as a program in which students would be eligible to receive nuclear power certification under the Nuclear Uniform Curriculum Program. This online program was to be delivered by the Energy Providers Coalition for Education, an industry training consortium in the United States. Domestic and international students enrolled in the power engineering technology program with a GPA over 80% were to be eligible to enroll in this online post graduate certificate, which would give them the training needed to be prime candidates for the Nuclear Operating Training Program at Bruce Power. Unfortunately, the partnership did not move forward, interviews indicated the initiative lost its champions at both the college and Bruce Power and the training arrangement with the Energy Providers Coalition for Education expired.

4.1. Opportunities & Challenges for Power Engineering Technology Students

As described above the PET program is a structured sequential program, meaning students must follow a specific schedule of courses and practical training to move onto the next the step. The structure and timing of this requirement is significantly important for international students because of the time restrictions of student visas. Students wishing to achieve their 3rd or 4th class certification from TSSA must secure their co-op positions after their second semesters to ensure they complete the necessary experience to be able to move forward in the program. The COVID-19 pandemic has made it particularly difficult for international students to stay on schedule and gain hands on experience.

The Co-op Education and Career Services department at Georgian works with the students to help them prepare for the recruitment process. The co-op placement consultants help students prepare their resumes, assist with placement searches and interview preparation. Unfortunately, at the time of writing there were few companies in the region offering opportunities for students to gain the experience needed to qualify for the TSSA power operator exams. Students will often temporarily relocate outside of the region, to a larger urban area to gain their co-op or work placement hours. This is an understandable decision and presents significant challenge to retain the power engineering students after graduation.

Historically the Tenneco Canada manufacturing plant offered local co-op and work placements for power engineering students, however the plant closed in June 2020. Remaining possible placements in the region are in Collingwood. This presents a challenge for international students as most students, especially those early on in their program, do not have a drivers license or a vehicle. A second challenge limiting access to co-op placements is some positions are limited to Canadian or permanent resident students. Employers can qualify for student wage subsidy programs that provide up to 70% of a wage paid to a co-op student. This federal government program cannot be used to pay the wage of an international student (Government of Canada, 2021).

4.1. Opportunities & Challenges for Power Engineering Technology Students (Cont.)

Interviews with Georgian College staff and international students reflect three challenges international students face when finding co-op placements.

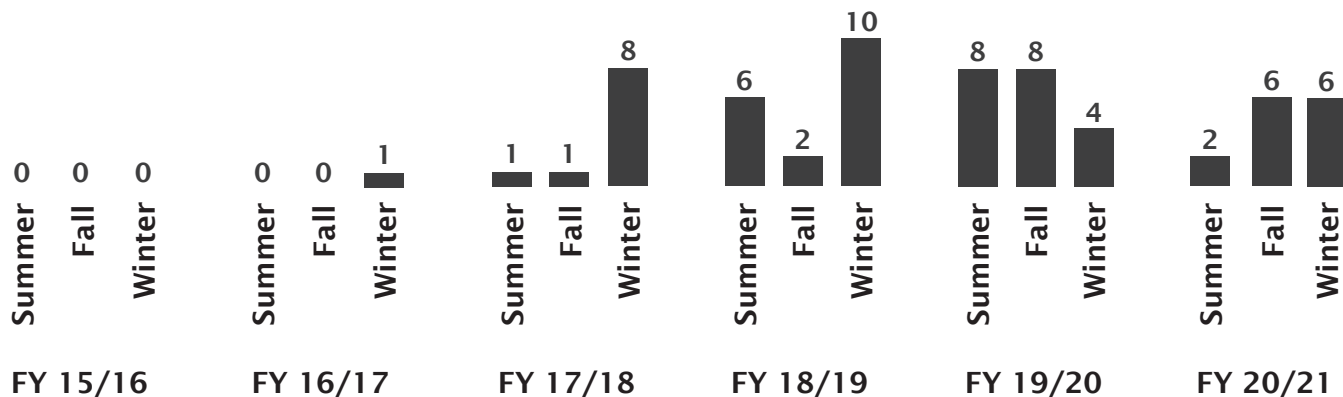
- 1. Students must gain their steam hours at a TSSA licensed facility, there are few facilities in the region, currently there are no positions available in Owen Sound.**
- 2. Transportation is the most discussed issue facing international students in relation to fulfilling co-op and work placements elsewhere in Grey or Bruce County. It is also challenging to depend on local and regional public transportation for shift work.**
- 3. Timing of co-op work term positions is critical for international students. Students must have their co-op work term secured going into the third semester and depending on which semester the students started the program the timing of the third semester varies. Many businesses recruit co-op students for summer semester positions when students traditionally are not taking course work, however this schedule may not work for an international student's academic schedule.**

