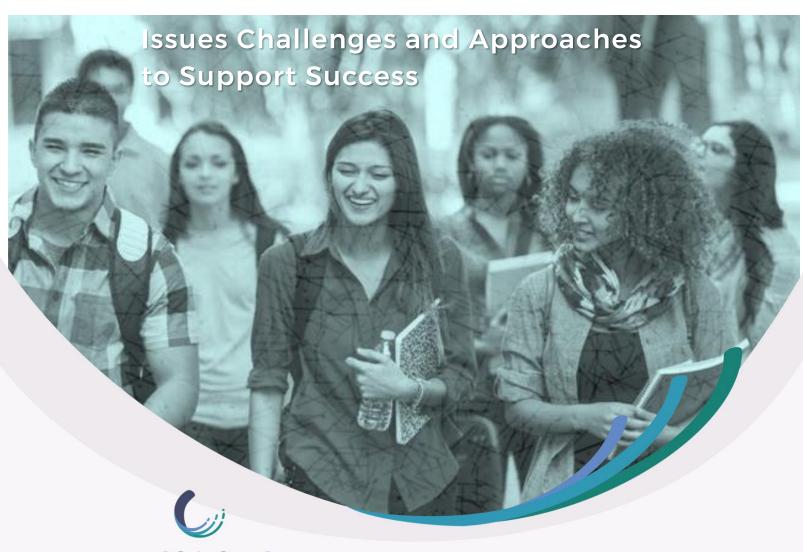
Transitioning from Public School to Post-Secondary Education in the Atlantic Region



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EXECUTIVE SUMMARY

The Council of Atlantic Ministers of Education and Training (CAMET) engaged the Canadian Career Development Foundation to work with CAMET's Post-secondary Transitions Committee to conduct targeted research on the role of post-secondary education (PSE) in supporting school-to-PSE transitions. The goal of this project was to deepen the overall understanding of the challenges faced by students undertaking the transition to PSE and to distil evidence-based recommendations for supporting students in persisting to PSE graduation.

The research for the project had three components:

- An Environmental Scan of the state of public-to-PSE transitions in Atlantic Canada. The Scan examined policy, programming and provision for youth and young adults in the region, reviewing issues of access and retention. It also examined national and international promising practices in supporting school-to-PSE transitions.
- A survey of over 1,000 youth and young adults focused on their pathways after high school graduation. The survey focused on six student pathways: those who went directly to PSE after high school, those who took at least a year off before attending PSE, those who did not go to PSE, those who switched PSE programs, those who left PSE before graduation and those who persisted through to PSE graduation.
- Interviews with administrators, student support and career centre staff at 23 Atlantic postsecondary institutions. These interviews focused on the institutions' current programs and activities intended to support students at the pre-entry, induction and attending phases of transitioning to PSE.

The research showed that post-secondary institutions across the Atlantic region are aware of key transition challenges and are working very hard to strengthen student transitions from public-to-PSE. There is a solid foundation from which to build. The research conducted for this project informed the development of the following six recommendations:

Develop an Evidence Base

Investment in programming and services to support transition is significant across the Atlantic region. Investment in evaluating the impact of these programs and services was found to be limited. To optimize transition programming efforts, post-secondary institutions and/or governments could consider:

- Developing a culture of evaluation to contribute to an evidence-based inventory of transition programs.
- Encouraging current efforts to track and mine student data to include indicators that relate directly to the use and impact of student supports at pre-entry, induction and attending phases of transition.
- Making the collection of impact data a mandatory component of innovation program funding.
- Encouraging partnership among PSEs and between PSEs and public schools to drive innovation, track impact longitudinally and understanding of what works.

2. Build on Promising Practice

A number of promising practices were found in the Scan and interviews, representing a strong foundation from which to build. To optimize efforts to build on existing promising practices, post-secondary institutions and/or governments could consider:

Conducting further research on the "cultural-capital" indicators and other early indicators that support developing a "culture of going to PSE" among underrepresented groups.



- Continuing to provide and develop early-alert programming for at-risk students and ensure that services are promoted and available to students throughout their PSE.
- Promoting existing services to students and families at all stages of transition (pre-entry, induction and attending) so that they are well aware of the services that exist.
- Asset mapping community services/resources that can support disadvantaged students in attending and persisting in PSE and develop partnerships between post-secondary institution and those identified community services to provide more comprehensive student supports.

3. Promote the Value of PSE

The value of PSE has been substantiated in numerous studies and yet many young people do not recognize its return on investment. This was illustrated through the survey as 30% of the respondents said they were not sure that PSE was "worth it". It is vital that Atlantic youth and young adults understand the potential contributions of PSE. To promote this, governments and/or post-secondary institutions could consider:

- Developing an awareness strategy targeted to elementary and high school students, their families and communities as to the value of PSE to accessing future career options and to the economic growth of the Atlantic region.
- Providing more exposure opportunities to students from an early age as to the kinds of PSE available in the Atlantic region and visits to post-secondary institutions.
- Providing more work-integrated learning or career exposure opportunities that make the link between career pathways and PSE.

4. Mobilize a Vital Transition Tool: Career Education and Career Services

All components of the research highlighted herein found that there is an underutilization of career education and career services across the Atlantic Provinces. Research shows the significant positive impact that quality career education and career services have on PSE entry, progression and graduation. To optimize the use of career education and development, governments and/or PSE institutions could consider:

- Supporting training of teachers, guidance counsellors, PSE instructors and staff to build basic career development competencies to ensure capacity within the system to support learners through successful transitions.
- Using career education and development to help all students to see the connections between their learning and their preferred career futures.
- Helping students see the value of doing career development check-ups and check-ins throughout their learning journey to ensure their learning continues to be personally relevant and leading them to a solid and personally valued career future.
- Expanding and adequately resourcing career services in PSE so that these services can
 proactively reach out to students at pre-entry, induction and attending stages of their
 transition.
- Considering partnerships between PSE institutions and public schools as a way to improve career education and career services, allowing better student access to PSE career services and staff.
- Helping students to make career sense of LMI, whether through career education courses, career service outreach or available career development programming, resources and tools so that students transition plans are grounded in current and relevant information.
- Helping students understand the direct connections between education and their preferred career futures and ensuring that all learning pathways are viewed as having merit.



5. Mind the Gap (Year)

Taking a Gap Year is gaining in popularity, yet remains relatively new in Canada. As such, the infrastructure to support this pathway option has not been fully developed. To improve supports to the student who choose this option, government and post-secondary institutions may want to consider:

- Researching the benefits and challenges of taking a year off in between high school and PSF.
- Providing ways to make taking a gap year easier (e.g. postponing admissions, scholarships, providing experience-based opportunities to maximize the value of the year).
- Finding ways of making this pathway available to underrepresented and disadvantaged youth and young adults.

6. Prepare for Changes in the Transition Landscape

The importance of life-long learning in managing careers today will impact the landscape of post-secondary institutions. Several interviewees noted changes in their student demographics and their increasing demand for more targeted, quicker, online and competency-based learning options in PSE. Student transition-to-learning needs are changing as a more mature and global student body is seeking more flexible PSE delivery models to enable them to "fit in" their learning with other life priorities (e.g. work) across multiple transition points. In order to anticipate and strategically respond to these changes, PSE institutions could consider:

- Assessing mature and international student transition needs and placing on campus, oncall and virtual supports for these identified needs.
- Online support strategies that compliment online course offerings to encourage student engagement and persistence with their learning.
- Making learning more competency-based and/modularized so that students can progress through their learning in a way that fits their schedules.
- Increasing partnership between PSE institutions, career services and employers/industry to ensure that learning is responsive to labour market trends and needs.

The Atlantic governments, public schools and PSE institutions have clearly prioritized student transition supports and have taken steps to improve the PSE experience for all students. The recommendations that emerged from this research seek to support them in furthering their efforts and are respectfully submitted for review and reflection.

BACKGROUND

The Council of Atlantic Ministers of Education and Training (CAMET) released Future in Focus: Atlantic Career Development Framework for Public Education 2015-2020 as part of its commitment to improving school-to-school and school-to-work transitions. This policy document provided concrete recommendations for enhancing the role of public education in supporting student transitions.

The scope of Future in Focus was limited to the role of public education in strengthening student transitions. At the time, the CAMET Public and Post-secondary Standing Committees noted that a natural next step would be an extension of this work to undertake targeted research focused on the role of the post-secondary sector in strengthening student transitions. In 2016, CAMET engaged the Canadian Career Development Foundation to work with CAMET's Post-secondary Transitions Committee to examine the role of post-secondary education in supporting school-to-post-secondary education (PSE) transitions. Recognizing the multiplicity of student transition, the Committee decided to focus first on school-to-school transitions in this project with the intent of following up with another project focused on PSE-to-work transitions.

The goal of this project was to deepen the overall understanding of the challenges faced by students undertaking the transition to PSE and to examine how best to support these students in persisting to PSE graduation.

RESEARCH METHODOLOGY

The research project had three main components:

- An Environmental Scan (Appendix A) focused on deepening the overall understanding of the current state of public-to-post-secondary transition policy, programming and provision for youth and young adults in the Atlantic Provinces, including:
 - Examining the specific issues and challenges faced by students in the Atlantic region, their attainment levels, participation, persistence and graduation rates;
 - Reviewing the literature on access and student retention and exploring national and international approaches to support more equitable access and persistence to graduation;
 - Examining the current state of transition policy, programming and provision offered to students in the Atlantic region by Provincial Governments; and
 - Exploring select approaches offered by Atlantic PSE institutions to bridge the transition from public-to-PSE
- A survey (Appendix B) of youth and young adults on their transition experiences (youth under 24 who have/have not attended PSE).
- Interviews with administrators, student support and career centre staff at post-secondary institutions (Appendix C) on the programs and activities that they are currently implementing to support students with their PSE transitions.

The Environmental Scan was completed in 2016. Originally, the methodology proposed conducting participant research through focus groups and a small online survey with students. Given the desire of the Post-secondary Transition Committee to capture the widest possible perspectives on the current transition system, it was decided to conduct a larger survey targeting over 800 responses. The research was prolonged in order to ensure Ethics Review requirements were satisfied. CCDF sought approval though one PSE Ethics Review Board (i.e. University of PEI) which satisfied the requirement for other participating PSEs. This approval came in the fall of 2017. The survey was conducted in November of 2017 and the report was submitted in January 2018. Interviews with 10 PSEs were conducted in February 2018. The Committee expanded the number of interviews to 23 in an effort to capture the broader perspectives of the PSEs across the Atlantic region. These additional interviews were conducted in March 2018. The report on the interview findings was submitted in May 2018. This Summative Research Report includes high-level findings from all research components and recommendations distilled from these findings.

SUMMARY OF RESEARCH FINDINGS

Environmental Scan (see Appendix A for the full report)

The Environmental Scan set out to provide an overview of the current issues surrounding public school-to-PSE transitions across the Atlantic Provinces. It also examined promising practices within the Atlantic region, Canada and internationally with respect to supporting youth and young adults through this transition. Completed in 2016, the Environmental Scan found that:

- The Maritime Provinces Higher Education Commission (MPHEC) was an emerging promising
 practice with respect to data collection on the pathways of students at the university level.
 The Scan suggested that this could also be used at the college level to support more precise
 and widespread tracking of information on programming and services needs of students.
- The 2015 OECD PISA results indicated that students in Atlantic Canada are below the national average in terms of academic preparedness.
- While affordability of PSE continues to be a vital policy consideration, research suggests that
 there is arguably an equivalent need to understand how to support underrepresented youth,
 their families and communities in developing "cultural capital" factors that support students to
 go to PSE.
- The impact of existing Atlantic policies and programming was unclear as evaluative data was not found.
- The mechanism to ensure research/evidence informs ongoing policy and programming development/revisions was also unclear. International examples, such as Switzerland, that embed the analysis of research/data to inform policy/programming changes on a regular 4year cycle were profiled in the Scan.
- Atlantic students appeared, given the evidence found during the scan, to be struggling to
 persist after entry to PSE indicating a potential need to provide more services and
 programming to help them progress to graduation.

There would appear to be no shortage of programming targeted to supporting student transition and, impressively, the Environmental Scan also uncovered examples of policy frameworks intended to build a more cohesive approach to rationalizing programs. The Scan's review of programming and policies internationally and in Canada outside of the Atlantic region highlighted the need to think comprehensively across three specific points of the school-to-PSE transition – i.e., pre-entry, induction and attending – when considering program and policy responses. The pre-entry, induction, attending model (PIA) is employed herein as an organizing framework to highlight strengths and possible gaps in school-to-PSE transition programs and policies across the Atlantic Provinces.

Pre-entry Programs and Policies

Atlantic Canada, at the time of the Scan, was targeting curriculum to broaden students' horizons and introduce the notion of PSE early (as early as kindergarten) and was primarily using career education as the tool for doing this. This programming tended to be focused broadly, however, with limited tailoring to the needs of underrepresented groups. There were a number of provinces that had dual credit programming, allowing students to gain combined high school/PSE credits and giving them exposure to PSE level course work. Most provinces provided work and learning exposure opportunities across the curriculum, using career portfolio tools to help students identify career pathways. There were a number of provinces providing programming to parents to support them in becoming "career coaches." The Scan research did not find reference to programming focused specifically on providing "cultural capital" exposure activities as a vehicle to promoting access to PSE for youth whose families and communities have limited experience with PSE.



Labour market information was being made available in all provinces at the time of the Scan, but evidence that students were being supported in understanding and applying it was not found. The research is clear that the *build it and they will come* approach to LMI is ineffective. In order to benefit from LMI, students first need support to identify what information they need and then assistance to make personal sense of it in the context of their own career plan/pathway. Rather than being integrated *within* a cohesive career development process, LMI is too often provided as an isolated, stand-alone support, leaving it to students and/or their supporters to determine linkages between the information and the students' unique transitions needs/goals.

This approach to LMI provision is Canada-wide and in many ways indicative of the wider approach to career education. When looking at the European and US models of comprehensive school-to-school transition designs, VET and dual credit approaches found through the Scan, there is a commitment to ensuring that each and every student is supported in building clear and evolving pathways from learning to careers. While a number of strong transitions programs exist in Canada – and specifically in the Atlantic region – too many Canadian students remain unclear about what pathways exist and do not access critical supports to help them in managing their own transitions and accountability, at best, exists at the macro level as opposed to at the individual student level.

Whereas notable exceptions, such as Nova Scotia's O2, were found, previous research leading to CAMET's Future in Focus Framework similarly concluded that many students, especially those who come from families and communities with limited exposure to PSE, remain unclear about the possible pathways from public school-to-PSE-to-work and access limited supports in navigating their transition to PSE through to graduation.

Induction

There was a limited response from the PSE institutions across the Atlantic region to an information request disseminated during the development of the Scan. Those who did respond had a number of programs to support transition into PSE. Cape Breton University stood out as a comprehensive model. The New Brunswick Department of Post-Secondary Education, Training and Labour (PETL)'s fund to strengthen transition and improve persistence rates would appear to be resulting in a number of programs to support underrepresented group's entry that is in keeping with international promising practice with respect to addressing the mental health, belonging and engagement issues associated with transition.

Attending

The Scan also found very few program and policies to support persistence once students are in PSE. The provinces provided information on programs/services to support those who leave PSE prior to graduation with re-entry. However, the Scan did not find evaluations that speak to their impact. It was also less clear how provinces were working preventatively to identify these students early in order to avoid them dropping-out and to proactively support their persistence through to PSE graduation.

From Environmental Scan to Active Research

The Scan's findings shaped the survey and interview questions to examine supports at the pre-entry, induction and attending phases of the public school to PSE transition. At the pre-entry phase, the survey and interview questions were tailored to investigate the extent to which pre-entry approaches are known, accessed and substantively strengthen student transitions. At the induction phase, the survey and interview questions examined supports available and their impact on the needs and lived experience of early-year post-secondary students. Lastly, the Scan's findings regarding the attending phase of transition added to the rationale for having a focus on those students that persist through to graduation and on the programming that supported their persistence.

Survey of Youth and Young Adults (see Appendix B for the full report)

The data collected in the survey helped to paint a picture of the variety of different routes that youth take after high school and the factors that influenced their decision to follow these pathways.

There were 1085 respondents to the survey. Most of the respondents were going to school or working in Nova Scotia. The majority of respondents indicated that they were female and between the ages of 21-24 at the time of completing the survey. Whereas most respondents were from urban communities, almost 40% were from rural areas and nearly 3% came from remote areas. Eight percent of respondents identified as a visible minority, seven percent identified as immigrants and almost seven percent identified as Indigenous.

The respondents were categorized in six pathway groupings:

- DIRECT: Those who went directly from high school to PSE
- GAP: Those who took at least one year off between high school and PSE
- GRADUATE: Those who have graduated from a PSE program
- SWITCHED: Those who switched PSE programs
- WITHDREW: Those who left PSE before graduating
- NEVER: Those who had never attended PSE

The most common transition pathway of the respondents was the DIRECT route (58.3%). Forty-two percent of this group were 19 or 20 years old, the majority were from Nova Scotia (56.8%), over half (59.0%) lived in an urban region and over two-thirds (69.1%) were female.

The next largest grouping was the GAP respondents (13.1%). These respondents were mostly between 21 and 24 years old (59.9%), female (65.6%) and lived in an urban area (66.9%).

The GRADUATE and SWITCHED groups were similarly sized groupings (12.7% and 12.1% respectively). Those respondents in the GRADUATE group were mostly in the older cohort (21 to 24 years, 89.1%) and close to two-thirds of the SWITCH group were also in this older cohort. Both groups were mostly from Nova Scotia (GRADUATE, 42.0% and SWITCH, 54.2%).

The NEVER and WITHDREW groupings were the smallest groupings among the respondents (2.4% and 1.5% respectively). Fifty percent of the NEVER grouping was 19 to 20 years old. Most of this group was from Nova Scotia (42.3%) and most were female (53.8%). The WITHDREW grouping was equally from New Brunswick and Nova Scotia (37.5%). Most were working in New Brunswick (43.8%); well over half lived in a rural community (56.3%).

For those in underrepresented groups (see the Survey's Appendix B.1, Table A.8):

- Indigenous respondents were present in all transition pathways. Most of these respondents were in the GRADUATE group (8.7%).
- Most respondents with a disability and visible minority respondents were in the SWITCH group (10.7% and 11.5% respectively).
- Immigrant respondents were more likely to be in the NEVER (19.2%) or in the GAP group (11.3%).
- LBGTQ respondents were mostly in the DIRECT (10.8%), GAP (14.1%) and SWITCH (13.7%) groups.
- Over a quarter of respondents identified as low-income and most of these respondents were in the NEVER (42.3%), GAP (39.4%) and WITHDRAW (56.3%) groups.

Whereas the survey results are a reflection of those who responded and not representative of the general population, it is noteworthy that the survey findings that low-income respondents are less likely to move directly to PSE and are more likely to take a gap or withdraw prior to graduation are consistent with trends in the general population.



Full results of the survey are available in Appendix B. The key findings that emerged from the analysis of the data include:

The Value of PSE

- Overall, most respondents saw the value of PSE. They reported that it will help them with their career future and contribute to greater economic security.
- However, almost a third of respondents across all groups (but significantly among those who
 did not go to PSE or those who withdrew from PSE) felt that PSE was not worth it. They cited
 no guarantee of a job as the main reason.

The Experience of PSE

- Most respondents felt like they were on track, that they had made a good PSE choice and that
 it was a good fit for them.
- Those in the SWITCH and WITHDREW group felt that the key reason for doing so was a lack of fit with their institution and/or program.
- Almost half of the respondent groups did not feel prepared for their transition from high school. The GAP, SWITCH and WITHDREW groups felt most unprepared for the transition after high school. Many respondents who went to PSE said they lacked the preparation needed to handle the workload expectations in PSE.
- Almost all respondents felt academically overwhelmed, worried about their finances and felt that they were not as prepared as they would have liked to have been for PSE.
- Over a third of respondents reported that they felt lonely. Almost a quarter (22.3%) did not have a sense of belonging in their post-secondary institution.
- The WITHDREW group reported feeling more challenged than respondents in the other groups.
- Those in the SWITCH and WITHDREW groups reported more mental health issues, including stress and anxiety.
- Once the decision to switch or withdraw from PSE was made, the respondents said that there was nothing the institutions could have done to have changed their minds.

Supports in Transition

- Respondents said that they were most likely to go to family, themselves, professors and teachers for help with transition challenges.
- The WITHDREW group reported more frequently than other groups that they relied on themselves for support.
- The WITHDREW and SWITCH groups said that a key support that they needed was better access to counselling and career service supports.

Career Decision Making

- Almost all respondents reported turning to their parents/guardians for support regarding what
 to do after high school graduation. Friends were also identified as key influencers in this
 decision.
- Students in New Brunswick were more likely to seek guidance counsellors for career decision advice than respondents from other provinces.
- Extra-curricular activities, visits to PSE institutions and volunteering were key influences on respondent choice of institution and program.
- Most respondents said that they started to think about their career futures in Grade 9. Those who delayed, withdrew or took time in-between high school and post-secondary started



- thinking about their futures later or could not remember when they started thinking about their future.
- Those who had a high degree of career confidence and career direction from an early age had smoother transitions. Those who were uncertain struggled in their transitions, switching or dropping out of PSE.
- Most respondents affirmed that they have a current career direction. This direction was developed based on their personal interests, research into job prospects and knowledge of required credentials.
- Those who had not decided on a career direction said that they needed more information and felt overwhelmed by the number of choices.
- Underrepresented groups had similar pathways to the overall group of respondents, with the exception of those who identified as low income as reported above. Low income respondents transitioned less or withdrew more often than other respondents.
- Most respondents did not feel prepared for career decision making. Those in the SWITCH
 group felt the least prepared to make a career decision after high school. All respondent
 groups felt they needed more information to support them in their decision-making or they
 felt too young to decide.

PSE Decision Making

- Most of the respondents went to university.
- The respondents typically researched at least two institutions before deciding.
- Overall, respondents chose their learning options based on interest in the subject area, employment potential and economic potential of employment related to the field of study.
- Across all transition pathway groups, proximity to home and family was one of the most important factors in their decision.
- A key motivating factor for respondents to go directly to PSE was receiving a scholarship/bursary.
- Of those respondents who had withdrawn from PSE, most had a concrete plan for returning to school.

Taking a Break or Making a Switch

- Those who took a gap year or longer felt predominantly that they either needed a break from school or needed experience that would help clarify their career path. Financial issues were mentioned by less than a quarter of respondents.
- Those who took a gap between high school and PSE felt that the time was well spent and over three-quarters felt that the time helped them make career decisions.
- Those who switched PSE programs tended to go from university to a college program. They
 reported that they were happy with their choice to switch and far more academically
 confident.
- Almost two-thirds of those who switched had transitioned to a completely different career field.



Interviews with Post-Secondary Staff and Administrators (see Appendix C for the full report)

Interviews were conducted with 23 post-secondary institutions in the Atlantic region. Those interviewed included staff from a range of administrative (e.g. Vice-President) and direct service roles (e.g. Transitions Coordinator). Guided by the findings of the Scan and using the PIA model of transition support to inform the interview protocol, interviewees were asked questions that focused on:

- What the institutions were seeing as the main support needs for youth at pre-entry, induction and attending through to graduation;
- What the intuitions were doing to support students (especially students from underrepresented and at-risk groups) throughout PIA; and,
- What impact these supports have had on student entry and progression.

Notable findings include the following:

Pre-Entry

- Many post-secondary institutions are increasing exposure-related programs and initiatives to give high schools students' direct PSE experience prior to entry.
- Interviewees mentioned efforts to involve parents in the decision-making process by informing them directly about PSE and specific programs.
- A number of interviewees mentioned specific recruitment strategies targeted towards underrepresented and/or disadvantaged groups.
- Interviewees said that the main issues facing students at pre-entry were: financial (e.g. knowing if they can/how to fund their education), mental health (e.g. anxiety and resilience), career-related (e.g. not understanding the career and labour market implications of the program to which they are applying) and academic readiness (especially in math).
- For underrepresented or disadvantaged groups, interviewees identified specific issues related to the experiences of Indigenous students, students with learning disabilities, first generation students and student from low-income families. For Indigenous students, interviewees mentioned the following issues: negative experiences with mainstream education, a lack of self-confidence and a weak sense of belonging in PSE, having a difficult home life and living in poverty. For students with learning disabilities, interviewees mentioned the challenge of undiagnosed learning disabilities and/or the struggle to arrange accommodations in PSE as being their main issues. The main issue mentioned for first generation students was the lack of awareness of the realities of PSE life. Likewise, challenges identified for students from low-income families included limited exposure to PSE and financial issues.
- The main student supports available for pre-entry students mentioned by the interviewees were: early orientation programs, workshops and information on self-care, support with creating learning and career goals, mentorship programs, institution preview days, orientation to student services and pre-meetings with students with disabilities regarding their accommodation needs.
- Promising practice examples for pre-entry mentioned included:
 - Evolving the Role of Recruiter: St. Francis Xavier changed the role of recruiters to student success leaders a number of years ago recognizing how the role was evolving and placing greater emphasis on staff connecting with students, their parents and guidance counsellors and maintaining this early connection throughout the induction and attending phases;



- Connecting Faculty to Students Early: New Brunswick Community College has a "faculty calling program" that connects faculty with students at pre-entry. Faculty call students upon acceptance and during these calls they ask the student about how they are preparing for their transition. Faculty ask the students about their grades, their finances, and other factors pertinent to transitions. During these conversations, faculty assess if the student is highly, moderately or not likely to be at-risk. Those students identified as highly or moderately likely are linked to a learning strategist and learning counsellors. NBCC follows them throughout the program and intervenes as early as possible if the student begins to struggle.
- Early PSE Exposure for At-Risk Students: Holland College's <u>Transition Program</u> is a
 dual credit program that works with students who have been identified as at-risk of
 leaving high school before graduation and/or at-risk of not attending PSE. They work
 with students to address their academic and social issues while exposing them to PSE
 learning.
- Starting on Track to Stay on Track: Dalhousie University has the On Track transition program to support students throughout their university program. It currently has three elements: Start on Track, Stay on Track, and Back on Track. The first element (Start on Track) is an eight module online orientation course that every student can take upon acceptance and covers topics including financial literacy, academic integrity, and health and wellness. Each module offers information in the form of text, videos, multi-media, and a quiz. In order for students to successfully complete a module, they must attain a grade of 80%. The university monitors which questions in these quizzes students are getting wrong most often and sends information to the students on those topics. The second element, Stay on Track, has a career development focus that helps students identify their strengths and goals for learning. This second element is built on best practice research that shows that students who see the connection between learning and their own career goals have higher degree completion rates. The third element, Back on Track, connects with students with lower high school averages at the pre-entry stage and supports them throughout their first semester at the university. It is based on research that if you can help students be successful in their first semester that the risk of dropping out is greatly lowered. Back on Track includes three visits with a Learning Advisor. A fourth element to the program is in development and focuses on helping students develop a career plan.

Induction

- Interviewees said that students in the early stages of their program struggled with adapting to the PSE environment, adjusting to the academic demands, stress and time management, coping skills, finances, social connectedness, career indecision and mental health issues.
- Induction stage barriers for underrepresented and disadvantaged groups mentioned included:
 - Indigenous students: a sense of belonging, confidence, financial literacy, family support, racism, adjustment to PSE;
 - Students with learning disabilities: a lack of formal assessment making them ineligible for accommodations, mental health;
 - First generation students: family do not understand what they are going through, belonging, unfamiliarity with the terminology referenced in classes and at the institution.
 - International students: cultural differences between Canada and their home country, parental influence on learning choices;

- Students from low income families: food security and lack of awareness of PSE culture;
 and.
- o Older students: child care and balancing school and work life.
- Most mentioned supports available for those at the induction stage include: a wellness centre and/or mental health services, academic services, Indigenous student support services, services for students with disabilities, student success centers.
- Nearly half of the interviewees mentioned that they had early-alert programs to support students at-risk of dropping-out. Key elements of these programs include identifying students at-risk early, connecting them with supports, tracking progress throughout programs and having warning systems that alert staff/instructors when students are missing classes or at-risk of failing a course.
- Promising practice examples mentioned during the interviews included:
 - The student success framework, « En plein dans le mille! Cadre méthodologique pour le développement d'outils et de stratégies de soutien à la réussite des étudiantes et des étudiants du niveau collégial », developed for the Collège communautaire du Nouveau-Brunswick in partnership with the Université Sainte-Anne. This framework outlines programming to support students from pre-entry through to graduation.
 - o <u>Transitions</u> is an evidence-based publication by Nova Scotia's Dr. Stan Kutcher designed to help post-secondary students be successful on campus. Topics include time management, relationships, identity, finances, sexual activity, mental illness, suicide, addictions, and more. *Transitions* is part of the *Pathway through Mental Health Care for Post-secondary Settings* that builds on proven youth mental health components to create, evaluate and disseminate a comprehensive and effective post-secondary campus mental health framework. The components include: building mental health awareness for students and faculty, supporting physical and mental health literacy for students and faculty, enhancing capacity for early identification of mental health disorders on campus, and easy access to mental health care for students. This framework is being field tested at post-secondary campuses in Nova Scotia and PEI.

Attending

- All services remain accessible to students at the attending phase so interviewees did not name specific services for this phase of transition.
- Career services were mentioned as the main service for those who have persisted through to
 the last years of their program. Only a few interviewees mentioned using career services
 proactively to support students at earlier phases. It is noteworthy, however, that interviewees
 highlighted this as a missed opportunity, noting the benefits of career services at the preentry, induction and attending stages.

Promising Practice for Underrepresented and At-risk students

Interviewees referred to a number of promising practice examples that have been developed and implemented to address the learning transition needs of underrepresented, disadvantaged and at-risk students. Some have been highlighted already in the above sections. Other notable examples included:

Opening up the Referral System: The College of the North Atlantic has an electronic referral
system to ensure that students access immediate supports. Students, student support
workers, and instructors can all make electronic referrals to counsellors at any time.
 Counsellors connect with students within an hour of the referral being made. Instructors,



- counsellors and student support workers also have regular student status meetings for each student to ensure that all students are progressing. Outreach to the student will be made if there is an issue raised at these meetings.
- Stepping Up Care: Memorial University is piloting the Stepped Care 2.0 model. It provides training to faculty and staff to be able to identify at-risk students (specifically around mental health issues) and to be comfortable intervening with a student when they have identified a behaviour suggesting the student may be at-risk. The goal of the training is to build further capacity for intervention among the staff and to relieve the stretched counselling services that currently have to handle all issues related to student mental health.
- Growing Potential: New Brunswick Community College (NBCC) implements a program called IN BLOOM that is for women in transition from abusive relationships who want to attend PSE.
 NBCC has partnered with local women's service organization to provide wrap-around service supports that, on its own, the college was not able to provide.

CONCLUSION AND RECOMMENDATIONS

Students who have smoother transitions from public school to PSE tend to persist to graduation. It is clear from this research project that PSE institutions across the Atlantic Provinces have invested in promoting successful student transitions. The number and variety of supports available are impressive. What is also noteworthy is the level of consideration for all students considering PSE. There is an emphasis on the provision of services and programming for underrepresented, disadvantaged and atrisk student populations. Interventions provided in the Atlantic region to support this transition are increasingly proactive in approach and consider best practice in transition programming, as noted in the Environmental Scan, by focusing efforts and resources at three key stages of transition: pre-entry, induction and attending.

At pre-entry, there is a move towards orienting students earlier to PSE. The research undertaken in the Environmental Scan found evidence of the K-12 sector helping students to begin to explore PSE options as early as kindergarten. At the PSE level, interviewees mentioned starting to connect with students by grade 10 and, in one case, as early as grade 6. During the induction and attending phases, research for this report found a myriad of supports to help students thrive academically, socially and with respect to their mental health.

Academic supports are the primary focus of transition programming at the PSE level. There is a concerted effort by PSE institutions towards early identification at both the pre-entry and induction phases of transition. Yet, despite these efforts, many survey respondents still felt academically unprepared or overwhelmed. The literature reviewed for the Environmental Scan clearly shows that academic preparedness is a key factor in retention rates. PISA (2015) results showed that Atlantic students are below the national average in this regard. The Scan, survey and interviews did not reveal why there is a disconnect between the increasing availability of academic services and how the survey respondents felt, but one factor might be the lack of awareness of students to the programs and resources available. The survey respondents also indicated that they tend to go to family, friends and teachers/instructors for transition supports. Several interviewees said that they did not think that students know the full array of services available to them. Initiatives to increase awareness of the variety of services available at PSE at the pre-entry and induction phases may be needed to help students access the supports they need.

Whereas academic support services were clearly the most resourced supports across the Atlantic post-secondary institutions, there is a considered movement towards better mental health services and resources. The attention to the mental wellness of students mentioned in the interviews connects with the research findings of the Environmental Scan that supporting mental health is as important as supporting students academically. Both are critical to helping learners transition and persist to graduation. It is a positive sign that PSE institutions are investing in the mental health and wellness of their students.

One of the key findings from the survey was that those respondents who said that they had a high degree of career confidence and had a career direction from an early age reported smoother transitions. Comparatively, those who were unclear faced lack of fit and academic preparedness issues that made for transitions that were more turbulent. Respondents said that their career influencers and advisors were primarily their parents and friends; influencers that have continued to be the primary "go-tos" for career advice for many young people despite the availability of guidance and career services in high schools and post-secondary institutions (RBC and CCDF, 2016, Bell, Benes & Redekopp, 2016, Bell & Benes, 2012). Survey respondents lamented their need for more career information about their options, "real world" experience to make better career choices and someone to help them to put their career plan together. Respondents said that they were unclear with respect to where to get this information and support. Some respondents took the step of taking at least a year off to seek out applied experiences to support their decision making. They reported doing this

because they did not get the real world exposure and experience they felt they needed in high school. For many, the gap year helped them solidify their path forward. Almost a quarter of these respondents, however, remained uncertain even after taking a break from school.

Across the institution staff interviewed, few mentioned career development as a critical tool that can support students in their school-to-PSE transition. Career services were mentioned as a support for final year PSE student, when the "I have to get a job" push comes, rather than an instrument to increase engagement and intentionality in learning across the transition into and across PSE. Research quoted in the Scan showed the value of career education and career development services in supporting smoother transitions to PSE. European and US comprehensive models highlighted in the Scan are exemplars in this, positively supporting students in knowing about their PSE options and the associated career pathways. The Scan also found that while labour market information is readily available to Atlantic students, supports to make career sense of the information is lacking. Several interviewees commented on the underuse of career services and the lack of career development programming for students at the pre-entry and induction points of transition. In addition to the European and US comprehensive models showcased in the Scan, the Scan also highlighted a number of comprehensive approach models available in Atlantic Canada (e.g. Nova Scotia's O2 program at the high school level and Cape Breton University's mandatory academic advising program that includes a career development and counselling component). The examples highlighted in the Scan and Interview Report may help the K-12 sector and PSE institutions partner to develop further comprehensive transition approaches across the Atlantic region that include career development as a vital support in school-to-PSE transitions.