The Power Engineering Technology program is a high quality, in-demand program, that is attracting a growing number of international students. Although there are currently limited employment opportunities for power engineer students and graduates in their field in the region, the continuing success of the college to recruit international students into the program, presents a positive opportunity for the campus and the community. Investment attraction may provide greater regional employment opportunities for PET graduates, in the meantime, focusing on the quality of the program and supporting student success may have a long-term impact for the college and the region. Many students said they would consider building their lives here if they could find career advancing employment in their field of study.

5. Program Profile: Practical Nursing

Practical Nursing (PN) has the second highest number of international student enrollment at the Owen Sound campus. Figure 4 shows the number of international students enrolled per semester over the past five years. Although there are considerably fewer international students in the PN program as compared to the PET program, the Owen Sound campus is expanding their healthcare programming. In 2022, a new Bachelor of Science in Nursing (BScN) program is planned to begin at the Owen Sound campus as well as expanding nursing graduate certificates, which will provide ways for internationally trained nurses to gain Ontario credentials. In addition, healthcare office administration and personal support worker programs to develop a locally trained graduates with practical work experience.

Figure 4: Practical Nursing International Student Enrollments at the Owen Sound Campus (Fiscal Years 2015 / 2016 / to 2020 / 2021)



The practical nursing program is a five-semester full or part-time Ontario College Diploma, offered at the Barrie, Orangeville and Owen Sound campuses. Students can begin the program at the Owen Sound campus in the Fall or Winter semester. APPENDIX B details the structure of the program and an occupation profile.

In addition to the required courses and laboratory work, students must complete five clinical placements (one per semester). PN work experience practicum placements are arranged by a program placement coordinator. These practicums are arranged with the program coordinator to provide the students with practical learning as they progress through the program curriculum. Completion of these unpaid placements are a requirement to graduate from the program. Graduates from the program must write the Canadian Practical Nurse Registration Examination, administered by the College of Nurses of Ontario. The exam is written after the completion of the PN program. Students may work as personal support workers (PSW) whilst training to be a PN. There is high demand for PSWs throughout the region.

5.1. Opportunities and Challenges for Practical Nursing Students

Healthcare workers are in high demand in the Grey and Bruce Counties. In the Four County Labour Market Planning Board, analysis of five years of healthcare employer survey data revealed an ongoing struggle to fill registered nurse and registered practical nurse positions in the region (Four County Labour Market Planning Board, 2020).

Georgian staff were uncertain of the number of graduates from the program that remain in the region. The college does not track where students find employment after graduation, however, through a community connection, three former international students were recruited for interviews. Two of the three students were no longer living in the region, and one student who remained in the region was working as an RPN. The graduates who left the region, stayed in Canada but moved to larger urban areas where they could be closer to family or closer to people who share their first language or culture.

To learn more about the employment opportunities and challenges for practical nursing students, key informant interviews were conducted with administrators from five health sector facilities in the region. Interview participants represented a cross section of healthcare facilities in the region such as government owned long-term care facilities, privately owned long-term care facilities or retirement homes and hospitals or healthcare centres. Participants discussed the challenges of recruiting and retaining staff, the changing needs of employees and suggestions of types of supports for international students or newcomers that would support their success in the workplace. Most employers were experienced with working with newcomers or foreign trained staff, either at their current location or past experiences at other locations. They reflected on how challenging it must be for students and staff to be culturally isolated and cited this as being the biggest challenge they believe would hinder retaining students in the region.