Success of such initiatives is contingent on having trained career professionals in high school and in PSE with the capacity to deliver such services. Training of teachers and guidance counsellors continues to be a need across Canada, including the Atlantic region. Specialized career counsellors are available at many Atlantic PSE institutions but, as highlighted in this research, career services tend to be under-used.

Perhaps one of the most disconcerting findings from the survey is that a third of respondents reported that, in their view, PSE was not worth the investment. This perception is contrary to research that is remarkably consistent and shows that PSE is one of the best career assets for today's youth (Frenette & Frank, 2017). In Canada, there is no doubt that the underemployment rates for young people are cause for serious concern. While the transition from school to work is taking longer, PSE does in the long run consistently help young adults to build economically solid and sustainable careers (see Finnie et al., 2016). This finding from the survey would suggest that there is an opportunity for educating young people regarding the benefits of PSE – not just university but all PSE options. Students need to understand the value of PSE so that they see it as a critical investment in themselves and their future. They need access to and awareness of career supports that can help them understand the value of learning as it connects and contributes directly to their own career futures.

Finally, the findings of the Scan and the interviews point to an opportunity for program-specific evaluation and/or different evaluation strategies to determine what works best to support incoming and current students in their transition to PSE. A few interviewees wondered the extent to which students knew about and were accessing the programs set up to support them in their transitions. Interviewees did not know and/or were not able to point to any evidence-based studies on the outcomes of their programming efforts. Similarly, the Scan research showed a lack of available reports on program impact. A clear best practice in several PSE institutions is their approach to data mining student information to pinpoint when a student is at-risk of non-completion. Less common are efforts to identify the interventions that best address the specific needs of students once they have been identified. There may be an opportunity for institutions across the Atlantic region to collaborate on the tracking of common impact indicators and/or the use of a database /online data management system to learn what programming works best to address various student issues/needs. There were examples

shared in the interviews where institutions have partnered with each other and with public schools to develop and implement evidence-based interventions (e.g. Holland College's Transitions Program and the Maritime Province's Mental Health Care for Post-secondary Settings project). Openness to further partnership development was mentioned by a number of interviewees. These examples of partnership and the interest in building partnerships across institutions might be a starting point for building an evidence-base that continues to strengthen transition for students from public school to PSE.

Recommendations

The Atlantic Provinces have invested significantly in supporting successful school to PSE transitions for all students. There is no shortage of programs, resources and tools or innovative approaches used by the provinces to facilitate student transitions to PSE. Many of these programs/student supports are founded on promising practice principles, reflecting what the literature says works to improve student access to PSE and their progress through to graduation.

There is much to applaud in the efforts being made across the system, and specifically by PSE institutions in the Atlantic Provinces. There is a solid foundation from which to build. Through the scan of the research, in surveying over a thousand Atlantic youth and young adults on their pathways from public school-to-work or to-PSE, and in talking with staff at post-secondary institutions across the region, a number of recommendations emerged to support more accessible and supportive post-secondary pathways for all Atlantic students.

1. Increase the Evidence Base for Transition Programs

PSE institutions have invested significantly in programming to support students in transition. The number of programs, services and bricks and mortar facilities was impressive. However, evaluation of their impact was found to be limited. When asked about evaluation of transition supports, several interviewees referred to overarching student satisfaction surveys of their broad PSE experience. Interviewees were not able to provide evaluative data that demonstrated the specific impact of their interventions on student transition. Specific program evaluation appears to be limited to pilots. No evidence was found of ongoing evaluation to inform policy and practice. This leaves valuable learning about the impact of particular interventions hidden. It might also mean that PSE institutions are over-resourcing in some areas and not maximizing what they already are doing well.

To optimize transition programming efforts, post-secondary institutions and/or governments could consider:

- Creating an inventory of evidence-based transition programs.
- Encouraging current efforts to track and mine student data to include indicators that relate directly to the use and impact of student supports at pre-entry, induction and attending phases of transition.
- Making the collection of impact data a mandatory component of targeted transition program funding.
- Encouraging partnership among PSEs and between PSEs and public schools to drive innovation, track impact longitudinally and develop an understanding of what works.

2. Build on Promising Practice in the Development and Implementation of Transition Programming/Supports

The research found efforts to build toward comprehensive approaches to student supports taking in account not only the three key phases of transition but also the needs of underrepresented and disadvantaged student groups. Both the Scan and the interview research found innovative efforts to better assess student need and creative strategies to work with public schools and communities to provide wrap-around services to students, especially to at-risk and vulnerable



groups. The research also pinpointed examples of post-secondary institutions developing frameworks and strategies to outline comprehensive approaches to assisting students through their transition. These were closely aligned with US and European comprehensive practices identified in the Scan. These efforts are exemplary in their support for all students, with particular focus on those underrepresented student groups.

To optimize efforts to build on promising student support practices, post-secondary institutions could consider:

- Actively promoting and tracking the impact of interventions and programs focused on promoting a culture of going to PSE and strengthening PS access and success for underrepresented groups.
- Continuing to provide and develop early-alert programming for at-risk students and ensure that services are promoted and available to students throughout their PSE.
- Promoting existing services to students and families at all stages of transition (pre-entry, induction and attending) so that they are well aware of the services that exist.
- Asset mapping community services/resources that can support disadvantaged students in attending and persisting in PSE and develop partnerships between post-secondary institution and those identified community services to provide more comprehensive student supports.

3. Demonstrate the Value of PSE

As referenced above, the value of PSE to one's life and career is significant. Yet, 30% of respondents to the survey were either unsure of or did not see its value. There is an opportunity to help students understand the importance of PSE to them and their preferred career futures.

To demonstrate the value of PSE, governments and/or post-secondary institutions could consider:

- Developing an awareness strategy targeted to elementary and high school students, their families and communities focused on the direct connection between PSE, accessing future career options and the economic growth of the Atlantic region.
- Providing more exposure opportunities to students from an early age to the range of PSE options available in the Atlantic region, including visits and/or direct experience activities within post-secondary institutions.
- Providing more experiential learning or career exposure opportunities in public and postsecondary education that reinforce the direct link between career pathways and PSE.

4. Promote Career Education and Career Services

All components of the research highlighted herein found that there is an underutilization of career education programming and career services across the Atlantic Provinces. In the Environmental Scan, survey and interviews career development emerged as a peripheral program at both the public school and PSE levels. Knowing why you are learning what you are learning and your learning's fit with your interests and preferred career future are fundamental to successful transition, persistence and resilience in PSE. Career development underscores for students the connection between PSE and their future goals, highlighting the value and return on investment of PSE. Despite the value of career education and career services, PSE career services continue to be relegated primarily to helping students transition from school-to-work, with services typically only accessed in the final year of study, if at all.

To optimize the use of career education and development, governments and/or PSE institutions could consider:



- Supporting training of teachers, guidance counsellors, PSE instructors and staff to build basic career development competencies to ensure capacity within the system to support learners through successful transitions.
- Using career education and development to support all students to establish the connections between their learning and preferred career futures.
- Helping students see the value of doing career development check-ups and check-ins throughout their learning journey to ensure their learning continues to be personally relevant and leading them to a solid and personally valued career future.
- Expanding and adequately resourcing career services in PSE so that these services can proactively reach out to students at pre-entry, induction and attending stages of their transition.
- Considering partnerships between PSE institutions and public schools as a way to improve career education and career services.
- Assist students to access and make sense of labour market information whether through career education courses, career service outreach or available career development programming, resources and tools so that students transition plans are grounded in current and relevant information.
- Promoting the value of all learning pathways.

5. Mind the Gap (Year)

Taking a Gap Year, while more common in European countries and the US, remain relatively new and minimally subscribed to in Canada. Most survey respondents who had taken a gap year found their experience to be beneficial in terms clarifying their post-secondary goals and objectives. Whereas it was not a uniform experience for everyone taking a gap (some still felt uncertain about their future steps), it is a pathway that many high school graduates may consider as it gains in popularity and the movement to spend PSE dollar wisely grows. In Canada, the infrastructure to support this pathway is not developed and as such governments and post-secondary institutions may want to consider:

 Researching the benefits and challenges of taking a year off in between high school and PSE, including tracking the relative impact of various structured/semi-structured approaches, structural supports to make taking a gap year easier (e.g. postponing admissions, scholarships) and targeted initiatives to promote gap year learning for underrepresented youth and young adults.

6. Actively Prepare for Changes in the Transition Landscape

Several interviewees mentioned that the demographic of their student body was changing. They mentioned a growing number of international students on campus, as well as older students. This is not surprising given the importance of lifelong learning in today's labour market. Rapid changes in technology, changing demographics, shifts in the employee-employer relationship and the rise of the gig economy are all contributing to changes in the lifelong learning needs of Atlantic Canadians. The traditional unitary transition from pubic to post-secondary is rapidly being expanded to multiple transitions in and out of learning across the lifespan. Increasingly, post-secondary institutions are recognizing the need for greater flexibility in learning programs to accommodate this. Several universities in the US are transitioning to competency-based education models where students can develop mastery through short learning modules delivered through highly flexible learning approaches. Canadian post-secondary institutions will no doubt be called upon to organize learning differently, drawing on competency-based models and providing more flexible, "just-in-time" learning options. Online learning models will also continue to grow as student need for accessible and on-demand learning will increase.



These new models of learning, a more mature and global student body and the need for more flexibility in how students "fit in" their learning with other life priorities (e.g. work) will change student transition-to-learning needs.

PSE institutions could consider:

- Making learning more competency-based and/modularized so that students can progress through their learning in ways that fit complex life demands, needs and schedules.
- Increasing the flexibility and responsiveness of PS programs through individualized learning plans, micro-credentialing, course challenge options, a strong emphasis on realworld application, transfer credit opportunities across programs with common competency elements and the recognition of prior learning.
- Offering online/easier access across the lifespan to brief, skill-building programs that can be combined in various ways to achieve credentials.
- Assessing mature and international student transition needs and placing on campus, oncall and virtual supports to respond to identified needs.
- Providing online support strategies that compliment online course offerings to encourage student engagement and persistence with their learning.

The Atlantic governments, public schools and PSE institutions have clearly prioritized student transition supports and have taken steps to improve the PSE experience for all students. These recommendations seek to support them in furthering their efforts and are respectfully submitted for review and reflection.

APPENDIX A: Transitioning from Public School to Post-Secondary Education in the Atlantic Region – Environmental Scan, 2016

Note: This Environmental Scan was published in 2016. The programs, statistics and initiatives and literature quoted are from the research that was available at the time.

Purpose of the Environmental Scan

The first component of this project was intended to deepen the overall understanding of public school-to-PSE transitions for youth and young adults in the Atlantic Provinces through an environmental scan. The Scan is broken into four main sections:

- 1. The first part examines the specific issues and challenges for students in the Atlantic Region, their attainment levels, participation, persistence and graduation rates.
- 2. This is followed by an examination of the literature on access and student retention and an exploration of national and international approaches to support more equitable access.
- 3. Next, there is an examination of the current state of transition policy, programming and provision offered to students in the Atlantic region by Provincial Governments; and
- 4. Finally, there is an exploration of the approaches offered by Atlantic PSE institutions to bridge the transition from school-to-PSE.

The final section highlights the preliminary findings; summarizing the issues identified through the environmental scan. In its entirety, this scan is a foundational piece that will be used to help shape the next phase of this project, employing active research methodologies to "scratch the surface" to uncover the strengths, opportunities, aspirations and results (SOAR) across Atlantic post-secondary transition systems. The Scan is intended to highlight issues/targets that would most benefit from a deeper investigation afforded by the survey and interviews conducted after. Ultimately, the Scan and the subsequent research will inform recommendations made at the end of the full research paper.

A Profile of Public-to-Post-Secondary Transitions in the Atlantic Provinces

Strengthening transitions from public-to-PSE is a vital economic and social imperative, both for the future success of Atlantic students and for the prosperity and social cohesion of the Atlantic Region. This section of the Scan examines how students from the Atlantic Provinces are currently faring in their public school-to PSE transitions in terms of attainment levels, persistence and graduation rates, academic preparedness, unemployment rates and access.

Education Attainment Levels

Table 1¹ shows a comparison of education attainment levels of Atlantic Canadians relative to the national average. Nationally, 48.5% of Canadians between the ages of 25 and 64 had not completed education levels beyond high school. In the Atlantic Region, the percentage of the provincial

¹ The most complete profile of the Canadian population can be gained through the recent national census (the 2011 National Household Survey), a data set that receives information from every Canadian. It thus produces data for policy-relevant research. In comparison, other Statistics Canada data are based on estimations, using a sample of the Canadian population to calculate national results.



population with an education attainment not extending beyond the high school level is higher than the national average, at 50.4% in Nova Scotia, 51.2% in Prince Edward Island, 54.2% in Newfoundland and Labrador and 55.2% in New Brunswick.

Table 1 also shows that those with a skilled trades designation in New Brunswick (8.7%) and Nova Scotia (8.9%) are roughly equal to the national average (8.6%). Newfoundland and Labrador has the highest population in the region with a designation at 11%. Prince Edward Island is the only Atlantic Province below the national average at 8.0%. The college attainment rate in Atlantic Canada is greater than the national average in every province, with Prince Edward Island having the highest number of college graduates in the region at 2.6 percentage points higher than the national average of 17.6%.

While the Atlantic Provinces are roughly equal or higher than the national average for trades and college attainment, the Atlantic Canada results at the university level are below the national average. While 13.3% of Canadians have an undergraduate degree as their highest education attainment, all Atlantic Provinces are below this average, ranging from Newfoundland and Labrador at 4.7 percentage points lower to Nova Scotia coming closer to the national average at 12.5%.

Finally, fewer Atlantic Canadians have advanced or professional degrees than the national average of 7.5%, with Nova Scotia having the highest rate in the region at 6.7%, followed by Prince Edward Island at 5.5%, New Brunswick at 4.7% and Newfoundland and Labrador at 4.6%.

Table 1: Level of education of Atlantic Canadians, by province, in absolute numbers and percentage

	NB		NS		PEI		NL		Canada
Less than high school	175,785	28.2%	203,275	26.5%	28,590	25.0%	133,480	31.0%	22.9%
High School diploma (only)	167,820	27.0%	183,315	23.9%	29,970	26.2%	100,215	23.2%	25.6%
Trade certificate	54,265	8.7%	68,585	8.9%	9,180	8.0%	47,220	11.0%	8.6%
College certificate	111,085	17.8%	138,670	18.1%	23,140	20.2%	80,080	18.6%	17.6%
Undergraduate degree	66,430	10.7%	93,710	12.5%	13,195	11.6%	37,280	8.6%	13.3%
Graduate or professional degrees	29,170	4.7%	51,680	6.7%	6,250	5.5%	19,920	4.6%	7.5%

Source: Statistics Canada, 2011 National Household Survey: Data Table on Educational Levels (99-012-X2011044)

Participation, Graduation Rates and Persistence

There have been many projects over the past decade that focused on measuring the participation, persistence and graduation rates of cohorts of students attending Atlantic universities. The most recent work emerges from the Maritime Provinces Higher Education Commission (MPHEC) which conducts numerous data analyses to determine elements of university participation.

MPHEC, in their June 2014 study, Measures of Student Progress and Outcomes: University Participation (2003-04 to 2012-2013), state that all three of the Maritime Provinces (Nova Scotia, Prince Edward Island and New Brunswick) have historically had university participation rates well above the national rate. However, this has started to change. The university participation rate for Canada has been steadily increasing, and the gap between the national rate and New Brunswick's and Nova Scotia's residents, in particular, has narrowed considerably (MPHEC, 2014). MPHEC's findings support the data presented in the 2011 National Household Survey (referenced above) and shows a significant shift in the transition of students in the Atlantic Region to university. For example, MPHEC's report notes that Nova Scotia remains the Maritime province with the highest participation rate of 18-24 year olds in university, albeit sliding from a high of 24% in 2004 to 21% in 2013.

More recently, MPHEC published, Student Progression in the Maritime System: Persistence and Graduation, June 2015, using data from yearly cohorts who entered a Maritime university between 2001 and 2006 to examine graduation rates in Maritime Provinces. The results note that for a Maritime student studying in their home university, the graduation rate from the university of first-entry was between 56% and 57% for these cohorts, with an additional 5% of the cohort graduating from another Maritime university. In the end, between 61% and 63% of any cohort of university students graduated from a Maritime university within a six-year period. For the remaining students in those cohorts, the data collected for the Scan does not illuminate the reasons for not graduating from a Maritime university. They may have: taken longer than six years to graduate; transitioned to another university outside of the Maritime Provinces; transferred to a community college; or have left prior to graduation (MPHEC, 2016).

It's important to note that tracking PSE entrants in the Maritime Provinces is about to become much more robust. The MPHEC reports cited above were published prior to the launch of the regional student identifier number system. This system will help public post-secondary institutions in the region have a considerably enhanced capacity to follow post-secondary entrants and allow organizations like MPHEC to track the individual pathways of students to learn exactly what happens to students who graduate and to those who do not. This will greatly assist those in the college system as there is a lack of data for community colleges in the region, as the consortium of Atlantic public colleges – the Atlantic Provinces Community College Consortium – has not yet adopted a research and statistics pillar to support its strategic activities. At this stage, it is difficult to know whether similar patterns of completion/non-completion exist for those entering college.

The most comprehensive report on persistence rates in Atlantic Canada was published in 2009 by Finnie and Qiu using the Post-Secondary Student Information System (PSIS), a national longitudinal survey that provides detailed information on enrolment patterns and graduation rates of Canadian public post-secondary institutions. This project was funded by the Canada Millennium Scholarship Foundation and CAMET and, while this research is nearly nine years old, it remains the only Statistics Canada-released study that focused on persistence in Atlantic Canada (Finnie and Qui, 2009).

Some of the main findings of this Finnie/Qiu study are:

- The dropout rate after first-year in Atlantic universities is similar to the national average at 20.2%, of which 5.1% are switchers to another program or institution. The dropout rates decreased to 11.7% in second year.
- College students are more likely than university students to leave before graduation (22.6%).
- At the undergraduate level, male students are more likely to leave prior to graduation than female students. The drop-out rates are very similar for males and females at the college level.
- Leaving rates among four Atlantic Provinces are clustered within a few points of each other, while Nova Scotia has somewhat lower rates. Finnie and Qui found this finding surprising as each Atlantic Province has its own institutions and each institution has its own set of policies.
 They felt that there should have been more variance than there was.
- Twenty-five percent of undergraduates who leave after first year will return, with half of them returning to the same institution and a quarter to a different institution at the same level. A much smaller proportion of college leavers return to their studies.

Academic Preparedness

The need for academic preparedness has been identified as an important factor to ensure the successful transition of students from public education to post-secondary graduation. From 2003 to 2010, the Canada Millennium Scholarship Foundation designed a series of longitudinal initiatives to examine the relative impact of the three main barriers to PSE, namely a lack of adequate career



education, financial limitations and insufficient academic preparedness. Academic preparedness was deemed just as much a barrier to successful transitions as poor career education and financial limitations.²

Strong cognitive ability in reading, math and science are indicators of academic preparedness and the Organization for Economic Co-operation and Development (OECD) tracks these indicators in its *Programme for International Student Assessment* (PISA). PISA is a multi-country assessment of 15-year-olds in math, science and reading. PISA is not a test of curriculum knowledge, but rather a test of how well an individuals' knowledge of reading, math and science can be applied to real-world challenges.

In the 2015 PISA, out of 72 participating countries Canada had the following results: 2nd in reading; 7th in science; and 10th in math. Canada vastly oversamples compared to other countries so that it can also report provincially/territorially. Table 2 provides the score of the Canadian provinces, in relation to the national average. It shows that Atlantic Canada results are frequently below the national average in all three indicators.

Table 2: The 2015 Programme for International Student Assessment by Canadian provinces for Science, Reading and Mathematics

Science	Average Score	Reading	Average Score	Math	Average Score
AB	541	ВС	536	QC	544
ВС	539	AB	533	ВС	522
QC	538	QC	532	Canada	516
Canada	528	ON	527	AB	511
ON	524	Canada	527	ON	509
NS	517	NS	517	PE	499
PE	515	PE	515	NS	497
NB	506	NB	505	NB	493
NL	506	NL	505	MB	489
MB	499	MB	498	NL	486
SK	496	SK	496	SK	484

Source: Council of Ministers of Education, Canada, Measuring Up: Canadian Results of the OECD PISA Study. The Performance of Canada's Youth in Science, Reading and Mathematics. 2015 First Results for Canadians Aged 15.

Unemployment Rates

For many decades, the statistical results relating to labour-market attachment have been consistent: with increased education comes lower unemployment rates. Post-secondary graduates tend on average to earn significantly more, stay employed longer and depend less on social assistance than those without a post-secondary credential (Declou, L. 2014). Post-secondary graduates also tend to have better health and higher civic engagement (DeClou, L. 2014). Research indicates that increasingly

² See Social Research and Demonstration Corporation, Future to Discover: Early Implementation Report. Available online at: http://www.srdc.org/uploads/ftd_eir_full_report_en.pdf. Social Research and Demonstration Corporation, BC Avid Pilot Project: Early Implementation Report. Available online at: http://www.srdc.org/uploads/AVID_EIR_full_report_eng.pdf. Joseph Berger, Anne Motte and Andrew Parkin, Price of Knowledge: Access and Student Finance in Canada (Montreal, Canada Millennium Scholarship Foundation, 2009), 45-83. Available online at: http://www.yorku.ca/pathways/literature/Access/The%20Price%20of%20Knowledge%202009.pdf.



jobs requiring a post-secondary (career-ready) credential will continue to rise.³ Perhaps the most compelling evidence of the importance is that, for several decades, the statistical results relating to labour-market attachment have been consistent, with unemployment rates decreasing as education levels rise.

The results of the 2011 National Household Survey show higher unemployment rates in Atlantic Canada than the national average for those with a high school diploma or less. In fact, while the national unemployment rate for those with less than a high school diploma is 11.3%, the unemployment rates for the equivalent education level in Atlantic Canada vary from 14.8% in Nova Scotia to 26.8% in Newfoundland and Labrador (Statistics Canada, 2011).

Table 3 demonstrates the significance of education to unemployment rates in the Atlantic Region:

- For those with a graduate or professional degree, the unemployment rates in Atlantic Canada are consistently lower than the national average.
- For those with an undergraduate degree, Atlantic Canada has unemployment rates near the national average.
- For those with a trades or college credential, the unemployment rates for the region range from five to two percentage points higher than the national average.
- For those with high school and less, the unemployment rates for the region are approximately five to nine percentage points higher than the national average.

Table 3: Unemployment rates for each Atlantic Province and the Canadian average, by education level, per the 2011 National Household Survey

	NB	NS	PEI	NL	Atlantic Region	Canada
Less than high school	20.2%	14.8%	18.7%	26.8%	20.1%	11.3%
High School diploma (only)	10.7%	9.2%	13.1%	16.1%	12.3%	6.9%
Trade certificate	9.6%	9.4%	11.0%	14.5%	11.1%	6.4%
College certificate	6.9%	6.6%	8.1%	8.9%	7.6%	5.1%
Undergraduate degree	3.7%	4.7%	5.4%	4.9%	4.5%	4.5%
Graduate or professional degrees	3.0%	4.2%	3.1%	4.0%	3.6%	4.7%

Source: Statistics Canada, 2011 National Household Survey, Statistics Canada Catalogue no. 99-012-X2011044.

Access

Access to PSE remains uneven among Canadian youth. Nationally, a great deal of attention and research has focused on measuring the barriers that prevent students from accessing PSE. In our review, we found no reports/papers related specifically to Atlantic student access to PSE. One of the primary sources of research on access of students to PSE comes from the Canada Millennium Scholarship Foundation (CMSF) research from 2001 to 2010. This research provided foundational understanding of barriers to accessing PSE. Much of this research is summarized in the four editions of their flagship publications, *The Price of Knowledge*. One of the main findings from this research was that children from families with no previous experience at the post-secondary level or with lower

³ See Lumina Foundation, A Stronger Nation, April 2016, http://strongernation.luminafoundation.org/report/main-narrative.html



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family income were significantly less represented at the post-secondary level than their peers from higher income, more highly educated families.

With respect to students from low income families, Berger, Motte and Parkin in their report, The Price of Knowledge: Access and Student Finance in Canada (2009) found that:

- Twenty-five percent of 19 year-old low-income Canadians attend university, while 46% of their high-income counterparts of the same age are enrolled in university studies.
- Low-income youth are 40% more likely to enrol in college studies as in university studies by the age of 19.
- For low-income Canadians, the odds of graduating from high school and pursuing postsecondary studies without taking a long break are "equivalent to a coin toss". For the children of wealthy families, the element of chance vastly diminishes. Fully 77% of youth from highincome families have enrolled in PSE.

Parental education level was also found in the CMSF research as a strong determinant to access. A survey of school students conducted by CMSF established that, starting in Grade 6, students from homes without any previous PSE experience start reporting a greater likelihood of not attending any form of PSE after high school (Prairie Research Associates, 2005). In fact, the percentage of those deciding not to attend PSE from homes without PSE experience increases with age. The percentage of students from these homes increased from 17% in Grade 6 to 33% in Grade 12, while students from families with both parents having completed university studies reported a constant high percentage of wanting to pursue post-secondary studies throughout middle and high school years (Prairie Research Associates, 2005).

Research in Canada has continued to probe the question of unequal access. Most recently, this research has shown that parental education is much more of a determinant than income to access (Finnie, Wismer and Mueller, 2015). The level of parent education can have both direct and indirect effects. Finnie, Mueller and Sweetman (2014) state that:

Indirectly, it influences high school grades, reading ability and academic engagement, which are all positively correlated with the high probability of attending PSE, especially university. This [also] illustrates various mechanisms by which background factors operate from very early ages to influence post-secondary access (n.p.).

Canadian research has started to examine these background factors more specifically. Researchers are asking: Is it the level of education of one's parents that is the sole mitigating factor or is it the limited experience of and/or positive attitude toward PSE in one's family and community that is more at play? This question has been further explored by Childs, Finnie and Mueller (2010 and 2012) who point to the importance of "cultural capital," defined as a set of ways that parents impart their social status and economic opportunities onto their children. Cultural capital can include interventions such as going to cultural activities, reading newspapers, discussing current events and having a diversity of books/literature in the home. Collectively, cultural capital is positively related to PSE access (Childs, Finnie, and Mueller, 2010). They argue that the level of education of one's parents can limit one's access to the cultural capital but they acknowledge that it can be mitigated. They contend (2012) that cultural capital variables that impact access could be enhanced through educational programming (e.g. exposure to cultural events through field trips and in-school performances) and by encouraging/supporting parents with lower education levels to increase their children's cultural capital (e.g. their report that found positive impacts when parents spent time talking to their children about current events, movies or even TV shows). They argue that policy responses should not just focus on programs that make PSE more feasible (which they contend still remains important), but also on students (at a young age), their families, their communities and their schools in ways that help all

understand the benefits of PSE and provide the "cultural" pathway to prepare youth for that option (Finnie, R., Mueller, R. and Sweetman, A., 2014).

Canadian researchers have also looked at a variety of sub-groups (e.g. rural youth, youth with disabilities, Indigenous youth, and immigrant and visible minority youth) to examine why some groups go to PSE more than others (e.g., see Looker (2010), Parriag, Wright and MacDonald (2010), Finnie, Childs and Wismer (2010) Bruce and Marlin (2012), McCloy, U. & DeClou, L. (2013), Till, M., Leonard, T., Yeung, S. & Nicholls, G. (2015)). Findings from this research reinforce the importance of cultural/environmental factors, referred to above, in influencing access. Generally, the Canadian research reinforces that "one size does not fit all" and calls for a more in-depth understanding of unique barriers faced by specific populations to develop tailored responses connected directly to the sub-group's challenges and needs.

International/National Strategies to Support Access, Persistence and Graduation

This section of the Scan highlights a number of national and international promising practices aimed at increasing the recruitment and retention of PSE students and consistently reveals the importance of the following:

- Identifying and monitoring students potentially at-risk;
- Intervening early in an individualized/student-centred manner;
- Providing a continuous suite of support services to address multiple and diverse needs; and
- Cross-sector collaboration.

Interventions can occur at pre-entry to PSE (supporting students before they attend PSE), during the transition to PSE (supporting students as they transition from secondary to PSE) and while attending PSE (particularly in the first and second years). Interventions may provide generalized support around PSE applications, enrolment and success and/or they may target specific barriers or challenges faced by students such as academic achievement, finances, mental health and belonging. A comprehensive or wrap-around approach is favourable and would typically cover all these themes, supporting students from pre-entry through to graduation. Successful interventions and approaches often require collaboration amongst various stakeholders, such as the K-12 system, post-secondary, employers, community and government. Explicit policies supporting school-to-school transitions provide an essential endorsement and guide for the planning, implementation and evaluation of effective practice.

This section provides an overview of best practices from around the world, beginning with the United States (US), which also serves to set the context regarding the types of issues faced by students, specifically those from low-income and other disadvantaged groups and the types of programming that have proven effective in addressing these issues. Comprehensive approaches to PSE transition were found in a number of countries and appear to have impact with underrepresented groups and focus on those groups at-risk or for students who have left school prior to graduation and need pathways back to school and lead to PSE options. Dual systems are examined as a means to increasing recruitment and retention. This section also reviews interventions designed to address some of the specific challenges students commonly encounter (e.g. mental health issues, lack of family/community exposure to PSE and belonging and engagement) and finishes with an innovative institutional example aimed at supporting persistence in PSE from induction to graduation.

Promising Practices from the US - An Overview

The Executive Office of the President of the US (2014) convened a group of experts to examine barriers to and promising practices for increasing the number of low-income students who apply for, enrol and



succeed in PSE. "Low-income students face barriers to [PSE] success at every stage of the education pipeline, from elementary school through post-secondary education, sometimes in spite of their academic achievements. Many of these students lack the support and resources to navigate [PSE] preparation – from test taking, to applications, to financial aid – and they end up choosing an [institution] that is not a good fit for them or no [PSE] at all." (The Executive Office of the President, 2014, p. 14). Children from low-income or disadvantaged groups face several challenges with respect to PSE engagement. They often lack the encouragement and early exposure to higher learning that can foster the development of aspirations. They may have limited awareness of available opportunities and limited access to PSE advising, a critical support as a young person prepares to apply for PSE. Many low-income students require remediation and the remediation courses they follow may or may not help them build the necessary foundations for success with college/university level learning.

Some examples of promising practices in the US that have proven to positively impact application, enrolment and persistence/completion include:

- Promote a strong "college5-going culture" in middle and high schools.
- Offer summer enrichment programs and college visits.
- Provide students with tailored information on the variety of PSE options available (including financial aid information) as is done through the Expanding College Opportunities project and the College Board's Apply to 4 or More campaign. The College Scorecard initiative serves to "empower" students by providing more "transparent" information on options.
- Facilitate access to counsellors, advisors and "near-peer" mentors who can help guide students through the college and student-aid application processes and speak to the expectations and realities of college life. Two examples are College Opportunity and Career Help (COACH) program which involves Harvard University students coaching high school seniors in low-income serving schools on career plans and applications and College Possible of AmeriCorps that trains recent graduates to provide free PSE advising services to low-income students. Using college/university students or recent graduates, they have found, is cost-effective and these mentors can be more relatable to the mentees.
- Make PSE more affordable (waived application fees, increased federal investments in grants and tax credits, scholarships, performance based pay to colleges/universities, Pay-As-You-Earn student loan repayment).
- Send text messages to students during the summer following high school graduation to encourage enrolment. This practice helps confront the "summer-melt" phenomenon which sees 10-20% of students who have been accepted to college/university fail to matriculate in the fall.
- Focus on early identification of and intervention with students in need. Ensure a "suite of student supports" for PSE preparation such as tutoring, mentoring and career planning.

Apply to 4 or More – An initiative of the College Board whereby information packets with college planning information and application fee waivers are mailed to college-ready low-income students to encourage them to broaden their PSE search and consider a range of possibilities.



⁴ These include the "cultural capital" resources mentioned in Section 3.

 $^{^{\}rm 5}$ The term "college" is used in this section within the context of the US PSE system.

⁶ Expanding College Opportunities Project – Stanford University economists Caroline Hoxby and Sarah Turner tested a low-cost information-dissemination approach whereby packages including application guidance, expected costs, and application fee waivers were sent to low-income high-achieving high school students. Students were found to have submitted 19% more applications and the likelihood of college enrolment increased.

- Align curriculum across secondary and post-secondary to reduce the need for remediation, improve assessments to ensure appropriate remediation and customize remediation to students' career interests.
- Enhanced student supports on campus such as "learning communities" which group together low-income and other disadvantaged students for peer support and targeted services.

Comprehensive Approaches

The following Belgium and US examples demonstrate comprehensive approaches to facilitating school-to-school transitions across the key transition points - pre-entry, during transition and while attending.

Belgium

In September, 2016, The Find-Mind-Bind approach of Belgium was showcased at a learning exchange hosted by the European Commission on the "Integration of young people not in education, employment or training (NEETs)". The event brought together representatives from Belgium, Luxembourg, Germany and Norway to examine this approach whereby outreach workers actively seek out young people in the community (find), build a trusting relationship with them and help them develop a career plan (mind) and work with these youth and various community partners in support of achieving the career plans (bind). Key learning points were identified with respect to each phase. During the find phase, it is important to map out the needs of this diverse target group so that appropriate services can be planned according to the needs. Various methods can be used to identify the NEETs such as Luxembourg's national registry of early school leavers from secondary schools which is accessed by Local Action for Youth Staff. These staff members contact NEETs and offer direct or referral services. A single contact person, one-stop shops providing a variety of tailored services (e.g., the Youth Employment Agency in Hamburg) and progressive support (coaching and mentoring, peer-to-peer support, informal and non-formal education and leisure activities) are recommended during the mind phase. The bind phase emphasizes individualized pathways for young people that could include a combination of guidance, training and on-the-job learning such as apprenticeships. Progress or "distance travelled" is measured rather than relying solely on typical outcome targets such as enrolment numbers. Engaging employers is required at this phase to increase their awareness of the issues of NEETS and how to best support them and to ensure work and training opportunities are available. Through all phases, collaboration between partners is essential to facilitate early identification and intervention and the provision of a range of services delivered in a holistic and continuous manner with minimal administrative burden.

United States

The aforementioned 2014 report from the Executive Office of the President refers to a few examples of successful transition programs that follow a cohort-based model. In this model, students are identified at a young age (can be as early as pre-school) and are followed through college. A range of comprehensive and wrap around services are provided and may include mentoring, counselling, academic/tutoring support, scholarships, parent engagement, summer bridging programs, employment, community service opportunities and case management. Programs using this approach have shown improvements in college application, enrolment and/or completion rates (Executive

Office of the President, 2014) include the US Department of Education's GEAR UP grants (West Virginia example is cited), the I Have a Dream Foundation, Project GRAD, and College Track.⁷

Europe

The European Commission produced a report in 2014, <u>Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures,</u> that examines the main issues related to early leaving from education and training as well as strategies, policies and measures to confront these issues. "The role of VET [vocational education and training] in reducing early leaving from education and training is not only related to the reduction of dropping out from VET, but also to the potential of VET to attract, retain and reintegrate young people in education and training" (European Commission/EACEA/Eurydice/Cedefop, 2014, p. 110). The report details a number of preventive, intervention and compensation measures that European countries currently have in place to address early leaving from VET. These measures are summarized in the following tables. Common features and success factors include early identification and intervention, individualized pathways, combined individual, school and system actions, student centred and targeted case management (e.g., guidance, mentoring, learning plans), continuous support, capacity building, developing an evidence-base and prioritizing.

Preventive Measures

Type of Preventive Measure	Description/Examples
Transition programs	 To facilitate more supported, prepared and informed transitions to counter the common situation of students dropping out or changing programs due to realizing they made a "wrong" choice. Examples include career exploration programs, "try out" a course, company site visits, workbased training and case worker support through year 1 (Germany, Netherlands and Finland)
VET Preparatory programmes and study guarantees	 Preparatory/bridging programmes offer young people a chance to upgrade and improve their skills and grades and gain work experience (Germany, Luxembourg, Scotland and Wales). Youth guarantee schemes, typically in the apprenticeship sector where young people unable to find an apprenticeship placement are offered alternative forms of training to help prepare them to obtain a placement (Germany and Austria).

⁷ GEAR UP Grants – The US Department of Education offers Education Gaining Early Awareness and Readiness for Undergraduate (GEAR UP) grants to states/partnerships/local school districts to fund programs that follow students from grade 6 through to college, providing them with mentoring, outreach and support services(https://www2.ed.gov/programs/gearup/index.html). An example is the West Virginia GEAR UP program that operates in 14 schools and anticipated to reach approximately 13,000 students over a 6-year period.

I Have a Dream Foundation – This I Have a Dream Foundation sponsors groups of 50-100 children at low-income elementary schools and housing projects in 27 states, providing supports such as mentoring, counselling and scholarships. Over 15,000 children or "dreamers" have been served since the program's inception in 1981. www.ihaveadreamfoundation.org

Project GRAD – Project GRAD supports students from pre-K through to college in such areas as academics, parent engagement, social services and college access. Through its college access program, students can attend summer bridge programs, workshops and career fairs, access career counselling, visit colleges, receive help preparing college and financial applications and obtain tutoring and mentoring. Students from Project Grad in their longest served schools, complete college at a rate of 51.5% in comparison to the national average of 26.8% of those from low-income backgrounds. http://projectgrad.org/

College Track – College Track provides a comprehensive range of services and supports (for e.g., academic advising, tutoring, mentoring, case management and financial assistance) to students from grade 9 through to college graduation. Over 90% of College Track students are accepted into 4-year university programs compared to 50% of their neighbourhood peers who do not participate in the program. https://collegetrack.org/



Type of Preventive Measure	Description/Examples
Financial incentives	Performance-based funding models can motivate providers to address the early school leaving issue. For example, per capita student funding is linked to completion and dropout rates in Slovenia, Sweden, Finland and United Kingdom.
Early leaving expertise/ resources for VET providers	 Training providers may lack the expertise to address high rates of early school leaving. Some countries (Belgium, Denmark, France, Italy, Portugal and Finland) provide additional resources (e.g., funding) and expertise such as an external expert to help develop/implement a comprehensive strategy. Better data on early leaving is needed to facilitate this process.
Training of teachers and in-company trainers	 Teachers and trainers must be adequately prepared to work with at-risk groups, identify those in need and intervene with the appropriate supports. Several countries such as Estonia, Latvia, Lithuania, Luxembourg, Hungary and Slovenia have recently provided training to VET trainers so they are better equipped to perform this role.

Intervention Measures

Type of Intervention Measures	Description/Examples
Early warning systems and units	 Systems that identify students at-risk of disengaging by monitoring distress signals such as absenteeism enable VETs to respond proactively and reach out and support students before they make the decision to leave. In some cases, units are established with the responsibility of "tracking down" absent students to determine the reason for the absence and to offer support (tools and resources) and to advise parents. Examples of these systems and units can be found in Belgium, Bulgaria, Lithuania, Malta, Netherlands and Slovakia.
One-to-one support: apprentice coaching, mentoring and case management	 Individualized support for at-risk students through the form of mentoring and coaching. Apprentice coaches are assigned to apprentices for the duration of their apprenticeship, helping to identify and address any issues that could result in dropping out (e.g., technical, academic and conflict management support). Apprentice coaching programs are available in Belgium, Germany, Austria and the United Kingdom.
Complex interventions by multi-professional teams	 Some students are experiencing complex issues that cannot be appropriately addressed by a coach or mentor. In such cases, the services of a professional (e.g., counsellor or psychologist) or team of professionals may be required. Although VET legislation in many countries mandates the provision of specialized supports, availability within VETs tends to be sparse. Hence, several countries have reinforced the availability of professional counselling and support services (e.g., Czech Republic, France, Cyprus, Finland and Iceland).
Short term time-out measures	 Respite time is offered to students experiencing personal or academic challenges so they can access the individualized and group supports they need (Belgium, Germany, France, Luxembourg, Hungary, Austria and the United Kingdom).

Compensatory Measures

Type of Compensatory	Description/Examples
Measures	



Opening up VET for new groups of learners	Accepting youth who have not met the minimum educational requirements (Estonia, Spain, Latvia, Lithuania, Poland, Slovenia, Slovakia and Norway).
Second chance VET programmes	New formal pathways for youth who had previously dropped out and are seeking a second chance (Bulgaria, Ireland, Spain, Italy, Cyprus, Latvia, Malta and Poland).
Comprehensive reengagement programmes making use of VET pedagogies	 Reengagement programs provide support services that start with such basics as developing an interest in learning and the importance of being punctual. Multi-professional teams help young people deal with different types of barriers and once ready, the youth can begin to participate in education and training. Many countries have well-established mainstream reengagement programs.

Dual Systems

In the International context, what is referred to as a "dual system" is different from how this is defined in the Canadian context. Dual systems in Canada refer to learning at the secondary level that is also credited at the post-secondary level. This happens through partnerships between the public school system and individual post-secondary institutions. Dual systems are defined internationally as systems that enable students to follow individualized pathways that allow for the attainment of secondary and post-secondary credits for certain course work and work integrated learning experiences. Several countries have dual education and training systems. Most well-known are those in Germanophone countries, including Germany, Austria and Switzerland, which are also referred to as apprenticeship or vocational and education training systems. There are more apprenticable occupations in these countries compared to the number in Canada. For example, Switzerland has apprentice places for some 250 occupations whereas Canada has 55 Red Seal apprenticable trades.

In this section, we highlight two different dual-system models - a US-based model, Pathways to Prosperity and the Swiss Dual Training System.

United States

The Pathways to Prosperity Network in the US is an initiative of Jobs for the Future, the Harvard School of Education and multiple states aimed at increasing the number of youth who finish high school and attain a post-secondary credential with currency (Cahill et al., 2014). Participating states engage educators and employers in creating grade 9-14 pathways that combine high school and community college. These pathways help a young person enter a career typically in a high-growth industry (e.g., a STEM related field) while not closing the door on further education. While still in a pilot phase of implementation, reports thus far have shown that the following are key "levers" to support implementation (p.2) and impact:

- Supportive state policies such as dual enrollment policies that allow high school students access to college courses, financial incentives and sustainable funding to provide the programs leading to a credential (repurposed existing funds or new funds), and incentives for employers and unions to ensure the availability of work options for students. There should be no tuition costs for students.
- 9-14 career pathways with clear structures, timelines, costs and requirements that integrate
 high school and post-secondary curricula and meet labour market requirements. Flexible
 pathways enable students, credits and funding to move across secondary and post-secondary.
 Career information and advising systems with students exposed to a wide range of career
 options, beginning in elementary. Students engage in work-based learning and are supported
 in their decision-making. Many states are either mandating or strongly encouraging the
 development of student learning plans.
- Work-based learning and employer engagement are evident in curriculum/program design, provision of learning opportunities, guiding students, and supporting them in their transition to work. Educators help employers design workplace learning. Champion employers recruit



- fellow businesses to take part. Employers are incentivized through tax credits, subsidies, infrastructures, training levies, and training opportunities for current employees.
- Intermediaries are organizations involved through all program stages, from creating to sustaining pathways including recruiting and orienting community and corporate partners and finding work-based learning opportunities for youth. They can create bodies of knowledge and skills that serve and support all partners. A cross-sector and cross-agency leadership team coordinates the work.

Switzerland's Dual Education System

The Swiss model is referred to in one of three ways, as a dual model, an apprenticeship model or a VET model. In essence, it's a model that begins in senior secondary and extends through to PSE, combining classroom learning at vocational schools with on-the-job training at host companies. Between 70 to 75 percent of all students coming out of compulsory learning in year 9 choose to enter into vocational education for upper secondary with about 25% choosing the academic version of upper secondary education (i.e. university pathway).

So why do so many choose the dual system route? Firstly, the university system is much more limited than in other countries. Universities are much more specialized and focus on a relatively narrow band of professions (e.g. lawyer, doctor, teacher, professor, scientific researcher) and do not provide the liberal arts education as provided in Canada, for example. The premise in Switzerland is that upper secondary is where the foundational learning in the arts and sciences takes place in preparation for university level studies and this foundation of learning enables students to proceed directly to professional studies (Hoffman and Schwartz, 2015). For example, senior secondary students are admitted directly into medical schools rather than having to take a bachelor's degree first.

Secondly, as Hoffman and Swartz found in their 2015 study, the dual system has four features that make it especially attractive to many young people:

- "It immediately puts young people in a setting with adults, where they are treated differently than in school and given more responsibility coupled with lots of coaching and support.
- The learning is much more hands-on, contextualized, and applied: academic concepts are made real.
- Students are paid while they are learning, typically the equivalent of about \$600-\$700 a month to begin, growing to \$1,100-\$1,200 by the third year, and this for three to four days of work a week at the most.
- And at the end of the apprenticeship they have a nationally recognized qualification that is
 portable, and the opportunity to move directly into full-time employment or to continue on to
 get more education" (p. 6).

The dual system has a wide range of opportunities for students at all levels. There are approximately 250 occupations "offered and defined through national VET ordinances and training plans" (Hockel, Field and Grubb, 2009). It is structured to support students with low skills into VET programs with a range of certificate options associated with specific occupations. VET certificates can then ladder into other apprenticeship/VET qualifications and PSE credentials. The Swiss pride themselves in saying (which is reinforced by research) that their VET system has virtually "no dead ends" (Hoffman, 2013).

For the last 20 years, Switzerland has moved to modernize the system in keeping with the shift to a more knowledge-based economy. One significant change made was the introduction of a post-secondary VET in Switzerland which "offer[s] avenues for progression that are both attractive to upper-secondary VET graduates and meet labour market demands" (OECD, 2014, p. 2). Some VET graduates have access to a university entrance qualification that can lead to the acquisition of a Professional Baccalaureate (Steedman, 2010) at a university of applied sciences (UAS). Professional education and training (PET) credentials and the UAS's are providing an additional layer onto the Swiss



VET system. Its introduction was in part a way to stimulate the economy (Graf, 2016) and give students access to university level qualifications from a VET pathway.

A 2009 review of the Swiss dual system (VET) found a number of strengths in supporting students across multiple school-to-school transition points. A particular strength of the overall Swiss education system is its embedding of career education and counselling delivered by professionally-trained practitioners. Career education/guidance begins in the 6th year (when students are 12 years old) (Steedman, 2010). It is a fundamental responsibility of teachers throughout the period of compulsory education, ending in the 9th year. All subject teachers receive career development training. Career curriculum is developmental and includes visits to career centres, consultation with parents, learning about occupational options, working with diverse sources of labour market information and taster sessions in firms offering apprenticeships in the 8th and 9th year of compulsory education. The 9th year is focussed on helping students connect their interests with career options and learning pathways that begin in the 10th year.

Attending career guidance and counselling sessions is mandatory for students in compulsory secondary education. They receive these services at career centres based in their communities rather than inside the school. These centres are open to them across their compulsory, upper secondary and post-secondary education, providing continuity of service. At the centres, they have access to professionally-trained career counsellors and specialists with expert knowledge of specific institutions and education/work pathways. Counsellors are trained in special programs to "make sure that they are well-informed about VET courses and the associated labour markets, rather than simply qualified in psychology and counselling [specialties]" (Hoeckel, Field and Grubb, 2009). Counsellors also visit schools and provide services on-site as well as at the centre based in the community. An OECD review of the Swiss career education and service model found that it "conform[s] well to the recommendations of the OECD review of career guidance" (Hoeckel et al., 2009).

Another hallmark of the system is its effort to evaluate and the development of its evidence base. This evaluation system has been instrumental to policy decisions and its cost-benefit analysis helps convince employers to remain or become engaged in its delivery (Hoeckel et al., 2009). Employer engagement is critical as Switzerland provides no special financial incentive to companies to participate (Hoffman, 2013).

The Swiss dual/apprenticeship system has a wide-ranging commitment by firms. One-third of employers offer training places and contribute 5.3 billion Swiss Francs (CHF) to it (Graf, n.d.). By comparison, the state invests 3 billion CHF (Graf, n.d.). Recognizing that it is easier for larger firms to take on apprentices, SMEs can access some Federal funding to set up group training facilities to meet training requirements and many SMEs share apprentices to cost-share the resources needed to support the apprentice (Steedman, 2010). On average, Swiss firms manage to make a small profit over the period of having an apprentice in their firm (Steedman, 2010). Net benefits for employers are dependent on training expenses associated with training costs (i.e. training is more expensive for some apprenticeships (e.g. electrical technician) than others (e.g. IT specialist) (Graf, n.d.).

Many countries have tried to emulate the Swiss (and German and Austrian) approaches but, according to the OECD Skills beyond School study (http://www.oecd.org/edu/skills-beyond-school/skills-beyond-school/skills-beyond-school-Austria-Gemany-Switzerland.pdf), these attempts have failed "...because of insufficient attention to the institutional context - including the range of further routes of progression" (OECD, 2014, p. 2). In these countries, upper-secondary VET tracks are reinforced by labour-market relevant post-secondary options for graduates that provide clear "... career and learning routes to help professionalize the initial occupation by establishing a career structure and routes of progression" (OECD, 2014, p. 2).

Programming that Addresses Specific Challenges to Access and Persistence

This section examines promising practices in Canada, US, UK and Australia focused addressing challenges to PSE access and persistence.

Mental Health

United States

"Helping senior high school students plan for their mental health needs before they graduate may be a more effective way of helping all of them cope with the transition to life after high school, regardless of their intended destinations" (Fowler & Lebel, 2013, p.1). To explore this notion, the Social Research and Demonstration Corporation (SRDC) conducted a comprehensive review of the literature and an environmental scan focused on student mental health promotion, examining outcomes, conceptual frameworks, and types of interventions that are indicative and supportive of positive mental health (Fowler & Lebel, 2013). The review includes helpful guidelines for the development of an intervention to promote student mental health through the transition from high school to post-secondary. One of the recommendations presented by SRDC is to "focus on enhancing social and emotional skills such as problem-solving, decision-making, social interactions, and self-regulation as a means of promoting and protecting students' mental health" (p. 28), also referred to as social-emotional learning.

Social-emotional learning (SEL) programs aim to equip students with core social-emotional competencies including self-awareness, self-management, social awareness, relationship skills and responsible decision-making (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2013 cited in SRDC report). A meta-analysis of 213 school-based SEL programs in the US revealed that participating students demonstrated significant improvements in social and emotional skills, attitudes about self, others and school, behavioural adjustment and academic performance (Durlak et al, 2011). These programs were found to be effectively delivered by classroom teachers and school staff and incorporated into everyday educational practices. In 2016, CASEL launched a two-year <u>Collaborating States' Initiative</u> that involves partnering with states on the development of policies, learning standards and goals, and practice guidelines and tools for statewide implementation of SEL for preschool through high school.

Canada

In Canada, SEL programs tend to be targeted at children in primary and elementary schools. High school programming often focuses on identifying mental health problems and seeking help (prevention) versus developing emotional and social strengths of students to increase positive development (promotion) (Fowler & Lebel, 2013). There are a number of programs at PSE aimed at helping students adjust but similar to high school, they centre on mental health literacy/prevention not promotion. One example that covers both is *Transition: Student Reality Check* (2008) by Dr. Stan Kutcher, an online resource available to youth which addresses the social, emotional and mental health aspects of the PSE transition (http://teenmentalhealth.org/product/transitions-ebook/). In terms of facilitating the transition from secondary to post-secondary, there are two other Canadian examples, both in Ontario: *The Jack Project* (awareness workshops for parents, educators, Grade 12, college and university students that include an overview of community and online resources) and *Healthy Transitions* (a one-day session for Grade 12 students on such life skills as stress management, relaxation, money management, health and fitness, cooking and nutrition and a link to community resources).

Exposure to PSE

Canada (Winnipeg, Manitoba)

Career Trek is an independent, non-profit organization in Winnipeg, Manitoba that offers a suite of early career interventions for kids who have the potential to attend post-secondary education but who have been identified as facing a number of barriers that will likely block them from going (such as being from low income families, being unmotivated towards school and/or having parents who do not have a PSE credential).

The Wonder of Work (WOW) Program provides youth in Winnipeg (the program also operates in other regions of Manitoba) with hands-on career education starting in Grades 5 and 6, allowing them to experience 80 different careers in 17 fields at participating post-secondary institutions. In Grade 10, participants come back to the WOW program as Junior Staff. This program pairs Junior Staff with paid part-time staff mentors to learn aspects of the Career Trek's program positions while working with younger WOW program participants. The 120 Junior Staff hours qualify participants for volunteer high school credits. Finally, Career Trek hires graduates annually as part of its part-time complement of over 200 post-secondary students, many of whom are program graduates. Over 800 students per year from across Manitoba participate in Career Trek.

Ancillary projects to the main WOW program include the Apinochek Pasaquok and the M programs. The Apinocheck Pasaquok (Children Rising) Program is a unique eight-year model that pairs Skownan First Nations youth and their families with Winnipeg-based youth and their families as a method to improve educational outcomes and the skill capacity of both communities. Their unique model "blends rural and urban, Aboriginal and non-Aboriginal children in order to break down barriers, build understanding, create a sense of community, and lay the foundation for smooth education and career progress" (https://careertrek.ca/programs/children-rising-parkland/). The M Program invites young mothers (ages 16 to 20) in high school and their children to experience careers and develop workplace Essential Skills while providing transportation, childcare and meals to overcome typical barriers to participation.

Evaluations of the program have found that 91% of the participants graduated from high school and Indigenous participants graduated at a rate of 77%, which is significantly higher that graduation rate for those not in the program. Fifty percent of Career Trek participants go directly to PSE (Bell and Benes, 2012).

Belonging and Engagement

United Kingdom

England's What Works? Student Retention and Success was a three-year program (Thomas, 2013) that involved seven projects at 22 higher education institutes (HEIs) and sought to gather evidence on effective practices for ensuring high continuation and completion rates. The study showed how crucial student belonging is during the transition period including pre-entry, induction and first semester/year. They found that indications of a sense of belonging included supportive peer relations, meaningful interactions between students and staff knowledge, confidence and identity as a successful learner and an educational experience of personal relevance.

The report describes several guiding principles for the development of interventions aimed at achieving a sense of belonging including (1) mainstream provision so all students can participate, with an opt-out rather than opt-in approach (2) proactive seeking of students versus reactive (3) relevant activities that are informative and useful with explicit benefits (4) timeliness (early engagement is essential) (5) encouragement of collaboration and engagement with other students and with staff and (6) monitoring of engagement so when low levels exist, appropriate action can be taken.

The most effective interventions during pre-entry were considered to be those who provide information, clarify expectations, develop academic skills, build social networks and nurture a sense of



belonging. Effective induction programs should be easily accessible, occur over an extended period in the academic environment with students from the same program, and use methods to help students get to know each other and teachers and tutors and understand academic expectations and procedures. Factors proven to contribute to belonging in the academic sphere include staff/student relationships (being able to ask for help), curricular contents (real-world, interesting and relevant), learning and teaching (group based, experiential, work placements), assessment and feedback (clear and transparent assessment guidelines, helpful feedback), personal tutoring (a staff member overseeing individual progress and referring to other services as needed), peer relations and cohort identity (fostering friendships, staff promoting social integration) and a sense of belonging to a particular place (within the university).

Australia

"If engagement is the linchpin of student success and retention, then HEIs [higher education institutes] need to monitor and measure the extent of student engagement-particularly in the first year-and most importantly intervene with students exhibiting signs of disengaging from their studies" (Nelson et al., 2011, p. 84).

The Student Success Program (SSP) at Queensland University of Technology, an intervention aimed at identifying and supporting those students at-risk of disengaging from learning and from their institution, began as a pilot within one faculty and then expanded to all faculties. The expanded SSP includes 4 "campaigns". The first campaign is pre-semester and involves reaching out to students who have not accepted an offer to enrol or who did accept but have not yet enrolled. During the second campaign, during weeks 1-4, at-risk students (e.g., from rural areas, low socioeconomic (SES) or have not attended orientation activities) are contacted to check on how they are settling in and to make them aware of the services and supports available. Campaign 3 occurs during the semester and is offered by trained Student Success Advisors (SSAs), students themselves, who make a "proactive highly individualized contact" with those at-risk of disengaging, delivering resources/services either directly or via a referral. Finally, Campaign 4 is at the end of the semester and provides advice to students at-risk of attaining "unsatisfactory academic performance" status. A study of the program demonstrated a positive influence on student retention, its impact on student persistence sustained for at least 12 months. The SSP is part of a larger First Year Experience Program at Queensland University of Technology.

Career Development

Canada

The focus of the University of Regina's UR Guarantee program is to support student transition and persistence in their degrees. The program provides a range of engagement, academic advising and career development supports to students in the program. Students have access to the tools necessary for academic success, access to relevant academic workshops, advising on other student engagement opportunities on-campus, assistance with career development activities and opportunities to participate in service and leadership roles. Students who complete the mandatory requirements of the program and graduate with a minimum 70% PGP are eligible to come back for another year of undergraduate classes free of charge (tuition and course fees) if they do not secure career-related employment within six months of graduation.

To be eligible, students must be enrolled in a minimum four-year degree; this includes newly-admitted, current, and transfer students with 30 credit hours or less. As well, enrolled students are mandated to remain registered in a minimum of three classes per semester for at least two semesters a year. The UR Guarantee Program is also available for all regional college students that are able to complete a four-year U of R degree at their college or who are only able to complete one year and are planning on transferring into to a four-year degree program at the U of R. It is also available to students enrolled in specific U of R degree programs offered in partnership with other institutions.



Even though students may not be physically studying at the U of R campus in Regina, they may be able to take advantage of the benefits of this program.

All eligibility requirements remain the same; however, an appropriate delivery method will be facilitated through consultation with each student and their college. Students only able to complete the first year of their program at a regional college can join the UR Guarantee program when they attend the U of R to complete their degree.

Once registered in the UR Guarantee program, arrangements are made to meet with a program counsellor in order to set goals for each academic year. There are mandatory and elective activities for students to complete.

Mandatory Activities include:

- Having regular academic advising
- Participating in academic success activities such as Exam Preparation and Time Management workshops.
- Attending career development seminars to better prepare them for employment (while in university) and provide them with an edge when applying for career jobs after graduation.
- Joining the Co-op Program or gaining other relevant work or community service experience.
- Gaining relevant interview skills through mock interview exercises.
- Participating in relevant networking opportunities.

Elective Activities may include:

- Attending fall orientation
- Attending on-campus career fairs.
- Joining one of the many student clubs on campus.

For students who successfully complete the program and graduate from the university, they keep a daily log of networking activities and job searching. Participants will also contact the UR Guarantee office at least once a month (until a job is secured) to provide an update on the job search activities and/or after every offer they receive.

The program began in January 2012. As of 2011, approximately 1,100 students have registered in the program. Among first year students, enrolment in the program has ranged from 14% of the total first-year cohort in the initial year of the UR Guarantee program (2011) to approximately 20% in the subsequent years. Table 4 indicates that first year retention rates in among those in the program are consistently higher than those not in the program.

Table 4: Rates of Retention among UR Guarantee Program Registrants and Non-UR Guarantee Program Registrants

Entry Year	Entry Cohort -	URG Retained		Entry Cohort -	Non URG Retained		
	URG	#	%	Non URG	#	%	
2015	223	201	90.1%	1204	986	81.9%	
2014	231	203	87.9%	1139	959	84.2%	
2013	236	195	82.6%	1121	884	78.9%	
2012	226	192	85.0%	1125	878	78.0%	
2011	188	160	85.1%	1302	1050	80.6%	

Source: University of Regina, 2016



A Profile of Provincial Government Programs and Services to Support Public School-to-PSE Transitions

This section of the Scan focuses on policies, programs and services currently offered by Atlantic provincial governments through their respective ministries responsible for PSE. The information presented herein is extrapolated from documents submitted by provincial government officials and supplemented by telephone and email exchanges with Provincial Government representatives.

While the primary focus of this investigation is the role of the post-secondary sector, this section of the Scan also endeavours to update the Environmental Scan focused on the public education sector conducted as part of the publication of Career Education in Atlantic Canada: Research and Recommendations (2015) and the release of the Future in Focus - Atlantic Career Development Framework for Public Education: 2015-2020. It is important to note that while every effort was made to gather robust data, this section of the Scan does not purport to provide an exhaustive listing of all policies, programs and services supporting post-secondary transitions across the Atlantic Provinces.

New Brunswick

The K-12 Sector

In the K-12 sector, the Anglophone and Francophone sectors of the Department of Education and Early Childhood Development (EECD) are implementing the following initiatives to support school-to-post-secondary transitions:

- EECD, in partnership with the Department of Post-Secondary Education, Training and Labour (PETL) are:
 - ensuring regional PETL staff members are working collaboratively with high school guidance counsellors and Personal Development and Career Planning (PDCP) / Formation personnelle et sociale teachers to provide up-to-date labour market information and the skills to continue to access this information. PETL regional employees co-facilitate workshops in the schools with teachers based upon teachers' requests;
 - developing and implementing a Families as Career Coaches initiative, an activitybased program intended to help families become active and knowledgeable supporters of high school students in their transition to PSE and the world of work; and
 - adopting a new career exploration tool, Chatter High, this gamifies the exploration of post-secondary and career options, health and financial literacy information. Chatter High organized a provincial competition in September-October 2016 to raise awareness and use of this new tool. The competition included a 10 minute edu-game that could be completed during class time. http://chatterhigh.com/
 - developing and implementing Essential and Workplace Skills programs that provide alternative pathways to access PSE and employment.

In addition, the Anglophone Sector is also moving forward with the following initiatives intended to support learning about a range of post-secondary learning options and planning for the transition to PSE:

A new Personal Development and Career Planning course was implemented in the fall of 2016.
 School districts choose if the course is offered in grade 9 or 10. The course is a full semester (it was previously a half-semester course), thus providing more opportunities to strengthen career education within the earlier high school grades. The course includes several components focused on exploring post-secondary learning options.



- A new Personal Wellness course targeting students in Grades 3, 4 and 5 was implemented in the fall of 2016. Each grade includes a unit on career exploration.
- The You and Your World course is currently being rewritten. This course targets students in kindergarten as well as Grades 1 and 2 and a key goal of the current revision is to bolster the career exploration section.
- The Anglophone West School District West (ASD-W) has developed a draft Four-Year Transition-to-Life Planning for Students with Exceptionalities document. The Department is currently developing a province-wide plan.

The Francophone Sector is moving forward with the following initiatives:

- Piloting the new Formation personnelle et sociale in Grades 6-8 (with career development outcomes) that includes the objective of integrating labour market information into the curriculum.
- In 2016, the portfolio requirements which are integrated in the new Formation personnelle et sociale 6-8 curriculum are being piloted in grades 6-8, followed by continued development work in high school.
- They have developed *Profil de sortie d'un élève*, that describes the three major educational aims for students in the Acadian and Francophone school system in New Brunswick:
 - Living as Engaged and Ethical Citizens
 - Developing a Desire for Lifelong Learning
 - o Leading a Balanced Life

Secondly, it targets three competencies that students must develop to achieve these aims:

- Socioemotional Competency
- Cognitive Competency
- Communicative Competency

Post-Secondary Education Sector

Post-Secondary Education, Training and Labour is involved in the following activities to support transitions from public education to PSE.

Current Services

- New Brunswick provides access to programs and services, including the following:
 - Career Cruising (an online career exploration tool for students in public school and in PSE);
 - InspireNB (an online tool that connects youth and career seekers with employers, career coaches and opportunities within New Brunswick communities). By leveraging the Career Cruising software platform InspireNB provides a means for career seekers to connect with careers that interest them, and businesses to connect with the talent pipeline necessary for their growth and success);
 - o SkillsNB (an eLearning platform offering training and up-skilling online courses);
 - Employment counsellors;
 - o Labour-market information (see below); and
 - The New Brunswick Teen Apprentice Program (industry-led pre-apprentice program for qualifying students starting in Grade 10 or Grade 11).
- New Brunswick also offers targeted funding to post-secondary institutions to strengthen
 transitions and improve persistence rates. Funding can be granted for up to three years for
 pilot projects, with the expectation that, if successful, institutions will find the resources to
 ensure the sustainability of these initiatives. This funding has been available since 2010. The
 following is a sampling of the projects that received funding in 2016-2017:



- Hiring a positive mental health champion and a mental health strategist at the University of New Brunswick-Fredericton;
- Hiring a Conversion and Persistence Officer at the Saint John campus of the University of New Brunswick;
- Instituting a pre-orientation program for students with disabilities at St. Thomas University;
- The development of a module on Indigenous cultural awareness at the New Brunswick Community College;
- The development of strategies to retain students from underrepresented groups at Mount Allison University;
- Workshops for instructors in support of students with autism and anxiety disorders at the New Brunswick College of Craft and Design;
- o Increased support for Indigenous learners at the Collège communautaire du Nouveau-Brunswick; and
- The development of employability skills for students with limitations at the *Université* de Moncton.

Labour-Market Information

- The New Brunswick government has created the NBJobs.ca website <u>www.nbjobs.ca</u> that
 provides an abundance of information including current labour market information,
 information about careers and training and an educators' toolkit to support transitions. The
 toolkit includes the following elements:
 - Let's Get Moving with Career Planning: a presentation designed with data specific to New Brunswick. Regional PETL offices are available to present to all Grade 9/10 students in the province. This presentation is now available online and it is currently being professionally adapted for those with hearing or visual impairments.
 - Let's Get Moving with Career Planning Student Survey: a student survey designed to accompany the presentation.
 - o **Pathways Infographic:** a visual aid designed to assist in discussions with youth around pathway options after high school.
 - o **Hiring Demand Bulletins:** monthly retrospect reports that can be used to study the characteristics of jobs employers are posting online.
 - Labour Market Information & Occupational Videos:
 - An animated labour-market information video available for career fairs and other public events
 - Your Career Path and Labour Market Information
 - o **Pathways to Certification:** a visual presentation of the different learning and career pathways available to students.
 - Infographics: an occupational profile of 10 in-demand occupations within New Brunswick that includes interviews with employees and employers in these occupations.

Future Plans

• The New Brunswick Public Libraries are currently working on a career advisor/resource centre initiative. The intent of this initiative is for the public libraries to host a telephone hotline or text message response service for families and students regarding their career development that includes information about certification and PSE options.



Cross-Departmental Initiatives

The Government of New Brunswick tabled in September 2016 a ten-year Anglophone education plan, New Brunswick Education Plan - Everyone at their best, ⁸ and many of the recommended actions will support the development of competencies leading to academic preparedness for PSE. Some key elements of the plan that are intended to support inclusive access and help with student retention in post-secondary include:

- Providing additional learning experiences prior to high school in the arts, science, trades and technology in order to enhance student awareness of course choices in Grade 11 and Grade 12 that could lead to potential careers in these fields;
- Reviewing high school course selections in the arts, trades and technology, with a view to
 revising, developing and clustering courses to address labour market and industry
 requirements and explore ways to ensure they are accessible to students in all high schools;
- Providing targeted learning experiences to create interest and increased competencies in coding and cybersecurity;
- Ensuring curriculum and instructional practices are flexible to enable learners to make choices, to be actively engaged in their learning and to foster ongoing reflection and self-assessment.
 This allows them to take a more active role in determining potential career and learning choices and pathways;
- Helping learners develop the mindset to take a more active role in making informed career choices and the competencies required to realize their personal and professional goals;
- Fostering an entrepreneurial spirit by ensuring learners at all levels (K-12) participate in engaging projects that build an entrepreneurial mindset, spark curiosity, nurture creativity, and address real world problems;
- Breaking down the silos within the education system. Early childhood facilities, elementary, middle and high schools, as well as post-secondary institutions, have developed and changed at different times, and typically function as separate entities. Challenges arise as children and youth transition from one level to another and move through the system. This can create confusion regarding expectations, procedures and approaches to communication. Data from five years of school reviews indicate that improvements in such transitions are needed. Therefore, the plan will review, define and communicate transition processes between and within different learning environments to better support children and youth in their learning, clarify expectations and help alleviate anxiety during these changes;
- Removing the parental/spousal contribution from the assessment of student loans, and introducing the Tuition Access Bursary (TAB) program. The primary objective of TAB is to make higher education more affordable for those who need support in their transition into the post-secondary sector. This initiative, along with on-going work to make public post-secondary institutions more sustainable, is intended to ensure stability and predictability for students, and enhance synergies between K-12 and post-secondary institutions; and
- Further strengthening the alignment of education systems through broader joint initiatives between EECD and PETL, including new initiatives to deliver quality labour market information to youth and their families that incorporate forecasted occupational demand, education pathways within New Brunswick and reinforce the milestones of career planning. These initiatives directly involve students, their families, and guidance counsellors and educators in preparing the future workforce. PETL and EECD plan to continue building on and making these initiatives a priority moving forward. PETL is also working with the province's universities to

⁸ http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/EveryoneAtTheirBest.pdf



Transitioning from Public School to Post-Secondary Education in the Atlantic Region – Issues, Challenges and Approaches to Support Success

increase experiential education opportunities for students and is funding programs at public universities and colleges aimed at increasing enrolment from underrepresented groups, and that provide education about education, especially to low-income learners, Indigenous learners and students who have disabilities.