5.1. Opportunities and Challenges for Practical Nursing Students (Cont.)

Employers were very interested in opening up channels of communication with the college to develop strategies to support international students. Regional employers are keen to recruit graduates from the program and work with Georgian College to create opportunities for students and graduates. For example, when learning that international students can work up to 20 hrs/week whilst in school, one employer suggested how hiring students as part-time PSWs, might be an effective retention strategy. One employer reflected on how this type of human resource growth and retention is a new vision in long-term care. Traditionally, predominantly women working in long term care were viewed as part-time household second income earners and not wanting to work full-time hours. Today, employers need to adapt to the changing needs of their employees, by offering more full-time hours and opportunities for growth and development. Additionally, as the region becomes more ethnically diverse, concentrated effort is needed to breakdown harmful stereotypes and systems that undervalue foreign women working in care professions. Most interviewed, discussed their past experiences of working with newcomers or temporary foreign workers, and observed that there may be a need for extra support or training for employers and existing staff to help breakdown barriers that may create an unwelcoming environment for international students in the workplace. Support for diversity training was suggested to help build more welcoming environments, with coworkers and residents at care homes.

Graduates of the PN program have many opportunities for employment in Grey and Bruce Counties. International students have the opportunity to work at different facilities throughout their program, gaining valuable experiential training. Interviews with employers and student highlight that the most effective strategy to retain PN graduates in the region would begin recruitment early, before students complete the program. Reaching out to PN students to work part-time during their studies, helping students learn more about Canadian workplace practices and communicating future opportunities before graduation is central to retaining students in the region.

6. Conclusion

Immigration policy in Canada has recently focused attention on the retention of international students and recent graduates to support short and long-term economic growth. Understanding the context of international education, immigration and economic development is important for framing how to make Grey and Bruce Counties home for international talents. The expansion of international enrollment at Georgian College is a part of a much larger national and provincial economic development and immigration strategy. For a rural region, this steady stream of newcomers arriving to study at the Owen Sound campus is a tremendous opportunity to promote the region as a welcoming and safe place to live, study and work.

Developing a deeper understanding of the opportunities and challenges for international students to find career advancing employment in the region, allows for a more accurate assessment of the potential of retaining graduates. The findings of the case study analysis of the Power Engineering Technology and the Practical Nursing program, highlights how the structure of the program and profession, can create unforeseen challenges for students to complete experiential training and find employment in the region. The case study also highlights the importance of building the capacity of regional employers, to support the recruitment of international students before they complete their program and make plans to leave the region. This report highlights key findings:

Retaining Power Engineering Technology Graduates

- **The Power Engineering program attracts a high number of international students because the program is offered at limited colleges in southern Ontario and the opportunity to start the program in the Fall, Winter or Spring semester was very important for the current students.**
- **The work experience component of the power engineering program is very attractive for students who wish to gain hands on experience and seek future employment in Canada after graduation.**
- **Currently, there are few work experience opportunities for power engineering students in the Owen Sound area or Grey County. This leads students to leave the region and go to larger urban centres to complete their required co-op and work placement hours.**
- **There is room for growth in creating more labour market demand in the region through new industrial development and building a program partnership with Bruce Power to expand the power engineering program to include a post-graduate certificate in Nuclear Power Technology.**

6. Conclusion (Cont.)

Retaining Practical Nursing Graduates

- **The Practical Nursing program attracts fewer international students but is an area of growth for the Owen Sound campus. Investment in the renovations of the health lab and the expansion of nursing programs may help draw more students to the program.**
- **Regional employers are keen to recruit graduates from this program and work with Georgian College to create opportunities for students and graduates.**
- **Employers may benefit from outreach services such as diversity training and direct recruitment events such as job fairs, to help encourage international graduates to stay in the region.**

The ongoing recruitment of international students to study at the Owen Sound campus is an undeniable opportunity for the community and college. International students live, study and work under unique circumstances, and these circumstances need to be understood and where challenges exist supported to find localized solutions to help facilitate their success. Although some barriers exist for career advancement in the region for specific programs, international students contribute to the college and community. As students engage with their fellow students at the college, work part-time and engage with people in the community, they are building the foundation for their life in Canada.

References (1 / 2)

Bruce Power. (2016, August 24). Bruce Power partners with Ontario colleges to secure steady workforce for future. Press Release. Retrieved from <https://www.newswire.ca/news-releases/bruce-power-partners-with-ontario-colleges-to-secure-steady-workforce-for-future-591177551.html>

Bruce Power. (2020). Economic Development and Innovation Initiative. Retrieved from Bruce Power: https://www.brucepower.com/become-a_supplier/economic-development_and-innovation-initiative/

Canadian Bureau for International Education. (2018). International Students in Canada. Ottawa: Canadian Bureau for International Education. Retrieved from <https://cbie.ca/what-we-do/research/library/>

Chen, J. (2017). Three Levels of Push-Pull Dynamics Among Chinese International Students' Decision to Study Abroad in the Canadian Context. *Journal of International Students*, 7(1), 113–135.