The Government of New Brunswick's Francophone ten-year education plan, Donnons à nos enfants une longueur d'avance, 9 includes key elements intended to support career and life readiness:

- Career and life readiness: Ensuring that all students develop the competencies they need to achieve their career and life readiness plan;
- Self-discovery: Providing all students, starting in elementary school, the tools to discover their strengths, the challenges they face, what they feel passionate about, and their interests, so they are better equipped to make informed decisions about their future both on a personal and professional level;
- Varied Courses: Providing all high school students opportunities to take compulsory and elective courses that meet their needs and are related to their career and life readiness plan;
 and
- Career exploration: Providing all students opportunities to regularly participate in activities
 where they can explore various careers in different areas, including careers in trades,
 computer programming and the arts.

Nova Scotia

K-12 Sector

Nova Scotia released its Action Plan for Education (2015-2020) which includes many actions to strengthen career education delivery in the province with the expansion of community-based learning opportunities, co-operative learning programs and entrepreneurship programs. The Nova Scotia Department of Education and Childhood Development (ECD) is pursuing a number of initiatives in response to *Future in Focus* (within each initiative are activities specifically supporting transition to PSE):

- Establishment of a Transition Task Force (TTF) to address successful transition of graduating students to post-secondary. This was a joint initiative of the Departments of ECD and Labour and Advanced Education. Recommendations were presented to the Ministers (June 2016) which included creating an entrepreneurial culture within the public education system, and developing programming options that help youth gain skills, education, and experiences to support a successful transition into post-secondary and/or work. The report and complete recommendations can be found at: www.ednet.ns.ca/education-actionplan;
- Establishment of a Business Council that will support the TTF recommendations and provide a
 forum for connecting business and the education system to support successful student
 transitions. Specifically, it will provide a forum where businesses can identify the skills
 students need to be successful in the workforce, a database of local entrepreneurs to serve as
 mentors to students, support teacher awareness of economic growth sectors in the provinces,
 and expand the number of co-operative education opportunities for students. The BEC will
 address issues such as career exploration opportunities, entrepreneurship, and mentorship;

 $^{^9\,}http://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/DonnonsANosEnfantsUneLongueurDavance-GivingChildrenAnEdge-FrancophoneSector.pdf$



- Completion of a Career Framework (including implementation strategies; partner engagement);
- Introduction of a career plan for all graduating high school students (NS Action Plan for Education In Progress);
- Integration of targeted themes linked to specific Grade levels (Personal Development and Self-Awareness in Grades 4-5; Exploration and Opportunities in Grades 7-9; and Transition and Planning in Grades 10-12);
- Expansion of community based learning programs, skilled trades and hands-on learning opportunities, as identified in the Action Plan and Transition Task Force recommendations;
- Revision of Entrepreneurship 12, aligning it with post-secondary courses and infusing entrepreneurship as other curricula are revised;
- Development of partnerships with business/ industry to support student readiness for workforce and post-secondary;
- Implementation of SchoolsPlus (promoting co-location of employment/career programs and services in schools) www.schoolsplus.ednet.ns.ca;
- Continuation of portfolio development, with integrated curricula that introduces career exploration and self-assessment of skills and interests and builds portfolios in Grade 4;
- Incorporation of service learning and integrated curricula with a focus on career exploration, experiential learning and entrepreneurship;
- Development of connections between the curricula, the community and post-secondary options:
- Introduction of a new mandatory Citizenship course for students in Grade 9;
- Integration of career related outcomes into various courses as they are revised; and,
- Introduction of Discovering Opportunities, a project based learning approach which has a focus on self and career exploration, in select schools at Grade 9.

While this Scan has limited its reporting of public education initiatives to those that are new/updated since the publication of Career Education in Atlantic Canada: Research and Recommendations (2015), Nova Scotia's Options and Opportunities (o2) program warrants repeating as it is a strong example of a program targeted to supporting disengaged youth in their public-to-PSE transition.

O2 offers students hands-on learning experiences with a career focus. Entry to the O2 program is available only at the grade 10 level. It is designed to prepare students for successful transitions from high school to work or learning. This program is for students who may not be meeting their academic potential because they are not fully engaged with their school program. A typical O2 candidate is a student who requires all or most of the following:

- Re-engagement with their learning and with their school;
- Direction and support in developing a career/life pathway;
- Learning experiences that make the connections between school community and the workplace:
- Confidence in their skills abilities and their learning preferences;
- Competence in skills needed in the workplace; and/or,
- Support to actualize their academic potential.

The O2 program consists of eight components:

- Community Learning Partnerships
 - Opportunities for students to connect learning with the workplace may include paid or unpaid work placements, mentorship, internship, volunteering, and service learning.
- Integrated Career Education and Planning



- Career-related learning opportunities are integrated into courses with a careerdevelopment focus (CD 10, CD 11, CBL 10 and Workplace Health and Safety 11).
- Skills for the Workplace
 - Attention to the development of employability skills and work readiness.
- Flexible Design and Delivery for grades 9-12, Career Academies
 - o Includes integrated courses, course clustering and flexible scheduling.
- Instructional Teaming
 - Teachers within the O2 program should have access to professional development and possess the following attributes:
 - Community/industry orientation;
 - Understanding of and commitment to advisement and advocacy roles;
 - Commitment to team-based planning and delivery;
 - Commitment to LifeWork Portfolio development; and,
 - Experience with learner-centered, project-based instructional practices.
- Expanded Course Options
 - Student plan course selection to include occupation-related courses, such as
 Agriculture/Agrifood, Business Management, Business Technology and Child Studies.
- Head Start in a Career
 - Provides students with a clear understanding of the career-related significance of their learning. Strategies include:
 - Strong partnerships with community college, industry and the community;
 - Travel to attend trade fairs, skills exhibitions, or exploration of trade careers;
 - Business and community field trips; and
 - Opportunity for participation in the Workit youth apprenticeship option.
- Expanding opportunities for families to engage in career and life planning, school life encouragement and support for students' learning and monitoring students' progress.

Students enrolled in the O2 program must take the compulsory Community-Based Learning 10 (CBL 10) course. Community-Based Learning 10 is a full or half credit course designed for grade 10 students and places them with community hosts/employers to explore career interests, discover the skills required for success in the workplace, and recognize the connections between their school-based learning and community/workplace. Community-based learning includes co-operative education courses, job shadowing, job twinning, mentoring, service learning, short-term placements, and volunteering.

The O2 program involves more than 2,000 students in 50 high schools. Each participating school is expected to develop a yearly grade 10 cohort of 20 students.

Post-Secondary Education Sector

The Nova Scotia Department of Labour and Advanced Education (LAE) is involved in the following activities in the support of student transitions from public education to PSE:

Current Services

- Nova Scotia provides access to programs and services, including:
 - A youth apprenticeship program, with a focus on individuals from diverse and underrepresented backgrounds.
 - Skills Canada-Nova Scotia (SCNS), promoting skilled trades and technologies to youth with the Nova Scotia Skills Competition and other career initiatives, including Disability Services workshops. These workshops encourage persons with disabilities to participate in Skills Canada - Nova Scotia (SCNS) programs and to further develop their job skills. In the 2015-2016 school year, 614 students who participated SCNS



programming, including workshops tailored specifically for persons with disabilities, identified as having a disability. Through the Disability Services initiative, SCNS reaches out to organizations like Team Work Cooperative and Autism Nova Scotia, and provides them with hands-on experiences in skilled trades and technologies. Last year, 31 workshops for persons with disabilities were offered in photography, cake decorating and Essential Skills.

- WorkIt grants, in support of school board activities to support exploration of the trades.
- Autism Works/LaunchPad, offering transition programs to assist high school students with autism to gain work-related skills, find and keep employment, or transition to post-secondary studies (www.autismnovascotia.ca/program/17).
- Techsploration, introducing girls in Grade 9 to careers in science, trades and technologies (<u>www.techsploration.ca</u>).
- o Student financial assistance funding to ensure PSE remains accessible and affordable.
- Guides to support parents and students with career planning and planning for postsecondary studies.
- o Increased experiential learning and mentorship opportunities in PSE.
- o Increased recognition of prior learning assessment.
- The creation of a Student Recruitment and Retention Working Group;
- The development of a diversity and inclusion framework.
- Incentive programs for employers to hire students for summer employment or cooperative education opportunities.
- o The Sandboxes initiative to support youth social entrepreneurship;
- Performance measures for universities, including elements relevant to supporting persistence rates and transitions;
- The launch of a new employment services system, with an increased focus on career counselling for youth.
- The Nova Scotia School of Adult Learning that connects with youth and adults who want to go back to school.
- Support for EduNova, working to support post-secondary recruitment and retention.
- Career Seek, supporting income assistance recipients to maintain their assistance level while they attend post-secondary programs of more than two years.

Labour Market Information

- The province of Nova Scotia has a Careers NS website (http://careers.novascotia.ca/) that profiles high-opportunity career options and includes a guide to understanding labour market information. The site offers the option to generate print versions of information found on this website. The LMI is updated monthly. This information is made available to career support staff in high schools and Nova Scotia Work Centres, providing trade-specific sector profiles.
- Nova Scotia has also launched a new employment services system, Nova Scotia Works, which
 includes increased focus on providing youth with career counselling. Through Nova Scotia
 Works, qualified career practitioners and counsellors deliver career counselling, job
 development and employment workshops to youth.

Future Plans

• The Government of Nova Scotia has completed a 2016 report entitled From School to Success: Clearing the Path focused on strengthening transitions. It is organized around five themes, each with concrete strategies for moving forward and implications for supporting school-to-post-secondary transitions. The themes are: career decision-making information; meaningful



- hands-on experience; transitions for youth with low marks and/or no high school diploma; post-secondary retention and completion rates; and how education, training and the apprenticeship programs match labour-market needs.¹⁰
- In 2015, the ONE Nova Scotia (oneNS) Coalition published a 10-year Collaborative Action Plan
 to revitalize Nova Scotia through a positive trajectory for the future. The Coalition was formed
 to develop a 10- year action plan for all sectors to work together to move forward the vision
 and goals set out in the oneNS Commission report. Importantly, the report makes note of the
 educational disparities associated with family background and importance of helping families
 to support their children during periods of transition within public education and from public
 education to PSE.

Newfoundland and Labrador

K-12 Sector

Since the release of the CAMET Future in Focus framework, the Government of Newfoundland and Labrador has moved forward with the following initiatives:

- The province is embarking on its Framework for 21st Century Learning, specifically focussing
 on the development of the skills students need to be successful in learning and in the labour
 market.
- They are currently pre-piloting within six schools the development and delivery of professional learning for teachers to ensure successful implementation of their career development curriculum. This initiative is moving to a piloting stage next year. They are observing classrooms in these six pilot schools in order to inform the development of relevant professional learning in the areas of career and life skills for administrators and teachers, both those teaching career development courses and subject-teachers who could link their subject areas to career pathways.
- The province is reviewing its current Career Development 2201 course in the fall of 2016 to ensure curriculum modifications will be ready by fall 2017.
- In four schools, the province is piloting the delivery of a module for elementary level career development that refers to a variety of learning options past high school.
- A new youth apprenticeship program, including dual-credits, is under review.
- The province is reviewing graduation requirements moving forward, including more emphasis on integrating the existing Life/Work Portfolio in the curriculum.

Post-Secondary Education Sector

The Newfoundland and Labrador Department of Advanced Education, Skills and Labour (AESL) is involved in the following activities to support transitions from public education to PSE:

Current Programs and Services

The Government of Newfoundland and Labrador offers an integrated approach to services, supports and strategies within a common ministry website, helping youth (including those out of school) to assess employment needs, access services and supports and develop Employment Plans to reach their work goals. Services are offered through community-based employment centres offering services and programs to job seekers. There is also a toll-free number that provides labour market and career information. Online workshops for career

¹⁰ http://novascotia.ca/lae/pubs/docs/From-School-to-Success-Clearing-the-Path.pdf



- exploration and job search are also offered through the integrated site. This unique program delivery model recognizes and responds to the considerable geographical mass of the province and the spread of the population across remote regions within the province.
- In partnership with employers/community groups, the Department supports youth under 25 years of age to access work experience programs and paid internships in positions related to their field of study/occupation of interest.
- The Provincial Apprenticeship Handbook provides detailed information about how to register
 as an apprentice, requirements for participating in apprenticeship training, interim logbook
 access to capture initial skills and hours while waiting for the official logbook, and a listing of
 the Department's employment centres which have services to assist individuals in obtaining a
 job in the skilled trades.
- Pre-apprenticeship training programs are available to youth, including Essential Skills courses
 that target document use, numeracy, writing, oral communication, working with others, and
 digital technology.
- The Province also offers a series of services for students who have dropped out of public education without a credential, as well as intervention programs to improve post-secondary outcomes for vulnerable or at-risk students. These programs aim to:
 - improve post-secondary outcomes;
 - o increase access to help with career decision-making and self-advocacy skills;
 - ground curriculum in a specific career to lend helpful focus and content to instruction;
 and
 - align high school standards with post-secondary and workplace expectations.
- The Government of Newfoundland and Labrador promotes its Disability Employment Program
 and Services as a means of ensuring employment equity for persons with disabilities by
 assisting students with a disability to complete PSE and access work experience required to
 gain employment.

Labour Market Information

- All users, including youth, can access the Province's Employment Centres and the Labour Market and Career Information Hotline.
- The Province has centralized all information relevant to youth on its Departmental website: http://www.aes.gov.nl.ca/lmi.html.

Future Plans

- The Province has outlined its interest in exploring the following policy development streams:
 - outlining career options possible upon completion of post- secondary degrees, diplomas, or certificates;
 - o improving affordability and accessibility of PSE; and
 - supporting adult literacy.
- The Province has also committed to participating in the Atlantic Canada initiative to harmonize the Recognition of Prior Learning processes.

Prince Edward Island

K-12 Sector

Prince Edward Island has published its own Career Education Strategy, complementing and extending the CAMET Future in Focus Framework and introducing additional province-specific elements.

To support a whole-school approach to integrating career development themes across the curriculum, a compulsory career education course at Grade 10 has been approved and there will be an expansion



of community-based/experiential learning. Prince Edward Island has provided targeted training in career education to all Grade 9 Health teachers, 10 Career Exploration and Opportunities teachers, school counsellors and administrators in the province. With a strong commitment to evaluation, Prince Edward Island has been assessing the impact of this training since the inception of their Career Education Strategy and has already found that there has been a significant positive shift in teacher understanding and application of career development concepts, including the exploration of post-secondary learning options. This training has resulted in a stronger commitment across educators, counsellors and administrators to implement career development concepts with all of their students.

A cornerstone of their Career Education Strategy is the provincial Student Graduation and Transition Planner (SGTP) initiative with Grade-appropriate information and career development activities that can be integrated into the school experience in a variety of ways from Grades 9-12. Activities connect explicitly with curriculum learning outcomes for Grade 9 Health and Grade 10 Career Exploration and Opportunities, but may also be integrated into subject-specific instruction, counselling interventions and/or whole-school initiatives. The SGTP is accessible to students in four forms: hard copy, electronic copy, interactive online tool and mobile application. The SGTP has been customized for both English and French school systems and its use will be fully tracked and evaluated. Students, teachers, school counsellors and administrators will be surveyed and their input will be used to revise the SGTP after the first cohort to use the tool graduates in 2018.

The SGTP project encourages and supports students, parents, educators, and the community to work together to help students make informed choices and navigate successful transitions. My Plan (the student interface of the SGTP) has been designed to assist students in developing the knowledge and skills required to make informed post-secondary, career and life choices.

Based on research that indicates that children want help with career planning, and parents/carers have the most significant impact on their children's decisions regarding their plans following high school, Families as Career & Transition Supports (FACTS) was developed. FACTS is a series of workshops offered free-of-charge to all parents/carers of Grade 9 and 10 students. The objectives of the workshops were to help parents understand how they can guide and support their children as they move from intermediate school to high school and from high school to PSE (including apprenticeship) or into the workforce. FACTS workshops provide parents/carers with practical information and strategies regarding high school pathways, community-based learning opportunities, and ways to engage in career conversations with their children.

Workshops have been offered to every Grade 9/10 school and have been carried out in diverse locations across the province (12 workshops were delivered to parents/carers of Grade 9 students during the spring of 2015 and 8 workshops were carried out for Grade 10 during the fall/spring of 2015/2016). Prince Edward Island, like other jurisdictions, has faced challenges concerning parent/carer participation, with only 44 participants attending the Grade 10 FACTS workshops and a total of 115 participants attending the Grade 9 workshops.

Post-Secondary Education Sector

The Province of Prince Edward Island, through its Department of Workforce and Advanced Learning (WAL), works cooperatively to build positive and constructive relations with employers, industry, educational institutions, community organizations and other levels of government to support student transitions through the following:

Current Programs and Services

- The Academy Diploma Program, that allows students to customize their high school experience by focusing their learning on a specific economic sector.
- Dual credit programs between high schools and post-secondary institutions.



- The Accelerated Secondary Apprenticeship Program, that provides a head start to high school students who are interested in entering the trades.
- A wide variety of financial assistance programs to encourage transition to post-secondary programs, retention of students through to graduation and reduction of debt after completion.
- Work experience programs for high school and PSE students, such as Career Prep, Jobs for Youth and Graduate Mentorship Program.
- Employment assistance services, including employment and career counselling and assessments to support youth in getting back into learning.
- Financial assistance provided by Training PEI to eligible individuals to develop skills for employment.

Labour Market Information

- In 2012, the Next Network website was launched as a tool to help high school students make informed decisions about PSE programs and careers that might interest them. The site includes videos, career profiles, college and university profiles and articles. It is expected that the content on this site will eventually be merged with a new labour market related website, www.workpei.ca, with the goal of providing labour market information for all Islanders, including youth.
- Two other websites exist to support youth access to labour market information. They are: Employment Journey (http://employmentjourney.com/) and myBlueprint (https://myblueprint.ca/pei).

Future Plans

- The Department of Workforce and Advanced Learning's Strategic Plans, Engaging our Workforce for Today and Into the Future 2016-2019 Strategic Plan, have many priorities that link to strengthening transitions. They include:
 - Ensuring that learning and training are accessible and respond to labour market needs by engaging industry, learners, and the educational system in:
 - skills acquisition linked to labour market demand;
 - experiential and work-integrated learning;
 - student placement;
 - seamless competency-based learning for K-12; and
 - entrepreneurship promotion.
- Developing the workforce through investments in skills, knowledge and employer supports, including:
 - labour market information and opportunities;
 - ensuring widespread access to career services;
 - better understanding the needs of underemployed, unemployed and underrepresented groups; and
 - working with stakeholders to determine longer-term labour market needs.
 - Connecting youth through a youth-focused workforce retention strategy:
- Delivering client-centered programs and services to all Islanders (modernizing the service experience through ease of navigation of programs, services and labour market information and multiple access points).
- Supporting informed decision-making at the policy and program levels through data analysis, program evaluation and measurable outcomes (aligning programs and initiatives to labour market information; sharing meaningful, relevant audience-specific local labour market information with individuals, government departments and agencies and external partners).



Programs and Services at Atlantic PS Institutions to Support Student Entry, Progression and Graduation

Public post-secondary institutions in Atlantic Canada and across Canada advertise their programs and promote their relative advantages to prospective students and to the public, focusing on the diversity of programs and the possible future career paths available. Post-secondary institutions have become highly creative in their promotional activities in their efforts to distinguish themselves from their competitors in the region. They all employ traditional forms of advertising and promotion (brochure, banners, radio/TV, sponsorships, in-school presentations, websites, etc.) as well as various forms of social, progressive and emerging media (Facebook, Twitter, YouTube, Instagram, Movie Theatres, etc.) to reach the broadest audience possible.

Each institution also offers a variety of services and programs to support access, recruitment and retention, including but not limited to:

- career services (including counselling, topic specific workshops and labour-market information);
- employment services (including mock employment interviews, resume and cover letter critiques, career-related workshops, networking events and initiatives);
- student support services (focused on study skills, language skills, math support, writing support and assistance for students with disabilities, such as note-taking, testing accommodations, access to assistive technology, etc.);
- cooperative, on-the-job training programs or work-integrated learning opportunities;
- professional skills development programs; and
- Indigenous learner supports, including but not limited to specific programming, elder-inresidence and bridging programs.

In researching this section, members of CAMET's working group reached out to post-secondary institutions in the Atlantic region. The response rate was low, unfortunately, with only a few providing information about their activities and programs. These have been highlighted as examples below.

New Brunswick

As noted earlier, New Brunswick offers a targeted funding program to support pilot projects in their universities and colleges to support access and retention of students across multiple sub-groups.

Nova Scotia

Nova Scotia supports 10 universities and an extensive community college system, each with its own institutional culture and activities targeted to strengthening transitions to and from their respective institution. Indigenous bridging programs and Indigenous-specific student support services are available at Acadia University, Cape Breton University, Dalhousie University, Mount Saint-Vincent University, St. Francis Xavier, St. Mary's University and the Nova Scotia Community College. The Nova Scotia Community College reserves a seat in every program, including highly competitive programs for an Indigenous learner.

Cape Breton University (CBU)

CBU provides mandatory academic advising to new students through their First-Year Advising Centre (FYAC), which is where students discuss their program and its "fit" with them and their future goals. Students work with an academic advisor to select their first-year courses. Each student is also matched with a Peer Success Coach, an upper-year student mentor, to connect and support students through their initial years at CBU. As part of CBU's mandatory FYAC appointment, students meet with an Academic Success Coach to discuss program, specific course or broad academic concerns and explore how well-prepared students feel for their post-secondary studies. This kind of academic



advising is accessible to students throughout their studies. Advisors support students with time management issues, study skills, financial support and budgeting.

CBU's orientation programming includes the Start Smart! Program aimed at preparing students to be successful in their CBU studies. The Start Smart! Program includes: an orientation day, community-building/social activities and activities to address persistence throughout their studies.

In addition to the above programs and services, CBU's academic supports (e.g. academic writing skills courses, free tutoring in introductory-level math, science, and business courses and supports for students with disabilities) and other student services (e.g. personal counselling and supports for international students) assist in helping students transition to CBU and persist to graduation.

Another key component in CBU support of transitioning students is helping them see the connection between their learning and available careers. As part of their academic advising process, CBU provides students with access to select self-assessment tools (e.g. Career Cruising and the Holland Code Quiz) as discussion points around the fit of student learning with their career goals. Career counselling services support students in considering alternate career path choices if the initial plans do not work out, and provide additional advising on course selection to attain that new goal.

Mount Saint Vincent University (MSV)

MSV provides high school students with online tip sheets that offer information on "What to do with a Degree in..." Each relate programs at the university with skill development and sample career options: (http://www.msvu.ca/en/home/studentservices/careerplanningservices/students/whatcanidowith mydegree.aspx). MSV regularly participates in information fairs for incoming students to introduce them to Career Services early. MSV provides career development workshops on how to choose a major, aimed at first year students to help them relate program choice to their interests, introduce them to related career options, and hence increase motivation to persist in their studies.

Nova Scotia Community College (NSCC) - Career in Gear

(https://careeringear.nscc.ca)

Career in Gear is an interactive career planning website of the Nova Scotia Community College (NSCC) that helps individuals to build confidence and make meaningful and realistic work and life choices. The website consists of a number of fun, engaging games and activities that enable users to explore their motivations, interests and skills as well as occupations and NSCC programs that align with these personal attributes. The online tool helps users answer questions such as: What do I want in a career? What makes me tick? What are the realities of my life? What support systems do I have? Career in Gear consists of three "gears" to managing work and learning choices: 1) Understand Who I Am! (interests, values and skills); 2) Find What's Out There! (labour market and occupational information); and, 3) Explore the Options! (training options based on game results and occupational research). Users follow a series of career planning steps in a self-paced manner with work completed during each visit securely saved. The site can be revisited and information/choices updated as life changes. If they choose, users can share their profile or report card with others in their support system such as career professionals, family members and friends. NSCC Career Advisors are available via email or Live Chat for additional support with exploration and decision-making.

Prince Edward Island

Holland College Transitions Program

Holland College works with Island high schools to bring their students to its campuses to learn about post-secondary programs, prerequisites, tuition and career pathway opportunities. Upon arrival, each student is given an Outreach Activity Kit which students use to participate in hands-on learning in areas such as wind turbine design, plumbing, dental techniques, and car signal wiring. This initiative affords students opportunities to see and have hands-on experience with a variety of occupations.



Holland College also offers a transitions program for disengaged high school youth. This student-centred, activity-driven and strengths-based program aims to expose high school students to post-secondary opportunities through regular and varied Holland College program experiences and community activities. Students in this program develop their Life-Work portfolio and complete a plan for transition from high school to PSE. There are high expectations regarding attendance and professional behaviours in the program and students have a case-manager that supports them throughout. Students who complete this transition program receive advanced standing in their applications to Holland College, and get to apply two credits earned from this program to their future program of study.

Newfoundland and Labrador

Memorial University (MU) - Career Integrated Learning

(https://www.mi.mun.ca/departments/officeofthevpacademicstudentaffairs/careerintegratedlearningproject/)

The Career Integrated Learning Project at the Marine Institute, Memorial University (2013), has garnered national and international attention. The project helps to facilitate student reflection on and articulation of the "transferable competencies" (non-subject/non-technical related skills) acquired throughout their academic studies. Aligned with MU's Teaching and Learning Framework, university professors/instructors and project staff identify competencies which may be practiced or developed by students in individual courses as demonstrated through the evaluation activities. Course syllabi include a listing of the relevant competencies and during the semester, students are encouraged to reflect on their individual development/enhancement of these competencies as they learn the course content. This student centred, experiential learning approach has experienced success in helping students translate their academic learning into the practical skills they've attained that will help them navigate life. A survey of the over 400 students who participated in the pilot showed that 72% of respondents believed that becoming aware of competencies was helpful to them (IAEVG Presentation, 2014). In the works is an e-portfolio system for students to record and track their competency attainment throughout university.

Environmental Scan Findings

The Scan began by looking at some of the key issues specific to Atlantic public school to PSE transitions. Several points emerged from this research:

- The Maritime Provinces Higher Education Commission (MPHEC) is an emerging promising
 practice of data collection on the pathways of students at the university level that is needed at
 the college level. This data is needed in order to be much more precise in the developing of
 programming and services that directly targets both the needs of the general population and
 of underrepresented groups.
- Academic preparedness is a key factor in the retention rates of students transitioning to PSE and the OECD PISA results show that students in Atlantic Canada are below the national average in this regard.
- While affordability of PSE is a vital policy consideration, research suggests that there is
 arguably an equivalent need to understand how to support underrepresented youth, their
 families and communities in developing "cultural capital" factors that support students to go to
 PSE.
- The impact of existing Atlantic policies and programming remains unclear.
- The mechanism to ensure research/evidence informs ongoing policy and programming development/revisions is also unclear. We found international examples, such as Switzerland, that embed the analysis of research/data to inform policy/programming changes on a regular 4-year cycle.



• Atlantic students are also struggling to stay after entry and there is a need to help them persist and move on to graduation.

There would appear to be no shortage of programming targeted to supporting student transition and, impressively, we also found examples of policy frameworks intended to build a more cohesive approach in rationalizing programs. CCDF's review of programming and policies internationally and in Canada outside of the Atlantic region highlighted the need to think comprehensively across three specific points of the school-to-PSE transition – i.e., pre-entry, induction and attending – when considering program and policy responses. The pre-entry, induction, attending model (PIA) is useful in reviewing the school-to-PSE programs and policies of the Atlantic Provinces. Overall, we found that the provinces have an extensive range of policies, programs and services offered across ministries responsible for public and PSE:

• Pre-entry Programs and Policies

We found that Atlantic Canada is targeting curriculum to talk about PSE choices early (as early as kindergarten) and is primarily using career education as the tool for doing this. This programming tends to be focused broadly, however, with limited tailoring to the needs of underrepresented groups. There are a number of provinces that have dual credit programming, allowing students to gain combined high school/PSE credits and giving them exposure to PSE level course work. Most provinces provide work and learning exposure opportunities across the curriculum, using career portfolio tools to help students identify career pathways. There are a number of provinces providing programming to parents to support them in becoming "career coaches." In our review, we did not find reference to programming focused specifically on providing "cultural capital" exposure activities as a vehicle to promoting access to PSE for youth whose families and communities have limited experience with PSE.

The provinces reported a number of programs/services to support drop-outs with re-entry. We did not find evaluations that speak to their impact. It is also less clear from our research how provinces are working to identify these students early to engage or re-engage them in school to avoid them dropping-out and support their persistence through to PSE graduation.

Labour market information is available in all provinces, but we did not find evidence that students were being supported in making career sense of it. The research is clear that the "build it and they will come" approach to LMI is ineffective. In order to benefit from LMI, students first need support to identify what information they need and then assistance to make personal sense of it in the context of their own career plan/pathway. Rather than being integrated within a cohesive career development process, LMI is too often provided as an isolated, stand-alone support, leaving it to students and/or their supporters to determine linkages between the information and the students' unique transitions needs/goals.

This approach to LMI provision is Canada-wide and in many ways indicative of the wider approach to career education. When looking at the European and US models of comprehensive school-to-school transition designs, VET and dual credit approaches, we see a commitment to ensuring that each and every student is supported in building clear and evolving pathways from learning to careers. While a number of strong transitions programs exist in Canada – and specifically in the Atlantic Region – too many Canadian students remain unclear about what pathways exist and do not access critical supports to help them in managing their own transitions and accountability, at best, exists at the macro level as opposed to at the individual student level.

While there are notable exceptions, such as Nova Scotia's O2, the research leading to the CAMET Future in Focus Framework confirmed that many students, especially those who come



from families and communities with limited exposure to PSE, remain unclear about the possible pathways from public school-to-PSE-to work and access limited supports in navigating their transition to PSE through to graduation.

Induction

While there was limited response from the PSE institutions across the Atlantic region, those who did respond have a number of programs to support transition into PSE. Cape Breton University stood out as a comprehensive model. The New Brunswick Department of Post-Secondary Education, Training and Labour (PETL)'s fund to strengthen transition and improve persistence rates (see 5.1.2.1) would appear to be resulting in a number of programs to support underrepresented group entry and are in keeping with international promising practice with respect to addressing the mental health, belonging and engagement issues associated with transition.

The next phase of research for this project focuses on investigating further the efforts of Atlantic post-secondary institutions to support student induction and their impact on the lived experience and needs of early-year post-secondary students.

Attending

Both in our international/national promising practice research and in Atlantic Canada research, we found very few programmes and policies to support persistence once students are in PSE. Given that most students drop-out in the first and second years of PSE programs, these findings added to the rationale for having a focus on this cohort of students and on the programming offered by post-secondary institutions to support their persistence through to graduation in the survey with youth and youth adults and in the interviews with PSE institution staff.

APPENDIX B: Survey of Youth and Young Adults

Approach/Methodology

Because of the need to reach diverse respondent groups across urban and rural environments and in multiple learning and service delivery locations, an online survey was developed to capture the widest possible perspectives on the current post-high school transition system in the Atlantic region.

The survey targeted youth 24 years of age and under who are currently in PSE, have graduated from PSE, who have never attended or who have withdrawn from or switched PSE programs. This research was focused specifically on the transition from high school to PSE (e.g. public/private universities or colleges and apprenticeship programs). The survey gathered data on the strengths and challenges faced by youth and young adults throughout their transition pathway following high school. Specifically, the survey asked:

- Post-secondary students and recent PSE graduates about their transition experience to PSE and, with hindsight, what they found helpful and what hindered them. The survey explored what could have further supported students emotionally, socially and/or financially during their transition and throughout their post-secondary studies and what helped them to build their sense of career direction. It investigated respondent knowledge of labour market opportunities post-graduation, their access to career development/employment services, their sense of career and employment prospects and the factors that supported students' preparedness for career and life after graduation.
- Young adults who did not transition to post-secondary after high school or who attempted but
 did not graduate about the challenges/barriers they faced, what contributed to their decision
 to not pursue post-secondary/what contributed to their decision to not persist in their
 program, what supports they wished they had to help them in their post-high school transition
 and what supports they most need to build their career readiness.
- Students who took at least one year between high school and PSE transition about their reasons for delaying the transition and the benefits and challenges of doing so.
- Students that switched PSE programs about the reasons for the change, what if anything could have supported them in choosing this learning pathway from the start and how confident they are that they have selected the right learning program now.

The survey took approximately 30 minutes to complete. I was approved by the University of PEI's (UPEI) Research Ethics Board.

The survey was available online through Survey Monkey. It was promoted through social media, emails to CCDF and the Working Group contacts, word of mouth and the cooperation of post-secondary institutions. It captured both quantitative and qualitative data from the respondents. The researchers used NVIVO to conduct the content analysis for the open-text questions. The full survey is included herein in Appendix B.2.

The survey is not statistically representative of the general population. Its purpose was to supplement or support the Environmental Scan's findings. It should not be used in isolation to draw conclusions about the general populations.

Respondent Profile

A total of 1085 respondents completed the survey. Most of the respondents were in the 19-20 and 21-24-year-old age groupings (36.8% and 43.7% respectively). Over half (51.9%) indicated that their home



province is Nova Scotia (NS), 13% stated that their home province is New Brunswick (NB), 12.2% stated that their home province is Newfoundland and Labrador (NL), and 5.2% of respondents stated that their home province is Prince Edward Island (PEI). Table 1 shows where respondents are currently going to school/work across the Atlantic Provinces. All other respondents had non-Atlantic home provinces, with 8.8% stating that they had a home country other than Canada. Just over 70% of all respondents currently work or go to school in the NS.

Table 1: Province where respondents went to school or work

Province	Number of responses (n)	Percentage (n/1085)		
New Brunswick	110	10.1%		
Nova Scotia	769	70.9%		
PEI	73	6.7%		
Newfoundland and Labrador	133	12.3%		
Total	1085	100.0%		

In terms of the highest level of education completed, over half (54.8% or 595) of respondents reported having a high school diploma or equivalent. This was followed by approximately a quarter (23.4% or 254), who reported completing some form of post-secondary education but did not persist to graduation.

Over half (59.6%) of the respondents live in an urban region and 39.1% live in a rural community. The remaining respondents live remotely (2.4%) or in a First Nations community (2.9%). The majority of respondents (71.2%) are female. Over a quarter (27.5%) identified as low income youth; 6.6% identified as Indigenous; 6.6% identified as a person with a disability; 3.4% identified as an African Nova Scotian/Canadian; 7.3% identified as an immigrant; 7.6% identified as a visible minority and 10.9% identified as a LBGTQ youth. Data Tables on the Respondent Profile are in Appendix B.1 of the report.

Overall, there were there were few significant demographic differences across the four Atlantic provinces. As shown in Table 2, significant differences included:

- A higher percentage of PEI respondents identified as male,
- A higher percentage of NL respondents were older (i.e. between 21 and 24 years of age), self-identified as coming from a remote region and/or as Indigenous,
- A higher percentage of NS and PEI respondents identified as immigrants
- · A higher percentage of NS respondents identified as belonging to a visible minority
- A lower percentage of NL respondents identified as coming from a rural region.

Table 2: Significant differences in demographics by province

		NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Total (n=1085)
	Male	18.2%	29.0%	41.1%	16.5%	27.2%
Gender ¹	Female	80.9%	69.3%	57.5%	82.0%	71.2%
	Other/ not answered	0.9%	1.7%	1.4%	1.5%	1.6%
	18	20.9%	19.6%	20.5%	17.3%	19.5%
Age ²	19 -20	40.0%	38.2%	38.4%	24.8%	36.8%
	21 - 24	39.1%	42.1%	41.1%	57.9%	43.7%
Region	Remote community ³	2.7%	1.2%	2.7%	9.0%	2.4%

		NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Total (n=1085)
	Urban community	55.1%	59.0%	60.3%	66.2%	59.6%
	Rural community ⁴	40.9%	41.4%	35.6%	26.3%	39.1%
Ethnicity	Indigenous ⁵	6.4%	5.2%	5.5%	15.8%	6.6%
	An immigrant ⁶	0.9%	9.1%	8.2%	1.5%	7.3%
	A visible minority ⁷	3.6%	9.1%	1.4%	6.0%	7.6%

 $^{^{1}}$ X²(6) = 21.261, p = 0.002

Transition Pathways after High School

Respondents were asked to select, from six options, the pathway that best describes their transition route after high school. The pathway choices that they could select from were:

- NEVER: those who did not, at any time, enrol in a post-secondary education (PSE) program
- DIRECT: those who transitioned directly from high school to a PSE program
- GAP: those who had taken at least a one-year gap between high school and PSE
- SWITCH: those who are currently in a PSE program and have switched programs at least once
- WITHDREW: those who had started a PSE program but withdrew or stopped-out
- GRADUATE: those who progressed through to graduation from a PSE program.

The most common transition pathway of the respondents was the DIRECT route (58.3%). Data tables in Appendix B.1 show that 42.7% of this group were 19 or 20 years old, the majority were from NS (56.8%), 80.1% of these respondents go to school in NS, over half (59.0%) live in an urban region, over two-thirds (69.1%) were female. Table 3 shows that the percentage of NL respondents in the DIRECT group (28.6%) was significantly lower than the other provinces (X²(3, N=1085)=75.544, p=0.000).

The next largest grouping was the GAP respondents (13.1%). Data tables in Appendix B.1 show that these respondents are mostly between 21 and 24 years old (59.9%), female (65.6%), and live in an urban area (66.9%). As shown in Table 3, the percentage of GAP respondents from NB (3.6%) was significantly lower than the others $(X^2(3, N=1085)=31.265, p=0.000)$.

The GRADUATE and SWITCHED groups are similarly sized groupings (12.7% and 12.1% respectively). Data tables in Appendix B.1 show that those respondents in the GRADUATE group are mostly in the older cohort (21 to 24 years, 89.1%) and close to two-thirds of the SWITCH group were also in this older cohort. Both groups were mostly from NS (GRADUATE, 42.0% and SWITCH, 54.2%). In terms of jurisdictional differences, NL had a significantly higher percentage of graduates (31.6%) as compared to the others (X^2 (3, N=1085)=65.903, p = 0.000). There were no significant differences present for the SWITCHED group.

 $^{^{2}}$ X²(6) = 13.686, p = 0.033

 $^{^{3}}$ X²(3) = 29.998, p = 0.000

 $^{^{4}}$ X²(3) = 11.292, p = 0.010

 $^{^{5}}X^{2}(3) = 20.711$, p = 0.000

 $^{^{6}}$ X²(3) = 17.067, p = 0.001

 $^{^{7}}$ X²(3) = 9.384, p = 0.025

The NEVER and WITHDREW groupings were the smallest groupings among the respondents (2.4% and 1.5% respectively).¹¹ Fifty percent of the NEVER grouping was 19 to 20 years old. Most of this group was from NS (42.3%) and most were female (53.8%). The WITHDREW grouping was equally from NB and NS (37.5%). Most were working in NB (43.8%). Well over half lived in a rural community (56.3%).

For those in underrepresented groups (see Appendix B.1, Table A.8):

- Indigenous respondents were present in all transition pathways. Most of these respondents were in the GRADUATE group (8.7%).
- Most respondents with a disability and visible minority respondents were in the SWITCH group (10.7% and 11.5% respectively).
- Immigrant respondents were more likely to not go on to PSE (19.2%) or in the GAP group (11.3%).
- LBGTQ respondents were mostly in the DIRECT (10.8%), GAP (14.1%) and SWITCH (13.7%) groups.
- Over a quarter of respondents identified as low-income and most of these respondents were in the NEVER (42.3%), GAP (39.4%) and WITHDRAW (56.3%) groups.

Table 3: Significant differences in type of educational pathway followed

Pathway	NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Percentage (n/1085)
Am currently in a post-secondary education program and I transitioned to the program directly after high school $^{\rm 1}$	51.8%	65.8%	42.5%	28.6%	58.3%
Am currently in a post-secondary education program after spending at least one year out of school. ²	3.6%	11.6%	21.9%	24.8%	13.1%
Have graduated from a post-secondary education program. ³	21.8%	8.1%	13.7%	31.6%	12.7%

 $^{^{1}}$ X²(3) = 75.544, p = 0.000

Factors Impacting Students' Decision to Go or not Go to PSE

Sources of Information, Advice or Support

Respondents were presented with a list of sources of information, advice and support that could help students make PSE decisions. They were asked to select their top three. As shown in Figure 1, parents/guardians were overwhelmingly the most frequently selected source of information, advice or support (81.3%). The next two closest sources were teachers (38.2%) and friends (35.8%).

The least sought-after sources of support were career development specialists (1.5%), career centres (1.5%) and banks/financial institutions (1.7%).

¹¹ The NEVER and WITHDREW cohorts are small. While we have reported on their responses throughout this report, these responses should be treated with caution as they are not statistically significant.



 $^{^{2}}$ X²(3) = 31.265, p = 0.000

 $^{^{3}}$ X²(3) = 65.903, p = 0.000

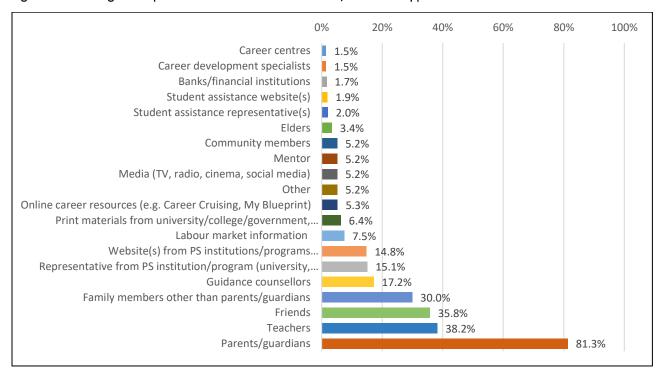


Figure 1: Percentage of respondents who selected information, advice or supports

There was little jurisdictional difference among respondents' selections. Parents, teachers and friends were most identified as sources of information, advice and support across all jurisdictions. However, among other sources listed, a significantly higher percentage of NB respondents (29.1% vs. 16.6% in NS, 12.3% in PEI and 13.5% in NL) identified guidance counsellors ($\chi^2(3, N=1085)=13.536$, p = 0.004). On the other hand, a significantly lower percentage of NL respondents (6.0% vs. 21.8% in NB, 16.1% in NS and 11.0% in PEI) identified representatives from PSE institutions as a source of information ($\chi^2(3)=14.030$, p = 0.003).

The top three sources of information, advice or support remained consistent across the transition pathway groups with small variances among GAP, SWITCH and the GRADUATE groups between parents/guardians and other family members as being key sources of support (see Table 4).

Table 4: Top 3 sources of information, advice or support that helped respondents make their post-high school decision

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Parents/guardians	73.1%	83.9%	71.8%	84.7%	93.8%	76.1%	81.3%
Family members other than parents/guardians	38.5%	27.8%	31.0%	36.6%	18.8%	31.9%	30.0%
Community members	19.2%	4.6%	7.7%	1.5%	12.5%	5.1%	5.2%
Elders	11.5%	2.2%	3.5%	3.8%	6.3%	6.5%	3.4%
Teachers	30.8%	42.1%	23.9%	36.6%	56.3%	36.2%	38.2%
Guidance counsellors	7.7%	20.6%	10.6%	18.3%	6.3%	10.9%	17.2%
Mentor	0.0%	3.6%	9.2%	6.1%	6.3%	8.0%	5.2%

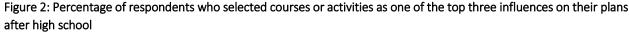
	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Representative from PS institution/program (university, college, apprenticeship)	3.8%	17.4%	12.0%	14.5%	12.5%	10.9%	15.1%
Website(s) from PS institutions/programs	7.7%	12.7%	17.6%	16.0%	12.5%	22.5%	14.8%
Print materials from university/college/governmen t, apprenticeship office, etc.	3.8%	6.6%	4.9%	6.1%	0.0%	8.0%	6.4%
Friends	19.2%	36.9%	43.7%	32.8%	25.0%	29.7%	35.8%
Online career resources (e.g. Career Cruising, My Blueprint)	0.0%	5.5%	4.2%	8.4%	0.0%	3.6%	5.3%
Media (TV, radio, cinema, social media)	0.0%	4.6%	7.7%	6.9%	6.3%	4.3%	5.2%
Career centres	0.0%	1.1%	2.1%	1.5%	6.3%	2.2%	1.5%
Career development specialists	3.8%	1.1%	4.2%	0.8%	0.0%	0.7%	1.5%
Student assistance representative(s)	7.7%	1.9%	2.1%	1.5%	0.0%	2.2%	2.0%
Student assistance website(s)	0.0%	1.7%	2.1%	2.3%	0.0%	2.9%	1.9%
Banks/financial institutions	11.5%	1.3%	2.1%	0.8%	0.0%	2.2%	1.7%
Labour market information (e.g. reports on job trends, salaries, number of graduates, etc.)	7.7%	5.2%	13.4%	9.2%	0.0%	10.9%	7.5%
Other	7.7%	5.4%	4.9%	1.5%	12.5%	6.5%	5.2%

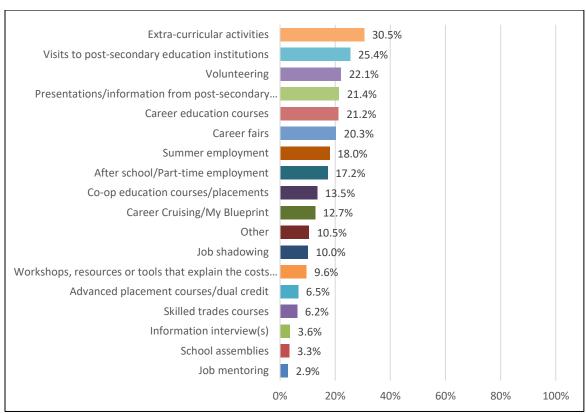
School-Based Courses and Activities

Respondents were also asked to select their top three courses and/or activities that had the greatest impact on their transition decisions. As shown in Figure 2, the three most frequently selected courses/activities were:

- Extra-curricular activities (30.5%)
- Visits to post-secondary education institutions (25.4%)
- Volunteering (22.1%)

The courses/activities that had the least impact were job mentoring (2.9%), school assemblies (3.3%) and information interviews (3.6%).





In terms of courses or activities that impacted students' decisions regarding what to do after high school, there was some variance across the transition pathway groups (see Table 5). All groups highlighted extra-curricular activities. The NEVER and GAP groups were more likely to list career education courses as a top 3 influence and less likely to list visits to PSE institutions. The NEVER group was more likely to list after school/part-time employment in their top 3. The WITHDREW and GRADUATE groups were more likely to list career fairs in their top 3 and least likely to list volunteering.

Table 5: Top three courses or activities that impacted respondents' decisions about what to do after high school

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Extra-curricular activities	30.8%	33.2%	25.4%	32.1%	25.0%	22.5%	30.5%
Visits to post-secondary education institutions	15.4%	26.9%	21.1%	26.7%	37.5%	22.5%	25.4%
Volunteering	23.1%	23.7%	22.5%	20.6%	0.0%	18.1%	22.1%
Presentations/information from post-secondary education institutions/ apprenticeship bureaus	3.8%	21.4%	15.5%	26.0%	6.3%	28.3%	21.4%
Career education courses	34.6%	22.6%	26.1%	13.0%	12.5%	15.9%	21.2%

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Career fairs	19.2%	20.7%	19.7%	17.6%	25.0%	21.0%	20.3%
Summer employment	11.5%	17.9%	19.0%	21.4%	18.8%	15.2%	18.0%
After school/Part-time employment	30.8%	17.2%	21.8%	13.7%	12.5%	13.8%	17.2%
Co-op education courses/placements	23.1%	13.4%	12.7%	16.0%	12.5%	10.1%	13.5%
Career Cruising/My Blueprint	0.0%	13.4%	10.6%	13.7%	18.8%	12.3%	12.7%
Other	0.0%	9.7%	13.4%	9.9%	12.5%	13.8%	10.5%
Job shadowing	15.4%	10.8%	3.5%	10.7%	6.3%	12.3%	10.0%
Workshops, resources or tools that explain the costs and available subsidies for post-secondary education (e.g. a post-secondary education cost calculator, application fee waiver programs, financial guidance course)	15.4%	9.3%	9.9%	9.9%	6.3%	9.4%	9.6%
Advanced placement courses/dual credit	0.0%	7.3%	4.2%	6.9%	0.0%	7.2%	6.5%
Skilled trades courses	11.5%	3.6%	7.0%	4.6%	6.3%	17.4%	6.2%
Information interview(s)	7.7%	2.7%	4.9%	3.8%	6.3%	5.1%	3.6%
School assemblies	0.0%	3.8%	3.5%	3.1%	0.0%	2.2%	3.3%
Job mentoring	3.8%	2.4%	6.3%	2.3%	6.3%	1.4%	2.9%

There were few significant jurisdictional differences among respondents to this question. Among the significant differences:

- Almost half (47.9%) of respondents from NL found extra-curricular activities supportive of their decision-making
- Few respondents from NL identified co-op education/placements as a factor influencing their plans after high school
- NB respondents found PSE visits more helpful than the respondent average
- Few PEI respondents (1.4%) found information interviews helpful in their decision-making (see Table 6).

Table 6: Courses and activities identified as supportive in career decision making by jurisdiction

	NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Total (n=1085)
Extra-curricular activities ¹	22.7%	31.1%	47.9%	24.1%	30.5%
Co-op education courses/placements ²	16.4%	14.6%	13.7%	4.5%	13.5%
Skilled trades courses ³	4.5%	3.4%	9.6%	21.8%	6.2%
Visits to post-secondary education institutions ⁴	30.9%	27.2%	16.4%	15.8%	25.4%
Information interview(s) ⁵	8.2%	2.9%	1.4%	5.3%	3.6%

 $^{^{1}}$ X(3) = 16.338, p = 0.001

Biggest Influence on Going or Not Going to PSE

Almost 95% (1030 of 1085) of respondents answered the open-ended question asking who or what was the biggest influence affecting their decision to go to or not to go to post-secondary. A content analysis of their responses, as shown in Table 7, found that the most frequently cited influencers were either their friends and/or family members (53.0%). This response was followed by the potential for employment associated with the PSE program (25.9%).

The biggest influence was my parents and friends urging me into post-secondary and being familiar enough with myself to realize that if I spent long enough outside of school I may not want to go back which wouldn't allow me as many opportunities. (GRADUATE group respondent)

Neither of my parents went to university or college and they've struggled with money for years because they weren't able to get high income jobs. I worked at Tim Horton's in high school and I realized that I'd rather get a post-secondary education and have an actual career, than work at a job like that when I'm older. (DIRECT group respondent)

These responses were seen across each of the six transition groups with one exception: 41.7% (n=10) of young people in the NEVER group stated they were their own biggest influence. This is exemplified by one NEVER respondent who commented, "Myself. I was not ready to go. [I] wanted to work for a few years first." Across these particular respondents, their comments highlighted an intrinsic view that they were either not ready to transition to PSE or they wanted to verify their decision with some out of school experience. In some cases, they commented that while they have not gone yet, it still remains in their plans.

 $^{^{2}}$ X²(3) = 10.751, p = 0.013

 $^{^{3}}$ X²(3) = 68.641, p = 0.000

 $^{^{4}}$ X²(3) = 12.609, p = 0.006

 $^{^{5}}$ X²(3) = 9.986, p = 0.019

Table 7: Factors influencing respondents' decisions about post-secondary education

	Never (n=24)	Direct (n=595)	Gap (n=137)	Switch (n=125)	Withdrew (n=16)	Graduate (n=133)	Total (n=1030)
Family and teacher expectations that they would attend PSE	4.2%	7.1%	2.9%	4.0%	0.0%	11.3%	6.5%
Employment opportunities (obtaining the job they had in mind or get a better job)	12.5%	26.6%	25.5%	28.0%	31.3%	23.3%	25.9%
Family and/or friends	37.5%	55.1%	46.0%	54.4%	43.8%	53.4%	53.0%
Myself	41.7%	11.4%	13.9%	16.0%	18.8%	13.5%	13.4%
Counsellor/ teacher	8.3%	4.7%	6.6%	5.6%	0.0%	5.3%	5.1%
Other	8.3%	5.0%	11.7%	0.8%	6.3%	3.8%	5.3%

Is PSE Worth the Investment?

When asked if they felt post-secondary education was worth the investment, most respondents agreed that it was (see Table 8). The percentage of respondents that answered affirmatively ranged from 61.5% in the NEVER group to 74.6% in the GRADUATE group.

The most frequently cited reason across all groups for why PSE was worth the investment was that it would provide a chance to have a better career and an economically stronger future. This was mentioned by 63.5% of the respondents (see Table 9).

Post-secondary education is worth all the time, money, etc. that you put into it because in the end it increases your chance of having a great career and a great salary in the future. (SWITCH group respondent)

While most respondents felt that it was a good investment, almost a third of respondents (29.4%) across all groups were not sure or did not feel that PSE was a good investment. The main reason cited as to why it was not worth it is that there is no guarantee of a job when you graduate (see Table 10). The NEVER group was the most uncertain or negative about the value of PSE (38.4%). The WITHDREW group were next most uncertain with 37.5% answering negatively or stating that they were not sure. The only significant difference among the jurisdictions in the response to this question was that the percentage of NS respondents who felt that PSE was worth the investment was significantly lower than the other province respondents (see Table 11).

Table 8: By transition pathway group: Is PSE worth the investment?

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Yes	61.5%	69.1%	74.6%	71.8%	62.5%	74.6%	70.6%
No	3.8%	4.0%	2.8%	3.8%	12.5%	5.1%	4.1%
Not sure	34.6%	26.9%	22.5%	24.4%	25.0%	20.3%	25.3%

Table 9: Reasons why PSE is worth the investment

	Never (n=10)	Direct (n=365)	Gap (n=85)	Switch (n=76)	Withdrew (n=7)	Graduate (n=84)	Total (n=627)
Its valuable (e.g. good investment)	0.0%	9.0%	11.8%	2.6%	0.0%	8.3%	8.3%
Better career options/future	90.0%	61.4%	63.5%	69.7%	57.1%	64.3%	63.5%
Make connections (with people of similar interests)	0.0%	2.7%	3.5%	3.9%	14.3%	3.6%	3.2%
Learning new skills	10.0%	18.9%	12.9%	13.2%	0.0%	21.4%	17.4%
Other	0.0%	9.0%	11.8%	11.8%	14.3%	9.5%	9.7%

Table 10: Reasons why PSE is not worth the investment

	Never (n=8)	Direct (n=17)	Gap (n=32)	Switch (n=33)	Withdrew (n=5)	Graduate (n=31)	Total (n=287)
No guarantee of job	50.0%	47.2%	43.8%	57.6%	60.0%	48.4%	48.4%
Program not meeting needs (i.e. wasn't what they expected)	12.5%	9.0%	12.5%	6.1%	20.0%	9.7%	9.4%
Wait and see - Too early to tell/it depends	25.0%	30.3%	28.1%	30.3%	0.0%	32.3%	29.6%
Other	12.5%	15.7%	15.6%	18.2%	20.0%	12.9%	15.7%

Table 11: By province: Is PSE worth the investment?

	NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Total (n=1085)
Yes	77.3%	67.4%	79.5%	78.9%	70.6%
No/Not sure	22.7%	32.6%	20.5%	21.1%	29.4%

 $X^{2}(3) = 13.469$, p = 0.004.

Planning for their Future

The next section of the survey asked respondents about when they started to think about their career futures, the adequacy of their preparation for choosing a career direction in and after high school, the adequacy of their preparation for making the transition after high school, and the information, resources and supports they feel would be helpful in supporting successful transitions.

When Respondents Started Thinking about their Futures

Figure 3 shows the point when respondents started thinking about their future. Overall, most respondents (21.3%) stated that they started thinking about their futures in grade 9 or 10. As shown in the graphs, differences emerged among the groups. For those:

• In the NEVER group, they more often started thinking about their futures after high school (19.2%),

- In the DIRECT group, they more often started thinking about their future in grade 9 or 10 (26.4%).
- In the GAP group, they more often started thinking about their future after high school (27.5%),
- In the SWITCHED group, they more often started thinking about their future in grade 11 (22.9%),
- In the WITHDREW group, they were not sure when they started thinking about their future (25.0%) and,
- In the GRADUATE group, they more often started thinking about their future in grade 11 (19.6%).

Overall, there were no significant jurisdictional differences except that a higher percentage of NL respondents selected after high school graduation as compared to the other provinces (see Table 12).

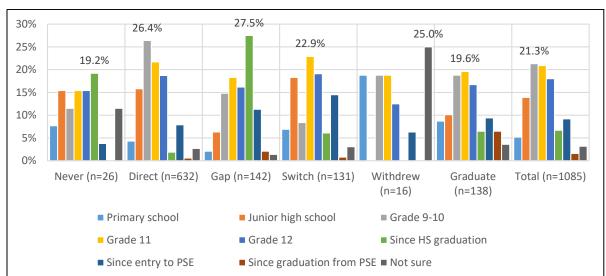


Figure 3: When did respondents start thinking about their future?

Table 12: When did respondents start seriously thinking about and/or planning their career future?

	NB (n=110)	NS (n=769)	PEI (n=73)	NL (n=133)	Total (n=1085)
After graduation from high school	6.4%	5.1%	6.8%	16.5%	6.7%

 $X^{2}(3) = 23.797$, p = 0.000

Preparation for Career Decision-Making

When asked if they felt adequately prepared with respect to deciding on a career direction, most respondents felt they were not (69.8%). There was a significant difference present among the different transition pathway groups. As shown in Table 13, those in the SWITCHER group had the lowest percentage of young people who felt they were adequately prepared to decide on a career direction in high school (X^2 (5, N=1085) = 24.401, p = 0.000). There were no significant jurisdictional differences among the responses to this question.

Table 13: Were respondents adequately prepared for deciding on a career direction in high school?

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Yes	34.6%	35.6%	23.2%	17.6%	25.0%	24.6%	30.2%
No/not sure	65.4%	64.4%	76.8%	82.4%	75.0%	75.3%	69.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

 $[*]X^{2}(5) = 24.401, p = 0.000$

The two main reasons given by those (n=625) who felt they were not adequately prepared to decide on a career direction were (see Table 14):

- Not enough information provided on the various careers available (55.7%); and
- Unable to decide too young, immature, inexperienced (39.8%).

There's really not a lot of talk about what happens after high school. Schools focus so much on university bound students. There should be more co-ops for everyone. There are so many careers out there that we never hear about. (A GAP group respondent)

It's hard to make a decision on something so important when there are so many options and you're so young. (WITHDREW group respondent)

Table 14: Why respondents felt that they were not prepared.

	Never (n=14)	Direct (n=340	Gap (n=89)	Switch (n=87)	Withdrew (n=9)	Graduate (n=86)	Total (n=625)
Not enough/ limited info provided	42.9%	57.9%	49.4%	56.3%	33.3%	57.0%	55.7%
Unable to decide (too young, too immature, inexperienced)	50.0%	37.4%	48.3%	40.2%	55.6%	37.2%	39.8%
Other	7.1%	5.0%	3.4%	3.4%	11.1%	3.5%	4.5%

Overall, a little less than one third of respondents (30.2%) felt they were adequately prepared to decide on a career direction in high school. Of those who provided a reason for why they felt prepared (n=240), there were two main reasons (see Table 15):

- 46.3% stated that they always had an idea of what they wanted as their future career path, and
- 41.3% reported that the information provided in high school about career planning from the teachers, coop programs and/or career fairs was adequate.

While in high school, we as students were given plenty of direction and guidance while preparing our career decisions. Staff were always available to assist and answer many questions to help ease our experience with career decisions. (NEVER group respondent)

I've always been very passionate about the outdoors, and I knew I wanted a career outdoors! I still felt that way when I graduated high school, and now I'm in the environmental sustainability program and still feel the same about my future career. (SWITCHED group respondent)

Table 15: Why respondents felt prepared

	Never (n=4)	Direct (n=166)	Gap (n=21)	Switch (n=20)	Withdrew (n=4)	Graduate (n=25)	Total (n=240)
Staff and school career activities helped them	50.0%	45.2%	19.0%	35.0%	50.0%	36.0%	41.3%
Always had an idea of their career path	50.0%	43.4%	61.9%	40.0%	50.0%	56.0%	46.3%
Parents/family provided guidance	25.0%	6.0%	9.5%	5.0%	0.0%	4.0%	6.3%
Other	0.0%	6.6%	14.3%	20.0%	0.0%	4.0%	7.9%

Preparation for the Transition from High School

There was almost an even yes vs. no split among respondents (53.3% vs. 46.8%) to the question of whether respondents felt they were prepared for their transition out of high school. There was a significant difference among the respondents from the different educational pathways. As shown in Table 16, the percentage of switchers who felt adequately prepared for transition was significant lower as compared to the other pathways ($\chi^2(5, N=1085)=17.785, p=0.003$). There were no significant jurisdictional differences among the responses to this question.

Table 16: Were respondents adequately prepared for making the transition out of high school?

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Yes	53.8%	58.1%	46.5%	42.7%	31.3%	50.7%	53.3%
No/Not sure	46.2%	41.9%	53.5%	57.3%	68.8%	49.3%	46.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

^{*} $X^{2}(5) = 17.785$, p = 0.003.

Of the 436 who provided a reason for why they felt prepared, they either felt ready because of their learning in high school or because of their own intrinsic reasons. This latter reason was seen in 50.0% of the responses (see Table 17).

Les professeurs de secondaire nous ont très bien préparé et nous ont donné des conseils. (SWITCHED group respondent)

I worked all through high school and I had been mowing lawns since I was 12 or 13. The transition to school was easy, and the transition to the working world was even easier as a result of always working. I knew what I could expect and I was exposed to the industry I chose from a young age through my father. (GRADUATE group respondent)

Table 17: Why respondents felt that they were prepared for the transition out of high school

	Never (n=6)	Direct (n=274)	Gap (n=49)	Switch (n=47)	Withdrew (n=4)	Graduate (n=56)
Family	0.0%	6.9%	6.1%	12.8%	25.0%	5.4%
I am prepared	66.7%	48.9%	59.2%	38.3%	50.0%	50.0%
Learning in high school	16.7%	41.2%	26.5%	42.6%	0.0%	41.1%

Other 16.7% 5.8% 10.2% 10.6% 25.0% 7.1%

The remaining 57.3% were either not sure if they were prepared or felt that they were definitely not prepared for this transition. The main reason why they felt this way was that high school did not help them develop the skills needed for life after graduation. This was mentioned by 67.9% of the 408 who answered the question (see Table 18).

High school didn't challenge me enough to prepare me for university. I felt like high school teachers didn't expect much compared to my university classes. Simple things that were expected in university such as proper researching skills, essays, citations, and even critical thinking/creativity were not taught in my high school. (DIRECT group respondent)

Table 18: Why respondents felt that they were not prepared for the transition out of high school

	Never (n=7)	Direct (n=221)	Gap (n=60)	Switch (n=58)	Withdrew (n=8)	Graduate (n=54)	Total (n=408)
High school did not prepared them for workload	0.0%	75.1%	46.7%	70.7%	37.5%	66.7%	67.9%
They do not have life skills, not ready for living on own	42.9%	16.7%	11.7%	17.2%	0.0%	20.4%	16.7%
Other	57.1%	9.5%	43.3%	12.1%	62.5%	16.7%	17.4%

Wished for Information, Resources and Supports

Respondents were asked about the types of information, resources or supports they wished they had in high school to help them decide whether or not to go to PSE. The majority (83.2% or 903) listed at least one support (see Table 19). The most frequently mentioned theme across all groups was the need for more information about career options (mentioned by 61.6%) and, in terms of this support, they wanted more hands on experience with a variety of careers (see Table 20). Examples of this can be seen in the following comments from respondents across all post-high school pathway groups:

I wish there would've been more information sessions especially in grade 12 about university. And that those schools would've had people come in and explained what kind of job you could do with each degree. (GAP group respondent)

A mandatory course "job fair", each day is a new career choice - the goods, the bads, the education needed, the time frame etc. Gives students more of an eye opener, lets them see what's out there, allowing them to picture themselves in the job. (GRADUATE group respondent)

A course or courses should have been offered on career opportunities. (DIRECT group respondent)

I wish I had more opportunities to do job shadowing or seminars on the different health careers available to see what they actually do day to day. (SWITCH group respondent)

My guidance counsellor and the Internet helped a lot with my decisions on where I was going. Wish I had of been able to attend some classes and talk to actual nursing teachers. (WITHDREW group respondent)

More real life exposure. Most student only know the general jobs out there like doctors or layers, etc., we never learn about the other career options geared towards our focuses (sic.). We get to do no research and have no tools to research on our own. (NEVER group respondent)

Table 19: Percentage of respondents who wished for at least one support to help them decide about PSE

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Yes	84.6%	80.7%	85.9%	86.3%	100.0%	87.0%	83.2%
No	15.4%	19.3%	14.1%	13.7%	0.0%	13.0%	16.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 20: Types of support respondents wished they had

	Never (n=22)	Direct (n=510)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=120)	Total (n=903)
Nothing	22.7%	8.4%	5.7%	3.5%	6.3%	5.0%	7.3%
Don't know/not sure	4.5%	2.4%	1.6%	2.7%	6.3%	0.8%	2.2%
HS career education	45.5%	60.6%	53.3%	72.6%	50.0%	68.3%	61.6%
Study skills/life skills/prepare for PS	0.0%	10.0%	13.1%	4.4%	6.3%	5.8%	8.9%
Scholarship/finances	13.6%	8.4%	10.7%	4.4%	0.0%	8.3%	8.2%
Other options besides university	4.5%	5.3%	6.6%	6.2%	12.5%	10.0%	6.3%
Time off OK/change is OK	0.0%	0.8%	5.7%	2.7%	6.3%	0.8%	1.8%
Other	13.6%	6.3%	9.8%	4.4%	12.5%	5.0%	6.6%

School and Program Selection

The next series of questions on the survey focused on those respondents who had chosen to go to PSE and their decision around their school and program choices. These respondents were asked to select the type of post-secondary institution they first attended. As shown in Figure 4, a majority of respondents (78.8%) enrolled in university. Just over 20% of respondents went to college and 1% attended an apprenticeship program. The biggest difference among the post-high school pathway groups was for those who went to PSE directly after high school. For this group, a larger majority (91.6%) went to university. The GAP and GRADUATE groups had a closer balance between university and college enrolment.

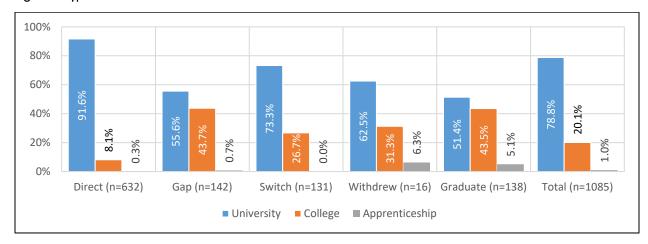


Figure 4: Type of institution attended

Planning and Preparing for Selecting a PSE Institution/Program

The survey included several yes/no questions meant to provide insight into the factors that respondents considered when deciding on their learning pathway after high school. Table 21 provides the breakdown for each of the five groups that went on to PSE.

Overall, the statement with the highest level of agreement in terms of their selecting a PSE institution/program was "I have an interest in the subject area in my program of choice" (95.4% of respondents agreed with this). Other statements with high agreement, showed that when it came to deciding on a PSE institution/program:

- 69.5% based it on the extent to which the program provided the skills needed for related employment,
- 63.8% based their decision on the money they would make in that career, and
- 63.1% based their decision on employment opportunities in the field.

Related to the financial aspect of their education, overall:

- 73.7% stated the cost of a post-secondary education is much higher than they realized, and
- 75.4% received the information and/or financial support needed to pay for their education.