Four Counties Labour Market Board. (2019). Four Counties Labour Market Board. Retrieved from In-demand Skilled Trades Report: <https://www.planningboard.ca/wp-content/uploads/2020/03/In-demandskilledtrades-Mar24.pdf>

Four County Labour Market Planning Board. (2020). EmployerOne Retrospective on Healthcare. Retrieved from <https://www.planningboard.ca/wp-content/uploads/2021/02/EmployerOne-Retrospective-Healthcare-2020.pdf>

Four County Labour Market Planning Board. (2020). EmployerOne Sector Review Executive Summary. Four County Labour Market Planning Board. Retrieved from <https://www.planningboard.ca/wp-content/uploads/2021/03/EmployerOne-Retrospective-Executive-Summary-2020-FINAL.pdf>

Four County Labour Market Planning Board, Grey County, Rural Ontario Institute. (2018). Newcomer Integration in Rural Ontario: Learnings from the Regional Forum, December 2018 & Community Consultation. Rural Ontario Institute. Retrieved from <https://madeingrey.ca/grey-bruce-local-immigration-partnership>

Government of Canada. (2019). Building on Success: International Education Strategy. Ottawa: Government of Canada. Retrieved from <https://www.international.gc.ca/education/assets/pdfs/ies-sei/Building-on-Success-International-Education-Strategy-2019-2024.pdf>

References (2/2)

Government of Canada. (2021). Retrieved from Labour Market Information System: http://clmi_explore-icmt.ca

Government of Canada. (2021). Student Work Placement Program. Retrieved from Employment and Social Development Canada: <https://www.canada.ca/en/employment-social-development/programs/work-integrated-learning.html>

Grey Bruce Local Immigration Partnership. (2020). Retrieved from Made in Grey: <https://madeingrey.ca/grey-bruce-local-immigration-partnership>

Immigration, Refugees and Citizenship Canada. (2021, February 12). Government of Canada announces further measures to support international students. News release. Ottawa. Retrieved from <https://www.canada.ca/en/immigration-refugees-citizenship/news/2021/02/government-of-canada-announces-further-measures-to-support-international-students.html>

Levitz, S. (2021, January 8). New work permit being offered to keep more international students in Canada. The Globe and Mail. Toronto, Ontario: The Canadian Press.

Ministry of Advanced Education and Skills Development. (2018). Ontario's International Postsecondary Education Strategy 2018. Toronto: Government of Ontario. Retrieved from <http://www.tcu.gov.on.ca/pepg/consultations/maesd-international-pse-strategy-en-13f-spring2018.pdf>

Public Health Grey Bruce. (2021). Grey Bruce Health Stats. Retrieved from Public Health Grey Bruce: <https://www1.publichealthgreybruce.on.ca/healthstats/Who-We-Are/Older-Adults#OADependency>

United Way Bruce Grey and Welcoming Communities Grey Bruce. (2021). Success for Everyone: Rural Pathways to Employment for Newcome Women in Grey Bruce. Owen Sound: United Way Bruce Grey. Retrieved from <https://welcominggreybruce.ca/wp-content/uploads/2021/02/Success-for-Everyone-Rural-Pathways-Toolkit.pdf>

Yin, R. (2011). Applications of Case Study Research (3rd ed.). London: Sage.

Younglai, R. (2021, February 12). Immigration to Canada drops to lowest level since 1998. The Globe and Mail. Toronto, Ontario.

APPENDIX A

Georgian College Program - Power Engineering - Operating Engineer

Credential: Ontario College Advanced Diploma, Co-op

Delivery: Full-time

Work Integrated Learning: 1 Co-op Work Term & 1 Field Placement

Length: 5 Semesters, plus 1 work term

Duration: 2 years

In-take: Fall, Winter & Summer Semesters

Location: Owen Sound

Program Certification: The program follows the Standardized Power Engineers Examination Committee (SOPEEC) 4th and 3rd class syllabus and prepares students to write TSSA examinations required for both the 4th and 3rd Class Power (Operating) Engineer certifications.