Overall, the factors that had the least impact on their PSE institution/program choice were:

- The amount of personal time required for classes and study influenced my choice of program (32.5%)
- The opportunity to do at least some of the program (courses) using distance or online learning (17.8%)

There was little variance among the respondent groups. Exceptions were in the WITHDREW and GAP groups. Perhaps, not surprisingly, the GAP group was less affirmative in their response to the statement "When I left high school, I felt really clear about my post-secondary choice because I knew it was a good "fit" for me." The WITHDREW group was more affirmative that family expectations, PSE costs, and the challenge of leaving home to go to PSE influenced their choice.

Table 21: Number/percentage of respondents in agreement with the following statements

	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1059)
When I left high school, I felt really clear about my post-secondary education choice because I knew it was a good "fit" for me.	67.4%	33.8%	35.1%	37.5%	52.2%	56.5%
While in high school, I had opportunities to check out my field of interest (talking to people in the field, observing or actually trying out some work) before committing to a post-secondary education program.	43.2%	36.6%	34.4%	18.8%	26.8%	38.7%
I made an informed choice based on employment opportunities/prospects in my field.	66.1%	65.5%	52.7%	50.0%	58.0%	63.1%
The earning potential of a career in this field influenced my choice of program.	64.6%	66.9%	63.4%	50.0%	59.4%	63.8%
The opportunity to do at least some of the program (courses) in my home community influenced my choice of program.	47.0%	44.4%	47.3%	37.5%	44.9%	46.3%
I have an interest in the subject area in my program of choice.	96.0%	93.7%	96.9%	81.3%	94.2%	95.4%
The expectations of my family influenced my choice of program.	55.7%	45.1%	61.8%	62.5%	53.6%	54.9%
My parents/guardians/close family members talked about their experiences at post-secondary education.	62.3%	54.2%	63.4%	37.5%	52.9%	59.8%
My community or mentor encouraged me to explore post-secondary education options.	56.6%	49.3%	44.3%	31.3%	47.1%	52.5%
The opportunity to do at least some of the program (courses) using distance or online learning influenced my choice of program.	15.5%	33.8%	9.9%	12.5%	19.6%	17.8%
The cost of completing the program (tuition, books, and accommodations) influenced my choice of program.	43.5%	50.7%	39.7%	68.8%	50.0%	45.2%
The amount of personal time required for classes and study influenced my choice of program.	30.4%	45.1%	26.0%	37.5%	34.8%	32.5%
I received the information and/or financial support I needed to pay for my education.	75.3%	73.9%	74.8%	62.5%	79.0%	75.4%
The extent to which the program provides the skills needed for related employment influenced my choice of program.	70.6%	78.9%	69.5%	43.8%	58.0%	69.5%
The cost of a post-secondary education is much higher than I realized.	73.6%	75.4%	80.2%	81.3%	65.9%	73.7%
Leaving home to go to a different community for post-secondary education was/would be challenging for me.	52.1%	52.8%	53.4%	62.5%	53.6%	52.7%

Respondents were also asked to select the reasons why they chose their program of study or the post-secondary institution. Overall, the five most frequently selected factors that affected their decision included:

- Size of school (53.5%)
- Located in or close to home community (49.0%)
- Availability of program (46.6%)
- Family influence and support (44.9%)
- Employment opportunities after graduation (40.8%) (See Table 22)

Table 22 provides the breakdown for each of the PSE pathway groups:

- For the DIRECT group, their top three selections were: Size of school (62.3%); Located in or close to home community (50.9%), Awarded a scholarship or bursary (48.6%).
- For the GAP group, their top three selections were: Employment opportunities after graduation (51.4%); Availability of program (47.2%); Family influence and support (40.8%)
- For the SWITCH group, their top three selections were: Located in or close to home community (51.9%); Employment opportunities after graduation (49.6%); Size of school (48.1%)
- For the WITHDREW group, their top three selections were: Availability of the program (68.8%); Extra-curricular activities available (50.0%); Family influence and support (37.5%)
- For the Graduate group, their top three selections were: Availability of the program (49.3%); Employment opportunities after graduation (49.3%); Located in or close to home community (48.6%).

Table 22: Why did respondents choose their program/institution?

	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1059)
Tuition	32.1%	26.1%	26.0%	12.5%	27.5%	29.7%
Cost	32.6%	30.3%	26.0%	31.3%	31.9%	31.4%
Located in or close to home community	50.9%	39.4%	51.9%	37.5%	48.6%	49.0%
Family influence and support	46.7%	40.8%	45.0%	31.3%	42.0%	44.9%
Friends	34.8%	33.8%	32.1%	31.3%	31.9%	33.9%
Instructors at the program/ institution	19.9%	23.2%	26.7%	18.8%	21.0%	21.3%
Availability of program	45.7%	47.2%	45.0%	68.8%	49.3%	46.6%
Length of program	16.3%	33.1%	29.8%	31.3%	39.1%	23.4%
Student/school facilities	32.0%	24.6%	32.8%	25.0%	15.9%	28.9%
Size of school	62.3%	36.6%	48.1%	31.3%	38.4%	53.5%
Extracurricular activities available	19.0%	9.2%	15.3%	0.0%	5.8%	15.2%
Availability of work terms/co-ops	23.4%	27.5%	29.8%	25.0%	17.4%	24.0%
I have heard that it is a friendly and open place to be	44.9%	35.9%	36.6%	31.3%	29.0%	40.4%

	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1059)
Employment opportunities after graduation	35.3%	51.4%	49.6%	18.8%	49.3%	40.8%
Earning potential after graduation	27.2%	39.4%	29.8%	18.8%	30.4%	29.5%
Opportunity to travel with job after graduation	17.2%	19.0%	19.8%	12.5%	18.1%	17.8%
Ability to tailor the program to meet my personal interests, needs and career goals	24.8%	33.8%	23.7%	6.3%	23.2%	25.4%
Awarded a scholarship/ bursary	48.6%	14.1%	24.4%	12.5%	27.5%	37.7%
Other	6.6%	7.7%	6.1%	12.5%	5.8%	6.7%

Finally, 84.4% stated they researched other institutions before making their final decision. As shown in Table 23, this percentage ranged from 68.8% of those who withdrew to 87.8% of those who switched programs.

Table 23: Did respondents research other institutions before they made their selection?

	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1059)
Yes	85.9%	81.7%	87.8%	68.8%	79.0%	84.4%
No	14.1%	18.3%	12.2%	31.3%	21.0%	15.6%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

How They Felt about Their Choice

The 1059 respondents who have experienced some form of PSE were asked to answer yes or no to a series of statements regarding how they felt about their PSE choice (See Appendix B.2: Survey questionnaire, Question 30). The statements also looked at personal adjustment factors impacting transition to PSE (e.g. confidence, belonging, fit, sense of well-being). Table 24 shows that overall a high percentage of respondents felt that:

- The program was a good fit for them (90.2%)
- They were on the path to meeting their life and career goals (82.4%)
- They knew where to go to access the resources to support them to complete their program (82.2%)
- They are sure that this program is worth it to them (80.3%).

When responding to the challenges in transition statements:

- Almost half (46.7%) felt academically overwhelmed
- Over a third (35.9%) said that they were lonely.

There was no significant difference among the transition groups.

Table 24: How do respondents feel about their chosen PSE program?

	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1059)
The class sizes were overwhelming for me in the beginning.	23.7%	17.6%	22.1%	31.3%	20.3%	22.4%
Now that I'm in this program, I feel as sure or even surer about my choice.	71.5%	81.0%	83.2%	43.8%	71.0%	73.7%
The program is a good fit for me.	90.5%	93.0%	94.7%	31.3%	88.4%	90.2%
I am lonely.	36.9%	35.2%	38.2%	62.5%	26.8%	35.9%
I know where to go to access the resources to support me as I complete my program.	83.4%	82.4%	85.5%	50.0%	76.8%	82.2%
I feel that my institution/program has adequate transition supports.	72.8%	77.5%	71.0%	50.0%	68.8%	72.3%
I feel that I belong.	77.1%	81.0%	75.6%	31.3%	84.8%	77.7%
I feel academically overwhelmed.	52.4%	38.0%	41.2%	50.0%	34.8%	46.7%
I feel that I am on the path to meeting my life and career goals.	81.8%	90.1%	84.0%	43.8%	80.4%	82.4%
I am enjoying my life.	76.3%	80.3%	80.2%	43.8%	87.0%	78.2%
I'm sure that this program is worth it to me.	79.3%	90.1%	80.2%	12.5%	82.6%	80.3 %
I feel that my program does a good job ensuring I have the skills needed for my chosen career field.	79.1%	86.6%	77.1%	43.8%	71.7%	78.4%
I am confident I will find a good job after graduating.	66.5%	75.4%	63.4%	50.0%	67.4%	67.1%

Challenges in Transitioning to PSE

Respondents were asked to list the challenges they had while attending PSE. A majority of respondents (77.6% or 822) answered this question. Table 25 shows that the three most frequently mentioned challenges overall were related to:

- Academics and studying (mentioned by 41.5%),
- Readiness for university life or culture (36.1%), and
- Finances (13.7%).

These challenges were consistent across all groups. The SWITCH and WITHDREW groups highlighted more often issues around mental health, stress and anxiety. Sample comments include:

Loneliness, feelings of inadequacy, anxiety and depression from the stresses of school... (SWITCH group respondent)

Stress, depression, didn't feel like I belonged no matter what or how much I tried, too cliquey. (WITHDREW group respondent)

Table 25: What were the challenges in transitioning to PSE?

	Direct (n=541)	Gap (n=122)	Switch (n=118)	Withdrew (n=16)	Graduate (n=123)	Total (n=822)
Interest in course content/motivation to do	3.5%	5.7%	2.5%	6.3%	7.2%	4.2%
Readiness for university life	38.8%	35.2%	37.3%	37.5%	24.0%	36.1%
Academics/studying	48.4%	23.8%	40.7%	18.8%	32.8%	41.5%
Mental health/stress/anxiety	6.5%	4.9%	15.3%	12.5%	8.8%	7.8%
Finances	10.5%	14.8%	19.5%	18.8%	20.0%	13.7%
Work life balance	5.2%	13.1%	8.5%	6.3%	12.0%	7.6%
None	2.6%	1.6%	0.8%	6.3%	4.0%	2.5%
Other	5.2%	9.8%	6.8%	18.8%	17.6%	7.9%

In terms of dealing with challenges, the three most frequently cited sources of support mentioned consistently across all groups (see Table 26) included:

- Family and/or friends (51.4%)
- Myself (31.2%), and
- Professors/teachers (15.7%).

The main difference among the groups is that those in the WITHDREW group relied on themselves more often (56.3%) than the other more frequently cited sources of support (friends and or/ family (18.8%) and professors/teachers (12.5%) (see Table 26).

Table 26: Who helped respondents navigate the challenges?

	Direct (n=523)	Gap (n=120)	Switch (n=118)	Withdrew (n=16)	Graduate (n=123)	Total (n=900)
No one/did it myself	32.7%	27.5%	35.6%	56.3%	21.1%	31.2%
Sports/extracurricular activities	1.3%	2.5%	0.8%	6.3%	9.8%	0.0%
University staff	10.7%	8.3%	5.1%	6.3%	10.6%	9.6%
Professors/teachers/	15.7%	15.0%	12.7%	12.5%	19.5%	15.7%
Received financial support	3.6%	4.2%	5.9%	6.3%	5.7%	4.3%
Family and/or friends	52.8%	52.5%	48.3%	18.8%	52.0%	51.4%
Counsellors (mental health, career, medical)	5.0%	3.3%	11.0%	0.0%	5.7%	5.6%
Not sure/still dealing with it	1.5%	2.5%	1.7%	0.0%	0.8%	1.6%

Taking Time Off

Respondents who took at least one year off before going to PSE were asked why they did not go directly. The three most frequently selected reasons were (see Table 27):

- Wanted to take a break from school (51.4%)
- Had not decided on my career direction and I wanted to gain 'real world experiences' to clarify where I want to go (41.5%)
- Did not have enough money to attend (21.1%).

Table 27: Reasons for taking a gap between high school and PSE

	Number (n)	Percentage (n/142)
I wanted to take a break from school.	73	51.4%
I wanted to do some travelling before attending a post-secondary institution.	23	16.2%
I had not decided on my career direction and I wanted to gain 'real world experiences' to clarify where I want to go	59	41.5%
I did not have sufficient information on post-secondary options.	24	16.9%
I did not have enough money to attend.	30	21.1%
I was afraid of having too much debt.	22	15.5%
I did not meet the entrance requirements for the institution/program I wanted to attend.	14	9.9%
I needed to go back to high school to upgrade my marks.	11	7.7%
I was waitlisted for the program I wanted to take.	7	4.9%
I was reluctant to leave my home community to attend school.	9	6.3%
I had family commitments which prevented me from attending post-secondary directly after I completed high school.	12	8.5%
Health reasons prevented me from attending a post-secondary institution directly after high school.	10	7.0%
I was offered employment out of high school and wanted to do this before going to post-secondary education.	10	7.0%
I wanted to earn money for post-secondary education.	29	20.4%
I needed to work to help my family at the time.	12	8.5%
Other (please specify)	20	14.1%

Over three quarters of the GAP group (76.1% or 108) felt this break between high school and PSE was helpful in clarifying their educational goals and career direction (see Table 28).

Table 28: Was the time between high school and PSE helpful in clarifying respondents' educational goals and career direction?

	Number (n)	Percentage (n/142)
Yes	108	76.1%
No	15	10.6%
Not sure	19	13.4%
Total	142	100.0%

The main reason cited by GAP respondents was that they had the necessary time to think about what they really wanted to do. This can be seen in the following comments:

It gave me a lot of time to be sure of what I wanted to do with my life.

I was able to think for myself without the influence of teachers or classmates.

The respondents who felt this time was not helpful were typically unsure about their career path.

[I] still am very confused about how I want to proceed. There are so many programs unexplored.

Changes in the Pathway

Reasons for Switching/Withdrawing

For those who switched programs, Table 29 shows that over half (51.4% or 63) said that they were not interested/not enjoying their program/found that the program was not a good fit or they felt that the job prospects would be poor once they graduated (16.3% or 20). This can be seen in the following comments:

Realized that I was in the program for the career and salary opportunities, but was not truly enjoying it.

I learned after doing a placement in nursing that I would not enjoy this job for the rest of my life and it was not a good fit for me. I switched to Business because it was a program I was interested in.

Those who withdrew felt that the program was not a good fit (25% or 4). Examples of this can be seen in the following comments:

I developed a passion for another field and I felt the school was too far away from home.

[I] did not like the course I was doing I dropped out and attended trade school the following year.

Table 29: What were respondents' reasons for switching or withdrawing from their program?

	Switch (n=123)	Withdrew (n=16)	Total (n=139)
Not sure	2.4%	18.8%	4.3%
Too expensive	0.8%	12.5%	2.2%
Too hard/overwhelming	15.4%	12.5%	15.1%
Not interested/not enjoying/not a good fit	51.2%	25.0%	48.2%
No job prospects	16.3%	0.0%	14.4%
Mental health issue	4.1%	6.3%	4.3%
Other	17.9%	31.3%	19.4%

Accessing Supports

Table 30 shows that a majority (80.9% or 106) of the SWITCH respondents were able to access (informal and/or formal) supports needed to help them deal with the challenges they faced when deciding whether to switch from their initial program of studies. Close to two thirds (62.5% or 10) of the WITHDREW respondents were able to access the supports they needed.

Table 30: Accessing supports needed

	Switch (n=131)	Withdrew (n=16)	Total (n=147)
Yes	80.9% (106)	62.5% (10)	78.9% (116)
No	19.1% (25)	37.5% (6)	21.1% (31)

The majority of both the SWITCH and WITHDREW respondents found support from the academic advisors/admissions officers at the post-secondary institute and/or their family. These two sources of support were mentioned by 89.5%/37.5% (SWITCH/WITHDREW) and 50.5%/50.0% (SWITCH/WITHDREW) respectively (see Table 31).

I had set an appointment with an academic advisor at the university's business program to review the options I had before switching. This was helpful as she was very knowledgeable in the area and seemed to have experience with other students in my situation. (SWITCH group respondent)

Mes amies et ma famille m'ont supporté dans ma décision. (SWITCH group respondent)

I got to meet with people from the school and they were very helpful. (WITHDREW group respondent)

Table 31: Supports most accessed

	Switch (n=95)	Withdrew (n=8)	Total (n=116)
Family and/or friends	54.7%	50.0%	54.4%
Academic advisor/admissions	48.4%	37.5%	47.6%
Other	17.9%	25.0%	18.4%

Thirty-one (21.1%) respondents from the SWITCH and WITHDREW groups who were unable to access supports were asked what they felt they most needed. Twenty-four of these respondents provided an answer. Table 32 shows that the most frequently (41.7%) mentioned support they felt they needed was some form of counselling (career and/or mental health):

... the counselling services at my university are mediocre at best and discouraging and even alienating at worst. I wish I had been given an option to take a break from academics for a term, or something, to consider options and I wish they had been presented to me without judgement or bias so I wouldn't feel inferior, weak, or shamed for needing a switch, rest, or deciding to do something less prestigious. (SWITCH group respondent)

I needed counselling: relationship and academic. (WITHDREW group respondent)

Table 32: Supports respondents say they needed

	Switch (n=18)	Withdrew (n=6)	Total (n=24)
Counselling (career/mental health)	66.7%	66.7%	41.7%
Financial	11.1%	33.3%	16.7%
Family	5.6%	16.7%	8.3%
Other	50.0%	16.7%	41.7%

Finally, SWITCH and WITHDREW respondents were asked if there was anything their institution or program could have done to get them to stay. Table 33 shows that over half (53.7%) of the 123 who responded stated that there was nothing that could have been done. They indicated that, once they made up their mind, their decision was firm.

I don't think they could have gotten me to stay. They would have to change everything about their institution and program. (SWITCH group respondent)

Nothing because it would not have been possible for me to finish in time and I couldn't juggle a newborn and getting to class. I would miss too many precious moments of my new baby's life. (WITHDREW group respondent)

Table 33 shows differences among the responses between the SWITCH and WITHDREW groups. The WITHDREW group was much more focused on career supports than the SWITCH group.

Table 33: What could the institutions/programs have done to get respondents to stay?

	Switch (n=109)	Withdrew (n=14)	Total (n=123)
Nothing	54.1%	50.0%	53.7%
Not sure	1.8%	7.1%	2.4%
More support (academic, personal)	14.7%	14.3%	14.6%
Real experience/more hands on	0.0%	71.4%	8.1%
Career counselling	0.0%	42.9%	4.9%
Mental health needs	2.8%	7.1%	3.3%
Other	14.7%	21.4%	15.4%

Where do Switchers go?

Respondents in the SWITCH group were asked to state the type of post-secondary institution and program they first attended and the type of institutions and programs to which they switched. As shown in Figure 5, many respondents switched from university to college. Their responses showed that the percentage attending:

- University dropped from 87.8% to 74.0% and
- College increased from 12.2% to 26.0%.

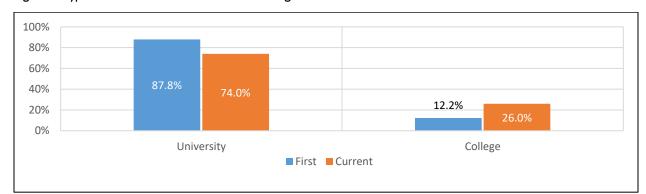


Figure 5: Type of institution attended after switching

The 131 respondents who switched institutions/programs were asked to list their original program as well as the program to which they switched. Of these, 121 provided a response. As shown, in Table 34, less than two thirds switched to a completely different career path; the remaining stayed within the general career area.

Table 34: Where do switchers go?

	Number	Percentage (n/121)
Completely different field	75	62.0%
Similar field	46	38.0%
Total	122	100.0%

There were 75 respondents who changed career areas. In many cases, this was a matter of switching from a science to an arts program or vice versa. For example, people switched from:

- Bachelor of Arts (English) to Bachelor of Science
- Bachelor of Commerce to Bachelor of Arts
- Bachelor of Science to Bachelor of Commerce
- Recreation Management to Geography

In other cases, the change was quite dramatic. Some of these program changes included switching from:

- History/Political Science to Tourism and Travel Management
- Pre-med to Art History
- Music to Paralegal Studies
- Welding to Office Administration Technology

There were 46 respondents who switched programs but stayed within the same general area. For example, some of the changes include people who switched from:

- Registered Nurse to Licensed Practical Nurse
- Bachelor of Science (majoring in Wildlife Management major) to Bachelor of Science (majoring in Biology)
- Criminal Justice to Criminology and Psychology
- Electrical Engineering to Energy Systems Engineering Technology



Reflections on Switching

Respondents were asked to respond to several statements to describe how they feel about the first and second program/institution that they have enrolled in. Table 35 shows the differences in responses between the two programs. The results clearly show they are a great deal more confident in their current program. For example, the percentage of those who felt academically overwhelmed dropped by 27.5 percentage points after they switched (from 68.7% to 41.2%). Other statements that had significant increases (by between 48.1 and 58.8 percentage points) included:

- I feel sure about my choice.
- I feel that I am on the path to meeting my life and career goals.
- I feel sure that this program is worth it to me.
- The program is a good fit for me.

Table 35: Differences in respondents' feelings about their first and second programs

	First		Cui	rrent	
	n	% (n/131)	n	% (n/131)	Change
The class sizes were overwhelming for me.	51	38.9%	29	22.1%	16.8%
I felt sure about my choice.	46	35.1%	109	83.2%	-48.1%
The program was a good fit for me.	47	35.9%	124	94.7%	-58.8%
I was lonely.	69	52.7%	50	38.2%	14.5%
I knew where to go to access the resources to support me in my transition to post-secondary education.	69	52.7%	112	85.5%	-32.8%
I felt that my institution/program had adequate transition supports.	70	53.4%	93	71.0%	-17.6%
I felt that I belong.	60	45.8%	99	75.6%	-29.8%
I felt academically overwhelmed.	90	68.7%	54	41.2%	27.5%
I felt that I was on the path to meeting my life and career goals.	46	35.1%	110	84.0%	-48.9%
I was enjoying my life.	58	44.3%	105	80.2%	-35.9%
I was sure that this program is worth it to me.	39	29.8%	105	80.2%	-50.4%
I feel that the program did a good job connecting learning to skills needed my chosen career field.	57	43.5%	101	77.1%	-33.6%
I felt confident I was going to find a good job after graduating.	57	43.5%	83	63.4%	-19.8%

Current Status and Future Plans

The last section of the survey examined respondent's career development to date and their future plans. Respondents not in school were asked about their current employment status. Those who withdrew from a PSE program and those who had never attended were asked about their future learning plans. All groups were asked about their current career plans.

Current Employment Status of Those not in PSE

Figure 6 shows the current status of the young people who were not in school at the time of taking the survey. Across all three groups, a similar percentage (60.0%) were working and 40% were not.

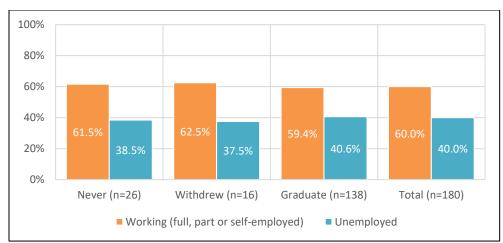


Figure 6: Current employment status of those not in PSE

Future Learning Plans of Those Who Had Withdrawn from or Who Had Never Went to PSE

Thirteen respondents from the WITHDREW group were planning on returning to school. Eleven of these respondents had decided on a date (three in the fall of 2017 and eight in the fall of 2018). As shown in Figure 7, these individuals were mostly planning on changing programs, but remaining in the same school from which they had withdrawn.

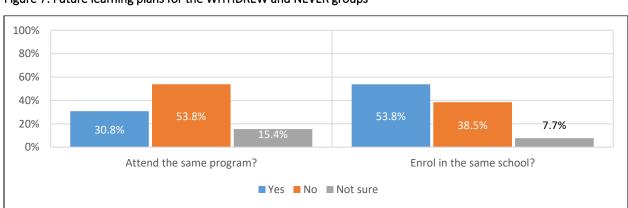


Figure 7: Future learning plans for the WITHDREW and NEVER groups

Career Direction

Overall, the majority (76.6% or 831) of respondents had decided on a career direction. As shown in Table 36, this percentage ranged from 50.0% of those who never went to PSE and 56.3% of those who withdrew from PS to 88.0% who had a gap in between high school and PSE.

Table 36: Percentage of respondents who have decided on a career direction

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Yes	50.0%	74.4%	88.0%	80.2%	56.3%	79.0%	76.6%
No	50.0%	25.6%	12.0%	19.8%	43.8%	21.0%	23.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Overall, the individuals who had decided on a career direction made their decision based on their interests and some labour market research. As shown in Table 37, the three aspects that these respondents were most familiar with included:

- Their interests, skills/personality,
- The job prospects in this field, and
- The credentials required for entry into their chosen field.

The three career management aspects that they were the least familiar with included:

- Job search strategies that work in their chosen field,
- Firsthand knowledge of what the work environment in the field is like, and
- Potential contacts in the field.

Table 37: Percentage of respondents whose career direction was informed by self-awareness and labour market research

	Never (n=13)	Direct (n=470)	Gap (n=125)	Switch (n=105)	Withdrew (n=9)	Graduate (n=109)	Total (n=831)
Your interests, skills/personality	100.0%	90.6%	96.0%	93.3%	100.0%	95.4%	92.7%
The job prospects in this field	100.0%	78.1%	86.4%	82.9%	88.9%	84.4%	81.2%
The average salary	69.2%	70.0%	77.6%	74.3%	66.7%	74.3%	72.2%
The credentials required for entry into this field	84.6%	81.9%	84.8%	84.8%	66.7%	95.4%	84.4%
The technical skills required	92.3%	76.0%	80.8%	81.0%	77.8%	91.7%	79.7%
The transferable skills that employers in this field are looking for	84.6%	74.3%	79.2%	81.0%	77.8%	90.8%	78.2%
Potential contacts in this field	69.2%	61.3%	62.4%	70.5%	88.9%	75.2%	64.9%
Job search strategies that work in this field	76.9%	56.6%	64.8%	63.8%	77.8%	67.9%	60.8%
Firsthand what the work environment is like in this field	69.2%	62.6%	68.0%	70.5%	88.9%	84.4%	67.6%
The typical work hours and/or performance expectations in this field	84.6%	73.8%	71.2%	74.3%	77.8%	91.7%	76.1%

The 254 respondents who had not decided on a career direction were asked why. The three most frequently-reported reasons were either not having enough information, experience or being overwhelmed by all the choices available to them. Table 38 provides a breakdown of the reasons by transition pathway group.

Table 38: Reasons for respondents not deciding

	Never (n=13)	Direct (n=162)	Gap (n=17)	Switch (n=26)	Withdrew (n=7)	Graduate (n=29)	Total (n=254)
I don't have enough information.	46.2%	51.9%	47.1%	42.3%	42.9%	24.1%	46.9%
I don't have enough experience with work to know what I might like/not like.	30.8%	73.5%	76.5%	76.9%	28.6%	55.2%	68.5%
I've decided to take a gap year to get clarity and/or build experience.	23.1%	10.5%	5.9%	3.8%	14.3%	6.9%	9.8%
I don't know what I am good at doing.	23.1%	48.8%	35.3%	50.0%	42.9%	27.6%	44.1%
There are so many choices, it is confusing.	38.5%	66.0%	47.1%	76.9%	57.1%	62.1%	63.8%
I need to work first to earn money for a post-secondary education.	23.1%	9.9%	23.5%	11.5%	14.3%	17.2%	12.6%
I need to upgrade my marks first.	23.1%	13.6%	11.8%	15.4%	0.0%	6.9%	13.0%
Other (please specify)	15.4%	9.9%	23.5%	15.4%	14.3%	44.8%	15.7%

For those undecided, they not only did not have the information available to help them to decide on a career direction, but it also appears many did not know where to look for it. The survey results (see Table 39) showed that for these respondents only:

- 52.4% knew where to go to access career and employment services,
- 33.1% knew where to find tools to help them assess what they are good at doing,
- 44.1% knew where to go to learn more about learning and career pathways, and
- 34.6% knew how to learn about or experience the different work options.

Table 39: Percentage of respondents who know how to access career information/supports

	Never (n=13)	Direct (n=162)	Gap (n=17)	Switch (n=26)	Withdrew (n=7)	Graduate (n=29)	Total (n=254)
Where to go to get access to career and employment services?	61.5%	51.9%	41.2%	50.0%	57.1%	58.6%	52.4%
Where to find tools to help you assess what you are good at doing?	46.2%	34.6%	35.3%	30.8%	0.0%	27.6%	33.1%
Where to go to learn more about learning and career pathways?	46.2%	46.9%	35.3%	42.3%	14.3%	41.4%	44.1%
How to learn about or experience different work options?	46.2%	35.8%	29.4%	38.5%	14.3%	27.6%	34.6%

Survey Findings

The data collected in the survey helped to paint a picture of a variety of different routes that youth take after high school and the factors that influenced their decision to follow these pathways.

Key findings from the survey are:

The Value of PSE

- Overall, respondents saw the value of PSE. They reported that it will help them with their career future and contribute to greater economic security.
- However, almost a third of respondents across all groups (but significantly among those who
 did not go to PSE or those who withdrew from PSE) felt that PSE was not worth it. They cited
 no guarantee of a job as the main reason.

The Experience of PSE

- Most respondents felt like they are on track, that they have made a good choice and that it is a good fit for them.
- Those in the SWITCH and WITHDREW group felt that the key reason for doing so was a lack of fit with their institution and/or program.
- Almost half of the respondent groups did not feel prepared for their transition from high school. The GAP, SWITCH and WITHDREW groups felt most unprepared for the transition after high school. Many respondents who went to PSE said they lacked the preparation needed to handle the workload expectations in PSE.
- Almost all respondents felt academically overwhelmed, worried about their finances and felt that they were not as prepared as they would have liked to have been for PSE.
- Over a third of respondents reported that they felt lonely. Almost a quarter (22.3%) did not have a sense of belonging in their post-secondary institution.



- The WITHDREW group reported feeling more challenged than respondents in the other groups.
- Those in the SWITCH and WITHDREW groups reported more mental health issues, including stress and anxiety.
- Once the decision to switch or withdraw from PSE was made, the respondents said that there
 was nothing the institutions could have done to have them change their minds.

Supports in Transition

- Respondents said that those who they most go to for help with transition challenges included family, themselves, professors and teachers.
- The WITHDREW group reported more frequently than other groups that they relied on themselves for support.
- The WITHDREW and SWITCH groups said that a key support that they needed was better access to counselling and career service supports.

Career Decision Making

- Overwhelmingly, young people reported turning to their parents/guardians for support regarding what to do after high school graduation. Friends were also identified as key influencers in this decision.
- Students in New Brunswick were more likely to seek guidance counsellors for career decision advice than respondents from other provinces.
- Extra-curricular activities, visits to PSE institutions and volunteering were key influences on respondent choice of institution and program.
- Overall, young people started to think about their career futures in Grade 9. Those who delayed, withdrew or took time in-between high school and post-secondary started thinking about their futures later or could not remember when they started thinking about their future.
- Those who had a high degree of career confidence and career direction from an early age had smoother transitions. Those who were uncertain struggled in their transitions by switching or dropping out of PSE.
- Most respondents affirmed that they have a current career direction. This direction was developed based on their personal interests, research into job prospects and knowledge of required credentials.
- Those who had not decided on a career direction said that they needed more information and felt overwhelmed by the number of choices.
- Underrepresented groups had similar pathways to the overall group of respondents, with the
 exception of those who identified as low income. Respondents in this group were less likely to
 go to PSE and more likely to take a gap year or withdraw from PSE.
- Most respondents did not feel prepared for career decision making. Those in the SWITCH
 group felt the least prepared to make a career decision after high school. All respondent
 groups felt they needed more information to support them in their decision-making or
 ultimately they felt too young to decide.

PSE Decision Making

- Most of the respondents went to university.
- The respondents typically researched at least two institutions before deciding.
- Overall, respondents chose their learning options based on interest in the subject area,
 employment potential and economic potential of employment related to the field of study.



- Across all transition pathway groups, proximity to home and family was one of the most important factors in their decision.
- A key motivating factor for respondents to go directly to PSE was receiving a scholarship/bursary.
- Of those respondents who had withdrawn from PSE, most had a concrete plan for returning to school.

Taking a break or making a switch

- Those who took a gap year or longer felt predominantly that they either needed a break from school or needed experience that would help clarify their career path. Financial issues were mentioned by less than a quarter of respondents.
- Those who took a gap between high school and PSE felt that the time was well spent and over three-quarters felt that the time helped them make career decisions.
- Those who switched PSE programs tended to go from university to a college program. They
 reported that they were happy with their choice to switch and far more academically
 confident.
- Almost two-thirds of those who switched had transitioned to a completely different career field.

Employment Outcome

• The employment status of the NEVER, WITHDREW and GRADUATE groups are remarkably similar (approximately, 60% employed; 40% unemployed).

APPENDIX B.1: Data Tables

Respondent Profile

Table A.1: Highest Level of Education Completed

	Number of respondents (n)	Percentage (n/1085)
High school diploma or equivalent	595	54.8%
Some form of Post-Secondary Education (diploma, degree, certificate, apprenticeship), but did not graduate	254	23.4%
Post-secondary education certificate	38	3.5%
College Diploma	72	6.6%
Apprenticeship Certification	19	1.8%
Bachelor's Degree	101	9.3%
Graduate Degree	6	0.6%
Total	1085	100.0%

Table A.2: Type of educational pathway followed

Pathway	Number of respondents (n)	Percentage (n/1085)
Have never enrolled in/attended a post-secondary education program.	26	2.4%
Am currently in a post-secondary education program and I transitioned to the program directly after high school.	632	58.3%
Am currently in a post-secondary education program after spending at least one year out of school.	142	13.1%
Am currently in a post-secondary education program and I have switched programs at least once.	131	12.1%
Started a post-secondary education program but withdrew or stopped-out.	16	1.5%
Have graduated from a post-secondary education program.	138	12.7%
Total	1085	100.0%

Table A.3: Age

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)	
18	19.2%	31.0%	2.1%	3.1%	25.0%	0.0%	19.5%	
19 -20	50.0%	42.7%	38.0%	34.4%	12.5%	10.9%	36.8%	
21 – 24	30.8%	26.3%	59.9%	62.6%	62.5%	89.1%	43.7%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table A.4: Home province/country

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
NL	23.1%	6.6%	22.5%	7.6%	18.8%	28.3%	12.2%
NS	42.3%	56.8%	40.8%	54.2%	37.5%	42.0%	51.9%
PE	3.8%	4.6%	8.5%	7.6%	0.0%	2.9%	5.2%
NB	7.7%	13.3%	3.5%	15.3%	37.5%	17.4%	13.0%
QC	0.0%	0.6%	0.7%	0.8%	0.0%	0.0%	0.6%
ON	0.0%	5.1%	9.9%	5.3%	6.3%	2.2%	5.3%
MB	0.0%	0.2%	0.0%	0.0%	0.0%	0.7%	0.2%
SK	0.0%	0.2%	0.0%	0.0%	0.0%	2.2%	0.4%
AB	3.8%	1.3%	2.1%	0.8%	0.0%	2.2%	1.5%
ВС	3.8%	1.1%	2.1%	0.8%	0.0%	0.0%	1.1%
My home country is	15.4%	10.3%	9.9%	7.6%	0.0%	2.2%	8.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table A.5: Province they work/go to school in

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
New Brunswick	11.5%	9.0%	2.8%	11.5%	43.8%	17.4%	10.1%
Nova Scotia	57.7%	80.1%	62.7%	69.5%	37.5%	44.9%	70.9%
PEI	7.7%	4.9%	11.3%	10.7%	0.0%	7.2%	6.7%
Newfoundland and Labrador	23.1%	6.0%	23.2%	8.4%	18.8%	30.4%	12.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table A.6: Community residence

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
First Nations community	7.7%	2.5%	4.9%	2.3%	6.3%	1.4%	2.9%
Remote community	0.0%	2.5%	2.1%	1.5%	0.0%	3.6%	2.4%
Rural community	50.0%	40.5%	30.3%	36.6%	56.3%	39.9%	39.1%
Urban community	46.2%	59.0%	66.9%	61.8%	37.5%	58.0%	59.6%

Table A.7: Gender

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Male	46.2%	29.3%	32.4%	17.6%	18.8%	18.8%	27.2%
Female	53.8%	69.1%	65.5%	80.2%	81.3%	80.4%	71.2%
Transgendered	0.0%	0.3%	0.7%	0.0%	0.0%	0.0%	0.3%
Rather not say	0.0%	0.5%	0.0%	1.5%	0.0%	0.7%	0.6%
Other	0.0%	0.8%	1.4%	0.8%	0.0%	0.0%	0.7%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table A.8: Socio-demographic/economic characteristics

	Never (n=26)	Direct (n=632)	Gap (n=142)	Switch (n=131)	Withdrew (n=16)	Graduate (n=138)	Total (n=1085)
Indigenous	3.8%	6.6%	6.3%	5.3%	6.3%	8.7%	6.6%
A person with a disability	7.7%	5.7%	7.7%	10.7%	6.3%	5.8%	6.6%
African Nova Scotian/Canadian	7.7%	2.8%	4.2%	2.3%	12.5%	4.3%	3.4%
An immigrant	19.2%	7.6%	11.3%	5.3%	0.0%	2.2%	7.3%
A visible minority	3.8%	7.3%	7.7%	11.5%	0.0%	7.2%	7.6%
A LBGTQ youth	3.8%	10.8%	14.1%	13.7%	0.0%	8.0%	10.9%
A low income youth	42.3%	24.5%	39.4%	22.9%	56.3%	26.8%	27.5%

APPENDIX B.2: Survey



Strengthening the Transitions from K-12 to Post-Secondary Education



Strengthening the Transitions from K-12 to Post Secondary Education

The Canadian Career Development Foundation (CCDF) is conducting research on behalf of the Council for Atlantic Ministers of Education and Training (CAMET). CAMET and CCDF are very interested in helping to improve all career transitions. This research is specifically looking at the transition from high school to post-secondary education (e.g. public/private university or college and apprenticeship). We want to know:

- · what helps youth during this transition,
- · what perceptions youth have about the value of post-secondary education (PSE),
- · why they decide to go or not go,
- · why they withdraw from post-secondary education,
- · why they switch programs,
- their knowledge of and confidence in their own career direction (whether it includes postsecondary education or not) and,
- the supports that they think would help them in choosing to go to post-secondary education, transitioning into and graduating from post-secondary education.

If you are 18-24 years of age, have graduated from high school, are currently in post-secondary education, graduated from post-secondary education, have never attended, withdrawn or switched programs, you are being asked to contribute to this research.

The survey takes about 20-30 minutes to complete. We very much appreciate your response to this survey. By way of thanking respondents for completing the survey, each has the opportunity to win an iPad Pro. Please consider telling others in your network about the survey and encourage their participation.

The survey will remain open until midnight (Atlantic) November 19, 2017.





Strengthening the Transitions from K-12 to Post-Secondary Education

1. Are you a University of Prince Edward Island (UPEI) student?	
Yes	
○ No	





Strengthening the Transitions from K-12 to Post-Secondary Education



Please read the Informed Consent Information below. By clicking on the "Yes, I agree to the above statement" at the end of this document, you indicate that you have read and understand the nature of your participation in this study, and that you voluntarily agree to participate as follows:

- I agree to participate in the study entitled, "Strengthening the Transition from K-12 to Post-Secondary Education", under the
 direction of the Council of Atlantic Ministers of Education and Training (CAMET) and the Canadian Career Development
 Foundation (CCDF).
- I understand that the purpose of the study is to gain a better understanding of the mechanisms/supports that improve access to and persistence in post-secondary education.
- I acknowledge that my participation in this study will consist of completing a survey.
- I understand that the information I provide will be provided to the researchers and will be kept confidential. I also understand that the analysis of the data will be included in a report of the study findings that may be presented at meetings and professional conferences, or published in professional publications, newsletters and academic journals. I understand that text that I provide may be quoted in these presentations and publications but that my identity will be protected, I will not be identified in any analysis or report and my anonymity is assured.
- I understand that I can quit the survey at any time and that the information that I have provided up until that point will be used as
 part of the study's findings.
- I am confident in the assurances provided by the researchers that the information I share will remain strictly confidential.
- I understand that no contact information obtained for the draw will be linked to my survey response and, once the research has been completed, all raw data from electronic files and in hard copy formats will be deleted and/or destroyed.
- I understand that my contact information will only be obtained if I indicate, where mentioned in the survey, that I want a copy of
 the report and/or if I would be willing to be informed of other surveys that CCDF does in the future.
- I understand that I can contact the UPEI Research Ethics Board at (902) 620-5104, or by email at reb@upei.ca if I have any
 concerns about the ethical conduct of this study
- I understand that if I have any questions about the conduct of the study, I may contact
 - Sareena Hopkins, Executive Director, Canadian Career Development Foundation, (613) 729-6164, ext. 203 OR s.hopkins@ccdf.ca OR
 - Donnalee Bell, Managing Director, Canadian Career Development Foundation, (61.3) 729-6164 ext. 206 OR d.bell@ccdf.ca.

2. I have read the above, understand the nature of my participation in this study, and I voluntarily agree to participate.
Yes, I agree to the above statement.
No, I do not agree to the above statement.

If you would like to print a copy of this Consent Form for your records, please click <u>HERE</u> to open it in a separate window Once opened, you can use your web browser to print or save a copy. Once you do so, please remember to return and complete the survey







Strengthening the Transitions from K-12 to Post-Secondary Education



Please read the Informed Consent Information below. By clicking on the "Yes, I agree to the above statement" at the end of this document, you indicate that you have read and understand the nature of your participation in this study, and that you voluntarily agree to participate as follows:

- I agree to participate in the study entitled, "Strengthening the Transition from K-12 to Post-Secondary Education", under the
 direction of the Council of Atlantic Ministers of Education and Training (CAMET) and the Canadian Career Development
 Foundation (CCDF).
- I understand that the purpose of the study is to gain a better understanding of the mechanisms/supports that improve access to and persistence in post-secondary education.
- · I acknowledge that my participation in this study will consist of completing a survey.
- I understand that the information I provide will be provided to the researchers and will be kept confidential. I also understand
 that the analysis of the data will be included in a report of the study findings that may be presented at meetings and professional
 conferences, or published in professional publications, newsletters and academic journals. I understand that text that I provide
 may be quoted in these presentations and publications but that my identity will be protected, I will not be identified in any
 analysis or report and my anonymity is assured.
- I understand that I can quit the survey at any time and that the information that I have provided up until that point will be used as part of the study's findings.
- . I am confident in the assurances provided by the researchers that the information I share will remain strictly confidential.
- I understand that no contact information obtained for the draw will be linked to my survey response and, once the research has been completed, all raw data from electronic files and in hard copy formats will be deleted and/or destroyed.
- I understand that my contact information will only be obtained if I indicate, where mentioned in the survey, that I want a copy of
 the report and/or if I would be willing to be informed of other surveys that CCDF does in the future.
- . I understand that if I have any questions about the conduct of the study, I may contact
 - Sareena Hopkins, Executive Director, Canadian Career Development Foundation, (613) 729-6164, ext. 203 OR s.hopkins@ccdf.ca OR
 - Donnalee Bell, Managing Director, Canadian Career Development Foundation, (613) 729-6164 ext. 206 OR d.bell@ccdf.ca.

3. I have read the above, understand the nature of my participation in this study, and I voluntarily agree to participate.
Yes, I agree to the above statement.
No, I do not agree to the above statement.

If you would like to print a copy of this Consent Form for your records, please click <u>HERE</u> to open it in a separate window Once opened, you can use your web browser to print or save a copy. Once you do so, please remember to return and complete the survey







Strengthening the Transitions from K-12 to Post-Secondary Education

Personal Background Information

4. V	/hat is the highest level of education you've comp	letec	i?
\bigcirc	Grade 9 or less	\bigcirc	College Diploma
\bigcirc	Some high school but did not graduate	\bigcirc	Apprenticeship Certification
\bigcirc	High school diploma or equivalent	\bigcirc	Bachelor's Degree
\bigcirc	Some form of Post-Secondary Education (diploma, degree, certificate, apprenticeship), but did not graduate	0	Graduate Degree
\bigcirc	Post-secondary education certificate		
\bigcirc	Other (please specify)		







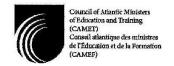
5. What is your age?			
\bigcirc	Younger than 18 years old		
\bigcirc	18		
\bigcirc	19 -20		
\bigcirc	21 - 24		
\bigcirc	25 years or older		





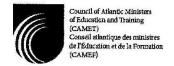


O, IV	ly name province (or country) is		
\bigcirc	Newfoundland and Labrador	\bigcirc	Saskatchewan
\bigcirc	Nova Scotia	\bigcirc	Alberta
\bigcirc	Prince Edward Island	\bigcirc	British Columbia
\bigcirc	New Brunswick	\bigcirc	Yukon
\bigcirc	Québec	\bigcirc	Northwest Territories
\bigcirc	Ontario	\bigcirc	Nunavut
\bigcirc	Manitoba		
\bigcirc	My home country is		





7. T	he province I work/go to school in is:
\bigcirc	New Brunswick
\bigcirc	Nova Scotia
\bigcirc	PEI
\bigcirc	Newfoundland and Labrador
\bigcirc	Other (please specify)





8.1	live in a: (Select those that apply)
	First Nations community
	Remote community (i.e. living in a community with limited road access, being 350 km from the nearest service centre and/or th is only accessed by air)
	Rural community (i.e. living in a community outside the main commuting zones of larger urban centres of 10,000 or more)
	Urban community (i.e. living in a community of 10,000 or more)





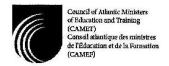
9. I Identity as	
Male	Transgendered
Female	Rather not say
Other (please specify)	
10. I am: (Select those that apply)	
Indigenous	A visible minority
A person with a disability	A LBGTQ youth
African Nova Scotian/Canadian	A low income youth
An immigrant	





edu	Select the choice below that best describes the pathway you chose after high school (post-secondary ucation includes programs that after high school graduation lead to a diploma, degree, certificate, prenticeship). I:
\bigcirc	Have never enrolled in/attended a post-secondary education program.
\bigcirc	Am currently in a post-secondary education program and I transitioned to the program directly after high school.
\bigcirc	Am currently in a post-secondary education program after spending at least one year out of school.
\bigcirc	Am currently in a post-secondary education program and I have switched programs at least once.
\bigcirc	Started a post-secondary education program but withdrew or stopped-out.
\bigcirc	Have graduated from a post-secondary education program.





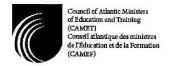


Strengthening the Transitions from K-12 to Post-Secondary Education

Factors that Impacted Your Decision to go/not to go to Post-Secondary Education

12. Choose up to three sources of information, advice or support that helped you make your decision or
whether to attend or not to attend post-secondary education? If you choose more than one, please rank
them in order of helpfulness.

	1st most helpful	2nd most helpful	3rd most helpful
Parents/guardians	\bigcirc	\bigcirc	\bigcirc
Family members other than parents/guardians	\bigcirc	\bigcirc	\bigcirc
Community members	\bigcirc	\bigcirc	\bigcirc
Elders	\bigcirc	0	\bigcirc
Teachers	\circ	\bigcirc	\bigcirc
Guidance counsellors	\bigcirc	\bigcirc	\bigcirc
Mentor	\bigcirc	\bigcirc	\bigcirc
Representative from PS institution/program (university, college, apprenticeship)	\bigcirc	\bigcirc	\bigcirc
Website(s) from PS institutions/programs (university/college/apprenticeship)	\bigcirc	\bigcirc	\bigcirc
Print materials from university/college/government, apprenticeship office, etc.	\bigcirc	\bigcirc	\circ
Friends	\bigcirc	\bigcirc	\bigcirc
Online career resources (e.g. Career Cruising, My Blueprint)	\bigcirc	\bigcirc	\bigcirc
Media (TV, radio, cinema, social media)	\bigcirc	\bigcirc	\bigcirc
Career centres	\bigcirc	\bigcirc	\bigcirc
Career development specialists	0	\bigcirc	\bigcirc
Student assistance representative(s)	0	\bigcirc	\bigcirc
Student assistance website(s)	\bigcirc	0	\bigcirc
Banks/financial institutions	\bigcirc	0	\bigcirc
Labour market information (e.g. reports on job trends, salaries, number of graduates, etc.)	\bigcirc	\bigcirc	\bigcirc
Other	\bigcirc	\bigcirc	\bigcirc
f you selected other, please specify:			





Strengthening the Transitions from K-12 to Post-Secondary Education

13. Review the following list of courses and activities. Choose up to three that had the greatest impact on your decision for what to do after high school. If you choose more than one, please rank them in order.

	1st greatest impact	greatest impact	3rd greatest impact
Extra-curricular activities	\bigcirc	\bigcirc	\bigcirc
Career education courses	\bigcirc	\bigcirc	\bigcirc
Co-op education courses/placements	\circ	\bigcirc	\bigcirc
Workshops, resources or tools that explain the costs and available subsidies for post- secondary education (e.g. a post-secondary education cost calculator, application fee waiver programs, financial guidance course)	0	0	0
Skilled trades courses	\bigcirc	\bigcirc	\bigcirc
Advanced placement courses/dual credit	\bigcirc	\bigcirc	\bigcirc
Job shadowing	\bigcirc	\bigcirc	\bigcirc
Job mentoring	\bigcirc	\bigcirc	\bigcirc
Career Cruising/My Blueprint	\bigcirc	\bigcirc	\bigcirc
School assemblies	\bigcirc	\bigcirc	\bigcirc
After school/Part-time employment	\bigcirc	\bigcirc	\bigcirc
Summer employment		\bigcirc	\bigcirc
Volunteering	\bigcirc	\bigcirc	\bigcirc
Visits to post-secondary education institutions	\bigcirc	\bigcirc	
Career fairs	\bigcirc	\bigcirc	\bigcirc
Presentations/information from post-secondary education institutions/ apprenticeship bureaus	\bigcirc	\circ	0
Information interview(s)	\bigcirc	\bigcirc	\bigcirc
Other	\bigcirc	\bigcirc	\bigcirc
you selected other, please specify:			

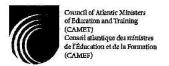




14. Who or what was the	biggest influence or	i your decision to g	o or not to go to post-secondary
education? Please expla	in.		







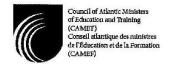


17.	when did you start seriously thinking about and/or planning your career future?
\bigcirc	In primary school
\bigcirc	In middle school/junior high school
Ö	Grade 9-10
\bigcirc	Grade 11
\bigcirc	Grade 12
\bigcirc	Since high school graduation
\bigcirc	Since entry to post-secondary education
\bigcirc	Since graduation from post-secondary education
\bigcirc	Not sure





to. Were you adequately prepared for declaring on a career direction in high sc	П
Yes	
○ No	
Not sure	
L9. Why do you feel that way?	



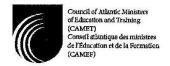


whatever you chose) out of high sch	for making the transition (to post-secondary education, work or nool?
Yes	
○ No	
Not sure	
21. Why do you feel that way?	





22. What kind of information, resources or supports do you WISH you had had to help you decide whether			
or not to go to post-secondary education? Please include anything you think would have helped and			
when/how it should have been made available.			

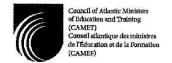




Strengthening the Transitions from K-12 to Post-Secondary Education.

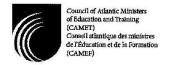
School and Program Selection 23. What type of post-secondary institution are you attending? University Ollege Apprenticeship Other (please specify) 24. What type of post-secondary institution did you go to? University College Apprenticeship Other (please specify) 25. Which institution did you switch from? University College Apprenticeship Other (please specify) 26. What was your first program and what was the program you switched to?







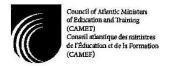
27. Please respond 'yes' or 'no' to the following statements.		
	Yes	No
When I left high school, I felt really clear about my post-secondary education choice because I knew it was a good "fit" for me.	\circ	\circ
While in high school, I had opportunities to check out my field of interest (talking to people in the field, observing or actually trying out some work) before committing to a post-secondary education program.	0	0
I made an informed choice based on employment opportunities/prospects in my field.	\bigcirc	\bigcirc
The earning potential of a career in this field influenced my choice of program.	\bigcirc	\bigcirc
The opportunity to do at least some of the program (courses) in my home community influenced my choice of program.	. 0	0
I have an interest in the subject area in my program of choice.	\circ	\bigcirc
The expectations of my family influenced my choice of program.	\circ	\circ
My parents/guardians/close family members talked about their experiences at post- secondary education.	\bigcirc	\circ
My community or mentor encouraged me to explore post-secondary education options.	\circ	\circ
The opportunity to do at least some of the program (courses) using distance or online learning influenced my choice of program.	\circ	0
The cost of completing the program (tuition, books, and accommodations) influenced my choice of program.	\bigcirc	\bigcirc
The amount of personal time required for classes and study influenced my choice of program.	\bigcirc	0
I received the information and/or financial support I needed to pay for my education.	\bigcirc	\circ
The extent to which the program provides the skills needed for related employment influenced my choice of program.	\circ	\circ
The cost of a post-secondary education is much higher than I realized.	\bigcirc	\bigcirc
Leaving home to go to a different community for post-secondary education was/would be challenging for me.	\circ	- 0





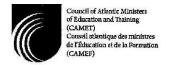
28.	Why did you choose this program/institution? (Select those that apply)
	Tuition
	Cost
	Located in or close to home community
	Family influence and support
	Friends
	Instructors at the program/institution
	Availability of program
	Length of program
	Student/school facilities
	Size of school
	Extracurricular activities available
	Availability of work terms/co-ops
	I have heard that it is a friendly and open place to be
	Employment opportunities after graduation
	Earning potential after graduation
	Opportunity to travel with job after graduation
	Ability to tailor the program to meet my personal interests, needs and career goals
	Awarded a scholarship/bursary
	Other (please specify)







29. Did you research	other institutions before choosing this one?
Yes	
○ No	*





30. Please respond 'yes' or 'no' to the following statements about how you feel about your chosen post-secondary education program?			
	Yes	No	
The class sizes were overwhelming for me in the beginning.	\bigcirc	\bigcirc	
Now that I'm in this program, I feel as sure or even surer about my choice.	\bigcirc	\circ	
The program is a good fit for me.	\bigcirc	\bigcirc	
I am lonely.	\bigcirc	\circ	
I know where to go to access the resources to support me as I complete my program.	\bigcirc	\bigcirc	
I feel that my institution/program has adequate transition supports.	\circ	\circ	
I feel that I belong.	\circ	\circ	
I feel academically overwhelmed.	\circ	\circ	
I feel that I am on the path to meeting my life and career goals.	\bigcirc	\circ	
I am enjoying my life.	\circ	\bigcirc	
I'm sure that this program is worth it to me.	\circ	\bigcirc	
I feel that my program does a good job ensuring I have the skills needed for my chosen career field.	0	\bigcirc	
I am confident I will find a good job after graduating.	\circ	\circ	



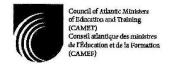


31. Please respond 'yes' or 'no' to the following statements about how you felt about your chosen post-secondary education program before you switched or withdrew?			
	Yes	No	
The class sizes were overwhelming for me.	\bigcirc	\bigcirc	
I felt sure about my choice.	\bigcirc	\bigcirc	
The program was a good fit for me.	\bigcirc	\bigcirc	
I was lonely.	\bigcirc	\bigcirc	
I knew where to go to access the resources to support me in my transition to post- secondary education.	\circ	\circ	
I felt that my institution/program had adequate transition supports.	\circ	\bigcirc	
I felt that I belong.	\bigcirc	\bigcirc	
I felt academically overwhelmed.	\bigcirc	\bigcirc	
I felt that I was on the path to meeting my life and career goals.	\bigcirc	\bigcirc	
I was enjoying my life.	\bigcirc	\bigcirc	
I was sure that this program is worth it to me.	\bigcirc	\bigcirc	
I feel that the program did a good job connecting learning to skills needed my chosen career field.	\circ	\bigcirc	
I felt confident I was going to find a good job after graduating	\bigcirc	\bigcirc	



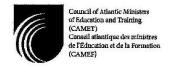


32. In reflection, how do you feel about your post-secondary education experience? Please respond 'yes' or 'no' to the following statements			
	Yes	No	
The class sizes were overwhelming for me.	\circ	\circ	
I felt sure about my choice.	0	\circ	
The program was a good fit for me.	\circ	\circ	
I was lonely.	\bigcirc	\bigcirc	
I knew where to go to access the resources to support me in my transition to post- secondary education.	\bigcirc	0	
I felt that my institution/program had adequate transition supports.	\bigcirc	\bigcirc	
I felt that I belong.	\circ	\circ	
I felt academically overwhelmed.	\circ	\bigcirc	
I felt that I was on the path to meeting my life and career goals.	\bigcirc	\circ	
I was enjoying my life.	\bigcirc	\circ	
I was sure that this program is worth it to me.	\bigcirc	\circ	
I feel that the program did a good job connecting learning to skills needed my chosen career field.	\bigcirc	0	
I felt confident I was going to find a good job after graduating.	\bigcirc	\bigcirc	



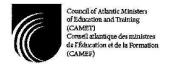


33. What were your reasons for switching or withdrawing from y	our program?
34. Were you able to access the supports (informal – e.g. frience career services, financial assistance and academic support) you deciding whether to switch or withdraw from the program you were supported to support the program of	u needed for the challenges you faced when
○ Yes	
○ No	



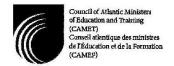


not.	ntormai) did you acce	ess and were they h	elpful? Please (explain why or why
36. What supports (formal or	nformal) did you need	1?		
		A DESCRIPTION OF THE PROPERTY		
37. What could your institution	ıs/program have done	e to get you to stay?	Please explair	1.



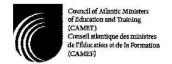


38. What were some of the challenges you faced while attending post-secondary education?
39. Who or what helped you to navigate these obstacles?
40. Do you have a plan for returning to school?
Yes
○ No





41. When do you plar	n to return to school?		
42. Do you plan to rei	curn to the same		
	Yes	No	Not sure
Program?	\bigcirc	\circ	\circ
School?		0	0





Questions Specific to Delays in Post-secondary Education Transition

43. What are you currently doing? (Select those that apply)	
Working full time	
Working part time	
Self-employed	
Employed but temporarily laid-off	
Unemployed and looking for work	
Unemployed and not looking for work	8
Returning to high school	
Other (please specify)	





44. What were the reasons for withdrawing or stopping-out from the program? Check all that apply.
Program was not what I expected
Realized the program was not a good "fit" for my interests/skills
Realized the program was not preparing me for the career future I wanted
Realized the employment prospects after graduation were not good
Difficulty of program
Failing courses
Financial issues
Day care availability
Lost interest in the program
Was undecided on a career direction
Personal/family issues
Health issues
I found employment
Other (please specify)



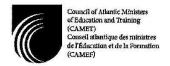


Strengthening the Transitions from K-12 to Post-Secondary Education

Questions Specific to Delays in Post-secondary Education Transition

	What were the top three reasons that you did not go directly to post-secondary education after high pol?
	I wanted to take a break from school.
	I wanted to do some travelling before attending a post-secondary institution.
	I had not decided on my career direction and I wanted to gain 'real world experiences' to clarify where I want to go.
	I did not have sufficient information on post-secondary options.
	I did not have enough money to attend.
	I was afraid of having too much debt.
	I did not meet the entrance requirements for the institution/program I wanted to attend.
	I needed to go back to high school to upgrade my marks.
	I was waitlisted for the program I wanted to take.
	I was reluctant to leave my home community to attend school.
	I had family commitments which prevented me from attending post-secondary directly after I completed high school.
	Health reasons prevented me from attending a post-secondary institution directly after high school.
	I was offered employment out of high school and wanted to do this before going to post-secondary education.
	I wanted to earn money for post-secondary education.
	I needed to work to help my family at the time.
	Other (please specify)





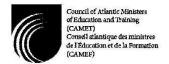


46. Was your time in between high school and post-secondary been helpful to you in clarifying your education goals and career direction?			
Yes			
○ No			
Not sure			
47. Why do you feel that way?			

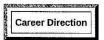




cation? Check all that apply to you:
Nothing would make me attend post-secondary
Clarity about my own career direction
Affordability
Local access (I could stay in my community)
Program that has good job prospects
Program that is a good "fit" for my interests and skills
Program that is flexible (online, part-time)
Program that I can complete quickly
Other (please specify)





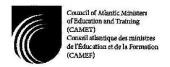


49. Have you decided on a career direction?
Yes
○ No





50. Do you know if your career direction fits with			
	Yes	No	Not sure
Your interests, skills/personality?	\bigcirc	\bigcirc	\bigcirc
The job prospects in this field?	\bigcirc	\bigcirc	\bigcirc
The average salary?	\bigcirc	\bigcirc	\bigcirc
The credentials required for entry into this field?	\bigcirc	\bigcirc	\bigcirc
The technical skills required?	\bigcirc	\bigcirc	\bigcirc
The transferable skills that employers in this field are looking for?			\bigcirc
Potential contacts in this field?	\bigcirc	\bigcirc	\bigcirc
Job search strategies that work in this field?	\bigcirc	\bigcirc	
Firsthand what the work environment is like in this field?	\bigcirc	\bigcirc	
The typical work hours and/or performance expectations in this field?	\bigcirc	\bigcirc	\bigcirc





51.	Why you have not decided on a career direction? (Select those that apply)
	I don't have enough information.
	I don't have enough experience with work to know what I might like/not like.
	I've decided to take a gap year to get clarity and/or build experience.
	I don't know what I am good at doing.
	There are so many choices, it is confusing.
	I need to work first to earn money for a post-secondary education.
	I need to upgrade my marks first.
	Other (please specify)





52. Do you know			
Where to find tools to	help you assess what you are good at doing? more about learning and career pathways? experience different work options?	Yes	No () () () () () () () () () (
Would you like a copy	entered into the draw for a new iPad?	Yes O	No C
Sent des la constant de la constant	 All contact information provided will be confidential and your anonymity assured. CCDF will maintain your contact information securely and use for the purposes as you have indicated. CCDF will not share or sell your information to anyone ever! 		

APPENDIX C: Interviews with Post-Secondary Staff and Administrators

Purpose of the Interviews with Post-Secondary Staff and Administrators

The purpose of the key informant interviews was to understand from PSE administrators and student support and career centre staff:

- What the institutions are seeing as the main support needs of youth at pre-entry, induction and as they progress to successful PSE graduation;
- What the institutions are currently doing to help support students (especially students from underrepresented and at-risk groups) throughout these phases; and,
- What impact these supports have had on student retention.

All interviewees received the interview protocol with nine questions and a consent form prior to the interview (Appendix C). The interviews were conversational (informal) in nature with the questions serving as a guideline for the discussion. Not all interviewees were asked or responded to each question. The interviews were approximately an hour in length. The interviews were conducted in French and English. There were five interviewers in total.

All but one interviewee signed the consent form. That interviewee chose to remain anonymous.

Respondent Profile

For the most part, contacts for the key informant interviews came from suggestions received from CAMET's Post-Secondary Education Working Group. A few contacts came from CCDF's network. All interviewees were approved by the Working Group. Researchers endeavoured to select staff from a range of administrative and student support positions. Those interviewed, their positions and their institutions are listed below, with the exception of the interviewee who wished to remain anonymous.

- Collette Aucoin, Vice President, Collège d'île, Prince Edward Island (PEI)
- Ken Bickerton, Disability Resource Facilitator, Cape Breton University, Nova Scotia
- Jennifer Browne, Associate Director, Student Life, Memorial University, Newfoundland and Labrador (NL)
- Elizabeth Chaulk, College of the North Atlantic, NL
- Joan Diamond, Transitions Coordinator, Holland College, PEI
- Carole Essiembre, Coordinator, Student Success Program, Université de Moncton, New
- Anne Forestall, Senior Assistant Vice-Provost, Dalhousie University, Nova Scotia
- Donnie Jeffrey, Manager, Career Services, Saint Mary's University, Nova Scotia
- Mark Kolanko, Associate Registrar, Enrolment, St. Francis Xavier University, Nova Scotia
- James Loder, Director, Academy Canada, President, Newfoundland and Labrador Association of Career Colleges
- Starla MacDougall, Vice Principal, Union of New Brunswick Indians Training Institute, New
- Kim Meade, Vice President International and Student Affairs, Mount Allison University
- Paula Barry Mercer, Associate Vice-President, Student Experience, Mount Saint Vincent University, Nova Scotia



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- Trish Murray-Zelmer, Employment and Financial Aid Coordinator, St. Thomas University, New Brunswick
- Mary Ellen Kingston Ritchie, Director, Student Development, New Brunswick Community College
- Liane Roy, President, Collège communautaire du Nouveau-Brunswick
- James Sanford, Executive Director, Student Services, and Jim Darnbrough, Executive Director, Enrolment Services, Acadia University, Nova Scotia
- Treena Smith, Director of Student Affairs, University of Prince Edward Island
- Karen Walsh, Executive Director, Office to Advance Women Apprentices, NL
- Kathy Wilson, Associate Vice President Academic, Mark Walma, Assistant Vice President Student Services, Dax MacLean, Director of Student Recruitment, University of New Brunswick
- Beverly Young, Director, Carpenter Millwright College, Nova Scotia
- Elizabeth Yeo, Director of Student Services, Nova Scotia Community College

Twenty-three interviews were conducted. Most interviews were with a single interviewee. Two interviews were conducted in a group format -- one with the University of New Brunswick had three people and the one with Acadia University had two people.

Interview Findings

Strategies for Informing High School Students about PSE options

All interviewees mentioned that their institution does some form of direct recruitment (in school) with high school students. Many institutions said that they have recruitment staff that develop in-province, Atlantic region and International recruitment strategies. Some start their recruitment visits to schools as early as Grade 6. Direct recruitment strategies mentioned by the interviewees included: having information booths at education fairs in the high schools and in the communities, and being invited as guest speakers (often in the Grade 10 Careers Course). Many interviewees mentioned that they were members of the Atlantic Association of Registrars and Admission Offices - a New Brunswick based organization that helps post-secondary institutions reach out directly to high schools across the Atlantic region.

Another key strategy to help high school students learn about post-secondary education mentioned by 15 interviewees were on-campus events or programs. Interviewees mentioned that they host open houses, campus tours, summer camps, bridging programs, leadership programs, access to on campus services such as career services and free continuing education courses for those in the community.

The same number of interviewees (15) mentioned specific recruitment strategies for disadvantaged and/or underrepresented groups. Interviewees mentioned having strategies such as having near-to-peer recruiters, Indigenous recruitment staff, and specific funding pockets for this type of recruitment and outreach strategies specific to students with a learning disability, people who are currently incarcerated, international students, students in adult high schools and women and girls. One interviewee mentioned doing outreach to specific community-based organizations such as the Boys and Girls Clubs to connect with underrepresented groups outside of schools.

Ten interviewees said that they are increasingly connecting with the supporters of high school students (e.g. parents, teachers, guidance counsellors) to help "spread the word" about post-secondary options. Strategies mentioned included: having specific information and outreach strategies to guidance counsellors, hosting a parents' night at their institutions, making individual visits to students/parents at their homes and delivering presentations to teachers about the opportunities for women in trades.

A few interviewees (4) mentioned having formal partnerships with high schools to develop programs to give high school students exposure to PSE, such as dual credit programs (e.g. Holland College's Transitions program for Grade 11 and 12 students) and take-a-trade day.

Digital and traditional marketing strategies were mentioned. Two interviewees mentioned using social media or the internet as a way to communicate to high school students about PSE options. Paula Barry Mercer from Mount Saint Vincent said that her institution was developing online virtual tours for those who cannot come to the physical campus. They are also developing a social media marketing campaign including links to a question and answer section, "How to University," on their website. Traditional advertising (such as sponsoring a school team or ads on buses) was mentioned by one interviewee as a strategy that is used by their institution to inform students about their PSE options.

Only one interviewee talked about the lack of success of a particular outreach strategy. This interviewee mentioned that working with guidance counsellors to promote specialty programs like the fine arts does not get much traction because of the perception that "fine arts" does not lead to "profitable" careers.

Transition Issues Facing Students at Pre-entry and in Persisting through to Graduation

Pre-entry

"We really want high school students to have a healthy perception of what university is going to be like." Mark Kolanko, St. Francis Xavier University

The main issues facing students at the pre-entry stage identified by interviews fell into the following categories: financial (e.g. knowing if they can/how to fund their education), mental health (e.g. resilience and anxiety), career-related (e.g. not really understanding the career and labour market implications of the program to which they are applying) and academic readiness (especially in math).