Description

Students develop the skills and knowledge to operate high-energy processes found in power plants such as steam production and use, refrigeration, and gas compression. These processes are found in many industrial, commercial and institutional facilities to support manufacturing, food production, and electrical power generation, as well as to heat and cool buildings. Students learn to operate and maintain equipment such as high-pressure steam systems, boilers, turbines, compressors, chillers, pumps and condensers. In order to ensure power plant processes are operated safely and efficiently, students acquire strong foundation in equipment theory and the underlying science that explains how these machines work. Additionally, students benefit from experiential learning in an on-campus Technical Standards and Safety Authority (TSSA) registered power plant, a power plant simulator, and through co-op learning experiences.

Source: <http://cat.georgiancollege.ca/programs/pety/>

Labour Market Profile: Power engineers and power systems operators (NOC 9241)

Occupation Duties

- Operate and monitor computerized switchboards and auxiliary equipment in electrical control centres to control the distribution and to regulate the flow of electrical power in the transmission network
- Co-ordinate, schedule and direct generating station and substation power loads and line voltages to meet distribution demands during daily operations, system outages, repairs and importing or exporting of power
- Monitor and visually inspect station instruments, meters and alarms to ensure transmission voltages and line loadings are within prescribed limits and to detect equipment failure, line disturbances and outages
- Issue work and test permits to electrical and mechanical maintenance personnel, assist maintenance and technical personnel to locate and isolate system problems, and assist during routine system testing
- Complete and maintain station records, logs and reports.

Example Job Titles

- apprentice power dispatcher
- auxiliary plant operator
- building systems technician
- control room operator – electrical power systems
- distribution control operator – electrical power systems
- electrical power systems operator
- energy from waste plant operator
- load dispatcher apprentice – electrical power systems
- nuclear generating station field operator
- nuclear reactor operator – electrical power systems
- power dispatcher – generating station
- power engineer
- power plant operator
- power plant stationary engineer
- stationary engineer
- system controller – electrical power systems

Regional Wage (hourly):

- Low \$25.00
- Median \$46.00
- High \$62.50

APPENDIX B: Profile of Registered Practical Nursing

Georgian College Program – Practical Nursing

Credential: Ontario College Diploma

Delivery: Full-time & Part time

Work Integrated Learning: 5 Clinical Placement

Length: 5 Semesters

Duration: 2.5 Years

Effective: Fall & Winter

Location: Owen Sound, Barrie or Orangeville

Program Certification: The Practical Nursing program is currently approved (Category 1, the highest ranking) by the College of Nurses of Ontario. Current graduates of this program are eligible to apply for registration as Registered Practical Nurses in Ontario.

Description

Students experience high-quality, innovative nursing education both in the classroom and simulation laboratory settings. Engaging in a mix of individual and team learning activities, students focus on the lived experiences of individuals, families, groups and communities. Through our partnerships, clinical experiences in diverse healthcare settings are offered in all five semesters and allow students to integrate their knowledge into the care of clients across the lifespan. In order to provide quality practicum placements, students have the opportunity to be placed in a variety of agencies in the region. Source: <http://cat.georgiancollege.ca/programs/pnrs/>

Labour Market Profile: Licensed Practical Nurse NOC 3233 (Registered Practical Nurse in Ontario)

Occupation Duties

- Provide nursing services, within defined scope of practice, to patients based on patient assessment and care planning procedures
- Perform nursing interventions such as taking vital signs, applying aseptic techniques including sterile dressing, ensuring infection control, monitoring nutritional intake and conducting specimen collection
- Administer medication and observe and document therapeutic effects
- Provide pre-operative and post-operative personal and comfort care
- Monitor established respiratory therapy and intravenous therapy
- Monitor patients' progress, evaluate effectiveness of nursing interventions and consult with appropriate members of healthcare team
- Provide safety and health education to individuals and their families.

Example Job Titles

- graduate nursing assistant
- licensed practical nurse (L.P.N.)
- registered practical nurse (R.P.N) in Ontario
- operating room technician
- registered nursing assistant (R.N.A.)

Regional Wage (hourly):

- Low \$20.00
- Median \$27.00
- High \$32.00