When asked if there were issues related to specific groups of students at pre-entry, interviewees highlighted issues specific to Indigenous students, students with learning disabilities, first generation students and students from low income families. For Indigenous students, interviewees mentioned the following issues: negative experiences with mainstream education, a lack of self-confidence and a weak sense of belonging in school, having a difficult home life and living in poverty. For students with learning disabilities, interviewees mentioned the challenge of undiagnosed learning disabilities and/or the struggle to arrange accommodations in PSE as being their main issues. The main issue mentioned for first generation students was the lack of awareness of the realities of PSE life. Likewise, students from low income families had limited exposure to PSE and were also dealing with financial issues.

Induction to Completion

From the time that they set foot on campus to the time they graduate, interviewees said that PSE students broadly struggle most with issues related to (in order of most times referenced):

- Adapting to the university environment (e.g. self-management, excessive partying and drinking) (7),
- Adjusting to the academic demands (e.g. knowing how to learn, note-taking and exams) (7),
- Stress and time management (7),
- Coping skills and independent problem solving (e.g. adjusting to being without "helicopter parents")(6),
- Finances and funding (5),
- Social connectedness/belonging (4),
- Career indecision (e.g. program fit, lack of career goals or plan)(3)



- Mental health (e.g. anxiety and depression) (3),
- Dependence on phones(1),
- Unrealistic expectations (e.g. taking on too many courses) (1),
- Poor work management skills (e.g. work ethic, timeliness, attitude, accountability)(1).

In terms of specific student groups, interviewees said that the main issues (in order of most mentioned) for:

- Indigenous students were:
 - o Belonging (3),
 - o Confidence (1),
 - o Financial literacy (1),
 - Lack of support from family and friends (e.g. "You think you are better than us.") (1),
 - o Racism (1),
 - o Adjustment to PSE (1).
- Students with learning disabilities were:
 - o No formal assessment of disabilities making them ineligible for accommodations (2),
 - Mental health issues (1)
 - Lack of awareness that their high school program was accommodated and that this makes them ineligible for entrance at many PSE programs(1).
- First generation students were:
 - o Family do not understand what they are going through (2),
 - Belonging (2),
 - Unfamiliarity with the terminology (1).
- International students were:
 - Cultural differences between Canada and their home country (1).
 - Parental influence on learning choices (e.g. parents will not pay for education unless it matches the choice made by the parent) (1).
- Students from low income families were:
 - Food security (1)
 - Lack of awareness of PSE culture (1)
- Older students were:
 - o Child care (1)
 - o Balancing school and work life (1)

Transition Supports Available to Students

At Pre-Entry

In general, when asked about the supports that post-secondary institutions have for those at the preentry stage of transition to PSE, interviewees had one of three responses: 1. This is a growing area of service for the institution; 2. We should be doing more; or 3. This is the purview of public education.

In terms of the first response, the growth in programming for pre-entry is influenced, in part, by greater numbers of students and parents wanting to know about the services available. James Sanford from Acadia University commented that:

... both students and parents are asking more questions about [their and their child's] specific needs. We're starting to see more discussion about the importance of supports for Indigenous students, for example. Campuses are being challenged to look at developing relationships with [their] local communities to help provide those supports and resources in a meaningful way.

Seven other interviewees specifically mentioned that they had or were developing transition supports targeted to pre-entry students broadly and for specific groups of students. In this latter case, pre-entry programming for students with a learning disability was most mentioned, followed by programming for first generation and Indigenous youth. In these early orientation programs, interviewees talked about a range of supports that they offer including: workshops and information on self-care and creating learning and career goals, mentorship programs with senior students, alumni, and Elders, institution preview days, orientation to student services and discussions with students with disabilities about their accommodation needs. Interviewees noted that these kinds of supports typically start as soon as a student accepts the institution's offer of acceptance. However, some interviewees said that they have started before this point, staffing an accessibility team member as part of their recruitment staff. This staff member outreaches to students as part of the institution's direct recruitment strategy (e.g. being available to answer accommodation questions at PSE fairs in high schools).

Some post-secondary institutions said that they have been focusing on the pre-entry cohort for some time. For example, Mark Kolanko from St. Francis Xavier said,

Some time ago, the job description of "recruiters" were redesigned to "student success leaders." Their role is to be the most knowledgeable people on and off campus regarding what supports are available, how to connect students to those supports, and how to help students navigate the issues faced in their own specific demographic. The roles were designed so we could have experts on the ground meeting with students, their families and school counsellors face-to-face to help them navigate the journey.

At Induction

When asked about the supports available to students upon entry, the interviewees mentioned numerous and varied supports. These included (listed from most to least mentioned):

- A wellness centre and/or mental health services (e.g. student intervention team to help students with personal challenges) (13),
- Academic services (e.g. advisors, student success workshops/coaches, early alert programs for students who are struggling with academic issues, tutors, learning strategist) (10),
- Indigenous student support services (e.g. having an Indigenous student coordinator, a cultural/welcoming space) (10)
- Services for students with disabilities (e.g. Autism Transition Coordinator, exam accommodations, accessibility services) (9),
- Student Success Centres that include programming such as study coaching, peer-to-peer support, tutoring, writing supports, University 101 courses, a Student Life Director (9),
- International student support services (5),
- Student clubs/organizations (4),
- Positive learning environments (e.g. library learning commons, small class sizes) (4),
- Career services (4),
- Diversity and inclusion programming (e.g. inclusion community building in residence, Indigenizing curriculum) (4),
- Gender and LGBTQ+ supports (3),
- Coordination with community organization programs for multi-barrier students (e.g. partnerships with the John Howard Society, the Autism Society, the Youth Project for LGBTQ+ youth, having a grocery store gift card program for students facing food insecurity) (3),
- Financial aid/housing (3),

- Full admissions programming including: admissions, career planning and counselling, financial management, case management approach where each student's progress is tracked by a student services advisor (2),
- Work-integrated learning (e.g. service learning, co-ops, co-curricular record) (2),
- Sexual Harassment and Assault Resource Centre (2),
- Building "learning living communities" (e.g. nursing students stay in the same residence) (1)
- Web site (e.g. admission and academic guides) (1),
- Competency-based learning approach (1),
- Chaplaincy (1),
- First generation student support services (1)
- Black student advising centre (1),
- Individualized/wrap-around supports (1),
- Full-time and part-time study options (1).

Academic support services were clearly the focus of student supports across most of the post-secondary institutions invited to participate in the interviews. Perhaps the most extensive example of this was the student success framework, « En plein dans le mille! Cadre méthodologique pour le développement d'outils et de stratégies de soutien à la réussite des étudiantes et des étudiants du niveau collégial », developed for the Collège communautaire du Nouveau-Brunswick in partnership with the Université Sainte-Anne. This framework outlines programming to support students from preentry through to graduation.

Mental wellness on campus and providing students with mental health supports has been a recent area of focus for most campuses. One such initiative is the Mental Health Care for Post-Secondary Settings project. The Maritime Provinces are trying to create better awareness and consistency of support for mental health across PSE campuses through this project. Kim Meade from Mount Allison University said that her university recently became a pilot site, in addition to five other campuses across New Brunswick, Nova Scotia and PEI. The project focuses on evidence-based interventions that can be implemented on any campus, large or small. It builds on "proven youth mental health components to create, evaluate, and disseminate a comprehensive and effective campus mental health framework" (Mount Allison News, March 21, 2017).

Despite growing service supports, some interviewees spoke about the lack of awareness or use of these services among students. Lack of use and awareness was often mentioned by those interviewees that worked in career services. Jennifer Browne from Memorial University said that "Students are not necessarily accessing the supports that are available to them." Donny Jeffrey from Saint Mary's University agreed commenting that, "[Students] don't see how their learning related to the world of work and without that connection they sometimes feel that they are wasting their time and money. This is why we want to see more first year students."

Leading Up to Graduation

Ironically, the supports mentioned most by the interviewees targeted to those students progressing to graduation are career services. Specific examples of career related supports mentioned by the interviewees included employment guides for students with a disability, career counselling, experiential learning, workshops to help graduating students develop employability skills and referrals to provincial career services for smaller institutions that did not have career services on campus.

Interviewees mentioned that whereas there is a strong focus on graduating students in career services, their preference is that this service be accessed by students throughout their PSE. Paula Barry Mercer of Mount Saint Vincent University stated that "students generally access career counselling close to graduation although we would like them to access it earlier." Similarly, Donnie Jeffrey from Saint Mary's University said that "third and fourth years seek us out. First years not so

much and second years accidentally bump into us." However, he also pointed out that "international students tend to be much more career-focussed when they arrive on campus and will seek us out much earlier."

Tailored Supports for Underrepresented Groups

Almost all of the interviewees mentioned having tailored supports for specific student groups. The specific groups mentioned were: Indigenous students, student with disabilities, LGBTQ+ students, international and immigrant students, first generation students, women in transition from abusive relationships and low income students. Indigenous students and students with disabilities were the most referenced groups across the interviews.

To support Indigenous student transitions through PSE, interviewees mentioned that their institutions had (in order of most mentions): welcome centres specific to Indigenous students (8), Indigenous recruiters/student advisors (6), designated program seats for Indigenous students (2), Indigenous-specific on campus and community-based programs (e.g. nursing and early child learning) (2), bridging programs (1), outreach to the community(1), Elders in residence (1), cultural awareness activities (1), tailored/individualized supports (1). Several interviewees spoke about the need to develop stronger relationships with Indigenous students, their families and their communities in order to improve access and transition to PSE. Starla MacDougall from the Union of New Brunswick Indian Training Institute emphasized the importance of relationship building at the pre-entry and entry stages: "If they're missing classes, we show up at their door and leave a handwritten note [saying], 'We miss you like crazy at school. Please call me when you can.' We go the extra mile because we are trying to develop a solid, second family unit kind of feel. We eat together, have breaks together. We care about each other."

For students with disabilities, the interviewees most mentioned having accessibility centres to help these students seek the accommodations needed for their learning. Also mentioned were providing designated seats, specific supports for students who are in modified programs in high school, having self-identification sections on application forms so that students can receive pre-supports and be accommodated quickly upon arrival on campus. Elizabeth Chaulk from College of the North Atlantic referenced the college's extensive efforts to accommodate students with learning disabilities:

"We are really proud of how we support our students with disabilities. I'll admit it was scary at the start. Suncor invested and this made a huge difference in what we could do. Every campus is now outfitted to support a range of accommodations. We trained all staff on how to accommodate everyone. We know that education and awareness needs to be constant; we continue to train. The administration leads the way by showing their belief in the accommodations approach and it has changed the culture on campus."

For the LGBTQ+ community on campus, interviewees mentioned having non-gendered bathrooms, a support committee, gay-straight alliance groups, and activities and marketing to promote a positive LGBTQ+ environment on campus.

Supports for international and immigrant students mentioned by the interviewees were much more career focussed than programming for other underrepresented groups. These supports included: targeted job fairs and career programs such as the StuWorks program at St. Thomas University that combines career coaching and a work experience program for helping international students learn about the Canadian workplace. Having an International Student Centre on campus was also reference by one interviewee.

For the other target populations mentioned, one interviewee said that they had a specific student support officers for first generation students. Another interviewee mentioned that they had specific scholarships for low income students. Several interviewees said that, because of the trend towards lifelong learning, they started seeing older entrants to their programs which requires different student

supports such as child care and program flexibility for working students. Another example of this kind of programming was referenced by Mary Ellen Kingston Ritchie from New Brunswick Community College. They are piloting a program on one of their campuses called, IN BLOOM. It is a program for women in transition from abusive relationships. In this program the college partners with local women's service organizations that can provide wrap-around services that the college may not provide.

Identification of and Supports for Students At-Risk of Leaving PSE

There was a significant range of responses across the institutions in terms of policies and programs to help identify and support students at risk of failing or dropping-out of their PSE program. On some campuses the policy is that the student would need to fail a course in order for them to be identified as at-risk or they would need to self-identify as at-risk to get supports. Also mentioned by a few institutions were policies that should a student fail out or withdraw from their program, they need to wait (in most cases up to a year) to reapply. Most institutions, however, mentioned that they have become more pro-active in their responses to identifying at-risk students and less punitive in their policies for reinstatement.

Almost half (10) interviewees mentioned that they have implemented early-alert programs. Most of these approaches focussed on academic issues that could cause students to struggle. Early-alert strategies mentioned by the interviewees focus on: the timeliness of grade and performance information (e.g. ensuring that student get feedback from faculty as early in the semester as possible, reviewing grades after the first semester to alert faculty of any student that is struggling, emailing students at-risk of failing after the results of the mid-term exams and providing them with a list of oncampus supports), connecting students with supports (e.g. assigning students to a learning advisor), identifying them as early as possible (e.g. getting them to fill out a survey at the pre-entry stage that may alert the institution to the possibility of the student being at-risk) and systems that track attendance and warn faculty when a student has been absent more than two or three days. Data collection of student progress was often referred to by the interviewees as being critical to early identification and seen by faculty and staff as an important tool in supporting students at-risk earlier.

Five specific programs/strategies to identify and support at-risk students were mentioned by the interviewees:

- Holland College has the earliest program mentioned. Their <u>Transition Program</u> is a dual credit
 program that works with students who have been identified as at-risk of leaving high school
 before graduation and/or at-risk of not attending PSE. They work with students to address
 their academic and social issues while exposing them to PSE learning.
- Dalhousie University has the On Track transition to and support throughout university program. It currently has three elements: Start on Track, Stay on Track, and Back on Track. The first element (Start on Track) is an eight module online orientation course that every student can take upon acceptance and covers topics including financial literacy, academic integrity and health and wellness. Each module offers information in the form of text, videos, multimedia, and a quiz. In order for students to successfully complete a module they have to attain a grade of 80%. The university monitors which questions in these quizzes students are getting wrong most often and sends information to the students on those topics. The second element, Stay on Track, has a career development focus that helps student identify their strengths and goals for learning. This second element is built on best practice research that shows that students who see the connection between learning and their own goals have higher degree completion rates. The third element, Back on Track, connects with students with lower high school averages at the pre-entry stage and supports them throughout their first semester at the university. It is based on research that if you can help students be successful in their first semester that the risk of dropping out is greatly lowered. Back on Track includes three visits

- with a Learning Advisor. A fourth element to the program is in development and focuses on helping students develop a career plan.
- New Brunswick Community College has a "faculty calling program" that connects faculty with students at pre-entry. Faculty call students upon acceptance and during these calls they ask the student about how they are preparing for their transition. Faculty ask the students about their grades, their finances, etc. During these conversations, faculty assess if the student is highly, moderately or not likely to be at-risk. Those students identified as highly or moderately likely are linked to a learning strategist and learning counsellors. NBCC follows them throughout the program and intervenes as early as possible if the student begins to struggle.
- The College of the North Atlantic has an electronic referral system to ensure that students get immediate supports. Students, student support workers, and professors can all make electronic referrals to counsellors at any time. Counsellors connect with students within an hour of the referral being made. Instructors, counsellors and student support workers also have regular student status meetings for each student to ensure that a student is progressing. Outreach to the student will be made if there is an issue.
- Memorial University is piloting the Stepped Care 2.0 model. It provides training to faculty and staff to be able to identify students at-risk (specifically around mental health issues) and to be comfortable intervening with a student when they have identified a behaviour making the student at-risk. The goal of the training is to build further capacity for intervention among the staff and to relieve the stretched counselling services that currently have to handle all issues related to student mental health.

Other strategies and programs mentioned by interviewees were mentorship programs for first year students, guides for peers who see students that need help, tutoring and learning circles, policy reviews to ensure that policies are not creating barriers to student success, training for staff, student advisors and residence staff to identify and support students at-risk.

Approach to Supporting Students in Transition

Interviewees were asked to characterize their approach to student supports as tried and true, constantly evolving or somewhere in-between. Four interviewees said that their approach was mostly tried and true. Mark Kolanko from St. Francis Xavier said they know, for example, that their accessibility centre is working and there is no need to "fix what isn't broken." James Sanford from Acadia University said that "one thing that we do that is unique but that we have been doing for a while is reaching out to families. We have a very personal, relationship building approach." Ken Bickerton from Cape Breton University said it can be hard to be innovative as "limited resources make it hard to grow."

Ten interviewees said that they would characterize their approach as constantly evolving. The interviewee that wished to remain anonymous said that the institution is constantly evolving because their student body is changing and that they have more international students than ever before. Collège communautaire du Nouveau-Brunswick's Liane Roy commented that "many of these services are not funded so we have to be creative with the money we get." Elizabeth Yeo from Nova Scotia Community College said that they are moving to an integrative model where each student has a student services advisor and a faculty advisor who work collaboratively with the student to meet their needs holistically. She said that this is a very individualized approach which means that, as an institution, they need to be constantly evolving in order to meet these individual needs.

Nine interviewees felt that they were somewhere in-between these two approaches. The reason for their response was that the approach can stay tried and true when they know it is working (e.g. recruitment) and they need to innovate where they also know they have room to grow or where

limited resources are pushing them to be more creative. Several interviewees said that research is key and a critical element of this research is connecting directly with students to find out what students need and like.

Through research and connecting with students:

- Dalhousie University realized "the importance of involving family and friends in the transition of students."
- Nova Scotia College of Art and Design recognized the "need to promote our worth better.
 Locally people don't realize that we are like a Julliard and are recognized as such in Europe.
 Universities in Canada, in general, don't do a good job of demonstrating value or local relevance."
- St. Thomas University recognized the need to develop "a new policy on sexual misconduct and violence."
- The Union of New Brunswick Indians Training Institute found that "Indigenous students need supports that are individualized. Many come from traumatized families still suffering the impacts of residential schools. Best approach we've found is to suspend judgement and keep the door open."

Whereas formal research efforts are important in understanding need, Kathy Wilson from the University of New Brunswick mentioned that it was also vital to be mindful of and to recognize the supports for students that happen informally throughout the campus. During her interview, Kathy remarked that "with all of this focus on programming that we can lose sight of the informal supports that are there and can be nurtured." As an example of this, she referred to a staff member in the campus coffee shop who everyone loves and who helps students develop a sense of belonging.

Evaluation of Programming

Interviewees were asked about the evaluation of their student transition support programs. In terms of their evaluation strategy to support student transition, they were specifically asked how they determined student need for programming, whether they conducted exit interviews and how they evaluated their programs globally.

Seventeen interviewees responded to the question about whether their institution evaluated student need. Ten interviewees said that they did. The methodologies mentioned in assessing student need included: surveys (e.g. student satisfaction, upon entry, end of first year, graduating), focus groups, employability skills assessments and narrative-based research. Interviewees also mentioned that their institutions participated in, contributed data to and reviewed a range of Canadian and International surveys including the National Survey of Student Engagement, the International Student Barometer and the National College Health Associations Survey and those of the Canadian University Survey Consortium. Three interviewees specifically mentioned that this information helps them to decide what programming is needed and/or how to adapt programs to better meet student need.

Twenty-two interviewees responded to the question of whether their institution conducted exit interviews with students leaving PSE prior to graduation. Exactly half of the interviewees said that they did. One interviewee said that it is a mandated part of their ISO designation. All interviewees talked about the challenge of conducting exit interviews, as connecting with students who have decided to leave their PSE program can be challenging. Many students leave without notice, do not return calls from support staff, or respond quickly to exit surveys or interviews to "get it done." Most interviewees said that once a student has decided to leave, they do not want to explain their decision to the institution. Overall, most felt it was important to reach out to students who are leaving or who have left, but that there is a need to find a better way of doing so.

In terms of evaluating student transition/support programming, 13 out of 21 interviewees said that they do this most commonly through student surveys such as those listed above. Other evaluation methods used include evaluation of programming research, analysing retention rates (especially of first year students), examining outcomes of summer pre-campus programming, looking at student evaluations of teaching staff and the learning environment, the outcomes of formative and summative student assessments and the results of exit interviews. Those who said that they do not evaluate their programming said that they have anecdotal evidence of the programming's effectiveness.

There was limited reference to evidence-based evaluation of specific student support and transition service and programming. No interviewee was able to share data or evaluation reports with the researchers indicating the outcomes/impact of specific programs, even though the question was asked. Three interviewees said that specific program evaluation tends to be done at the pilot stage, but not after it has been implemented. The only reference to the impact of specific programs was anecdotal. It is not clear why specific program results were not provided. It could mean that institutions are more focussed on the overall result of student transitions (satisfaction and completion) rather than the specifics of what programs work best and why.

APPENDIX C.1: Informal Interview Protocol: PSE Administrators and Student Support/Career Services Staff

Interview Questions

- How do you support high school students in learning more about your institution and/or their PSE learning options? What programs, policies, and activities do you have to increase their awareness of and exposure to PSE?
- 2. What are the main issues facing students at pre-entry, transitioning and trying to persist through to graduation? Is there a difference among underrepresented groups? If yes, what are their main issues?
- 3. What supports are available to students (e.g. academic, mental health, etc.):
 - a. Before they make the transition to PSE?
 - b. While they are making their transition to PSE?
 - c. As they progress toward graduation from PSE?
- 4. What do you do to reach out/attract/support underrepresented groups (Indigenous youth, first generation PSE students, youth with a disability, immigrant youth, visible minority youth, LBGTQ youth, low income youth)? What, if any, tailored supports are in place for specific populations?
- 5. As you think about your institution's approach to reaching out and supporting students/their families at pre-entry, at entry, and progressing through transition would you describe your approach as stable/tried and true, constantly evolving or somewhere in between? (Please elaborate.)
- 6. How do you identify students who may be at-risk? What interventions are in place to support them? Is there training for faculty to help identify at-risk students? Are there any programs and policies in place to give former students a second chance to return to school and get back on track?
- 7. Do you evaluate the impact of any of your policies/programs/activities focused on student transition (pre-entry/entry/progression)? If so, can you share any results?
- 8. Do you directly ask students at any stage (pre-entry, entry or as they progress) what transition supports they most need or want? If so, how is this done?
- 9. When a student does not persist to graduation (i.e. they switch programs or drop out completely), do you conduct a formal exit interview to understand contributing factors and what support might have helped/be needed now?

Interviewee Consent Form

Contact Name and Contact Information:

This form explains the purpose of this interview. Please ask any questions you might have after reading the form.

Background

In 2013, the Council of Atlantic Ministers of Education and Training (CAMET) engaged the Canadian Career Development Foundation (CCDF) to conduct an analysis of current career education strengths, weaknesses, opportunities and threats in the K-12 public system across the Atlantic Provinces. Based on this and a review of Canadian and international best practices, a series of recommendations were made and subsequently endorsed by the Atlantic Ministers, the first of which was to develop and publish a policy framework to underpin the implementation of those key recommendations. In 2014, CCDF worked with CAMET to develop Future in Focus, an Atlantic Career Development Framework for Public Education: 2015-2020 (released June 2015).

The scope of this work was limited to the role of the K-12 sector in strengthening student transitions – transitions from school to school and school to work. At the time, the CAMET public and post-secondary Standing Committees and CCDF noted that a natural next step would be an extension of this work to focus specifically on the role of the post-secondary sector in strengthening student transitions. In 2016, CAMET engaged CCDF to work with CAMET's Post-secondary Transitions Committee to focus specifically on school-to-post-secondary education (PSE) transitions. Because the scope of student transition is broad, the Committee decided to focus first on school-to-school transitions in this project, recognizing that PSE-to-work transitions could be the focus of a separate project.

To date, CCDF has conducted an environmental scan to look at the issues facing Atlantic students as they consider their learning pathways post-high school. We have examined national and international approaches to supporting youth prior to PSE entry, during their initial transition to PSE and through to graduation. We are surveying youth in PSE and not in PSE to gain their perspective on what factors help or hinder PSE. To round out the picture, we are interviewing PSE administrators and student support and career centre staff to understand:

- What the institutions are seeing as the main support needs of youth at pre-entry, entry and as they progress to successful PSE graduation;
- What the institutions are currently doing to help support students (especially students from underrepresented groups) along these phases; and,
- What impact these supports have had on student retention.

Participation

If you decide to participate in this research, CCDF may use the information in a report that will include a range of details on how your institution works to help students transition into PSE and how your institution supports the retention of these students. This report may be published and made available for public review. The information gathered from the interview will not be confidential unless specifically requested by you. Your name and institution may be referenced in the research report and you may be quoted in it.

The report will be sent for review by you prior to publication. You will have 72 hours to raise any issues about anything directly attributed to you or your organization. If the researchers are not contacted by this time, this will imply that you give your consent.

Contact

If you have questions or concerns about the interviews, you can contact me at (researcher name) and (contact information) or lead researchers, Sareena Hopkins, Executive Director, CCDF (s.hopkins@ccdf.ca) or Donnalee Bell, Managing Director, CCDF (d.bell@ccdf.ca).

Participant's Consent

I have been given a chance to ask questions. I understand the purpose of this interview and how my responses during the interview may be used by CCDF and/or CAMET. These questions have been answered to my satisfaction. I may contact (researcher name) if I have any more questions about me or my organization taking part in this research.

I hereby give my informed consent to participate in this interview.

Name of Interviewee (please print both first and last name and professional title)

Signature of Participant	Date
Signature of Researcher	Date

REFERENCES

- Bell, D. and Benes, K. (2012). Transitioning Graduates to Work: Improving the Labour Market Success of Poorly Integrated New Entrants (PINEs) in Canada. Canadian Career Development Foundation. Retrieved from: http://www.ccdf.ca/ccdf/wp-content/uploads/2012/05/Report-and-Inventory-on-Canadian-PINEs1.pdf
- Bell, D., Benes, K. & Redekopp, D. (2016). Improving the School-to-Work Transitions of Youth in Canada: A Scoping Review. The Canadian Career Development Foundation.
- Joseph Berger, Anne Motte and Andrew Parkin (2009). Price of Knowledge: Access and Student
 Finance in Canada. Canada Millennium Scholarship Foundation. Retrieved from:
 http://www.yorku.ca/pathways/literature/Access/The%20Price%20of%20Knowledge%20200
 9.pdf
- Bruce, D. & Marlin, A. (2012). Literature Review on Factors Affecting the Transition of Aboriginal Youth from School to Work. Council of Ministers of Education, Canada. Retrieved from:

 http://www.cmec.ca/Publications/Lists/Publications/Attachments/298/Literature-Review-on-Factors EN.pdf
- Cahill, C, Hoffman, N, Lloyd, A & Vargas, J. (2014). State Strategies for Sustaining and Scaling Grades 9-14 Career Pathways. Pathways to Prosperity Network. Retrieved from http://www.iff.org/initiatives/pathways-prosperity-network.
- CAMET (2015). Future in Focus Atlantic Career Development Framework for Public Education: 2015-2020. CAMET.
- Council of Ministers of Education, Canada (2016). Measuring Up: Canadian Results of the OECD PISA Study. The Performance of Canada's Youth in Science, Reading and Mathematics. 2015 First Results for Canadians Aged 15. Retrieved at:

 http://www.cmec.ca/Publications/Lists/Publications/Attachments/365/Book_PISA2015_EN_Dec5.pdf.
- Childs S., Finnie R., Mueller R. Family Environment, Family Habits, and Children's Cultural Experiences: Is There a Link to Participation in Post-Secondary Education? In: Finnie, R., Frenette M., Mueller R., Sweetman A.,(Eds.) Pursuing Higher Education in Canada: Economic, Social and Policy Dimensions. Montreal and Kingston: McGill-Queen's University Press and School of Policy Studies, Queen's University; 2010.
- Collaborative for Academic, Social, and Emotional Learning (2016). *Collaborating States' Initiative*. Retrieved from http://www.casel.org/collaborative-state-initiative/.
- Durlak, J.A., Weissberg, R.P. Dymnicki, A.B., Taylor, R.D. & Schellinger, K.B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, 82 (1), 405-432.
- European Commission (2016). Mutual Learning Programme: Learning Exchange on 'Integration of young people not in education, training and employment'. Retrieved from http://iccdpp.org/wp-content/uploads/2016/10/ICCDPP-MLP-LE-NEETS-MEETING-SEPT-2016-Executive-Summary.pdf.
- European Commission/EACEA/Cedefop (2014). Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures. Eurydice and Cedefop Report. Luxembourg: Publications Office of the European Union. Retrieved from http://www.anefore.lu/wp-content/uploads/2015/09/EURYDICE-EARLY-SCHOOL-LEAVING.pdf



- The Executive office of the President (2014). Increasing College Opportunity for Low-Income Students:

 Promising Models and a Call to Action. Washington. Retrieved from

 https://www.whitehouse.gov/sites/default/files/docs/white-house-report-on-increasing-college-opportunity-for-low-income-students-1-16-2014-final.pdf.
- Field, S., Alvarez-Galvan, J-L., Henard, F., Kis, V. Kuczera, M. & Musset, P. (2012). A Skills beyond School Review of Denmark, OECD Reviews of Vocational Education and Training, OECD Publishing.

 Retrieved from http://www.oecd-ilibrary.org/education/a-skills-beyond-school-review-of-denmark 9789264173668-en.
- Finnie, R., Afshar, K., Bozkurt, E., Miyairi, M., Pavlic, D. (2016). Barista or Better: New Evidence on the Earnings of Post-Secondary Education graduates: A Tax Linkage Approach. "Executive Summary." Education Policy Research Initiative and the University of Ottawa.
- Finnie, R., Childs, S. and Wismer, A. (2010). Immigrants and Visible Minorities: Post-Secondary Education Experiences (Version 11-04-10) A MESA Project L-SLIS Research Brief. Toronto, ON: Canadian Education Project.
- Finnie, R., Mueller, R. and Sweetman, A. Culture and Access to Canadian Post-Secondary Education.

 Public Sector Digest, June, 2014. Retrieved from:

 https://publicsectordigest.com/article/culture-and-access-canadian-post-secondary-education
- Finnie R., Mueller R., Sweetman A. (2016). <u>The Cultural Determinants of Access to Post-Secondary</u> (<u>Higher</u>) <u>Education in Canada: Empirical Evidence and Policy Implications</u>. In: Access and Expansion Post-Massification: Opportunities and Barriers to Further Growth in Higher Education Participation. London and New York: Routledge pp. 150-78.
- Finnie, R. and Qiu, T. (2009). Moving Through, Moving On: Persistence in Post-secondary Education in Atlantic Canada, Evidence from the PSIS. Statistics Canada. Retrieved at: http://www.statcan.gc.ca/pub/81-595-m/81-595-m2009072-eng.pdf
- Finnie, R., Wismer, A. and Mueller, R. "Access and Barriers to Post-secondary Education: Evidence from the Youth in Transition Survey," Canadian Journal of Higher Education 45:2, 2015, pps. 229-262.
- Fowler, H.S & Lebel, M. (2013). Promoting youth mental health through the transition from high school

 Literature review and environmental scan. Ottawa: Social Research and Demonstration

 Corporation.
- Frenette, M. and Frank, K. (2017). Do Post-secondary Graduates Land High-skilled Jobs? Statistics Canada.
- Lee, K.A., Almonte, J.L.J. & Youn, M-J. (2013). What to do next: an exploratory study of the post-secondary decisions of American students. High Educ 66, 1-16.
- Graf, L. (n.d.). The Swiss Apprenticeship System: Its Institutional Specificities and Strengths in International Perspective. American Institute for Contemporary German Studies. Retrieved from: file://C:/Users/Donnalee/Downloads/Graf2014 SwissApprenticeshipSystem.pdf
- Looker, E. Dianne (2009). Regional Differences in Canadian Rural-Urban Participation Rates in
- Post-Secondary Education. MESA Project Research Paper 2009-
 - 3. Toronto, ON: Canadian Education Project. Retrieved from: www.mesa-project.org/research.php
- Lumina Foundation (2016). A Stronger Nation. Retrieved from:
 http://strongernation.luminafoundation.org/report/main-narrative.html



- Maritime Provinces Higher Education Commission (n.d.). Measures of Student Progress and Outcomes:

 University Participation (2003-04 to 2012-2013). Retrieved at:

 http://mphec.ca/media/71910/Participation Rate Update.pdf
- Maritime Provinces Higher Education Commission (2015). Student Progression in the Maritime System.

 Persistence and Graduation, June 2015. Retrieved at:

 http://mphec.ca/media/105480/PerstGradTables2015.pdf.
- Nelson, K.J., Quinn, C., Marrington, A. & Clarke, J.A. (2012). Good practice for enhancing the engagement and success of commencing students. High Educ 63, 83-96. Retrieved from http://eprints.gut.edu.au/40257/1/41122.pdf.
- Parriag, A., Wright, M. & MacDonald, W. (2010). A Literature Review of Factors that Support Successful Transitions by Aboriginal People from K-12 to Post-secondary Education. Council of Ministers of Education, Canada. Retrieved from:

 http://www.cmec.ca/Publications/Lists/Publications/Attachments/255/transitions-aboriginal-2010.pdf
- Prairie Research Associates (2005). Survey of Secondary School Students. Canada Millennium Scholarship Foundation. Retrieved at:

 https://library.carleton.ca/sites/default/files/find/data/surveys/pdf files/millennium rs-24 2005-12 en.pdf
- RBC and the Canadian Career Development Foundation (CCDF) (2016). Addressing the Catch 22: RBC Career Launch Applicants Recommendations for Improving School-to-Work Transitions. RBC and CCDF.
- Social Research and Demonstration Corporation (SRDC) (2008). BC Avid Pilot Project: Early Implementation Report. Available online at: http://www.srdc.org/uploads/AVID_EIR_full_report_eng.pdf.
- ---- (2007). Future to Discover: Early Implementation Report. Available online at: http://www.srdc.org/uploads/ftd eir full report en.pdf.
- ---- (2016). Life After High School: Nudging Students to Increase PSE Enrolment. Service Research
 Conference Presentation. Retrieved from: http://www.srdc.org/media/199967/lahs-presentation-at-esdc-service-research-conference.pdf
- Statistics Canada, 2011 National Household Survey: Data Table on Educational Levels (99-012-X2011044). Retrieved from: https://goo.gl/AtVIgI.
- Steedman, H. (2010). The States of Apprenticeship in 2010: International Comparisons. Apprenticeship Ambassadors Network. Retrieved from:

 http://cep.lse.ac.uk/pubs/download/special/cepsp22.pdf
- Thomas, L. (2013). What works? Facilitating an effective transition into higher education. Retrieved from http://fyhe.com.au/past_papers/papers/2/Papers/ThomasL_FYHEKeynote2012.pdf.
- Till, M., Leonard, T., Yeung, S. & Nicholls, G. (2015). A profile of the Labour Market Experiences of Adults with Disabilities among Canadians aged 15 years and older. Statistics Canada. Retrieved from: http://www.statcan.gc.ca/pub/89-654-x/89-654-x2015005-eng.pdf