The Readiness Project

Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples Support

Final Report

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Land Acknowledgment

The Readiness Project would like to acknowledge this project is being carried out in the province of Newfoundland and Labrador, within the traditional territories of the Innu, Inuit, Mi'kmaq, and Beothuk peoples. We offer our respects to these Indigenous cultures and recognize their continued connection to the land.

The Readiness Project: Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples Support is a research project led by College of the North Atlantic (CNA) and funded by the NL Workforce Innovation Centre (NLWIC).

Established in 2017 by the Government of Newfoundland and Labrador and administered by CNA, NLWIC has a provincial mandate to provide a coordinated, central point of access to engage all labour market stakeholders about challenges, opportunities and best practices in workforce development. The Centre's goal is to promote and support the research, testing and sharing of **ideas** and models of **innovation** in workforce development that will positively **impact** employability, employment and entrepreneurship within the province's labour force and particularly underrepresented groups. Funding for NLWIC is provided by the Department of Immigration, Population Growth and Skills (IPGS) under the Canada-Newfoundland and Labrador Labour Market Development Agreement.

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Abstract

The Readiness Project was conceptualized to address problems with mature student admissions at College of the North Atlantic (CNA). Specifically, it sought to explore the best practices for program-relevant post-secondary admissions for Indigenous mature students. Working with an advisory committee comprising representatives from Indigenous governments of the Province of Newfoundland and Labrador, the project used a three-phrased approach. First, preliminary research was completed to determine the best practices for mature student admissions, drawing on academic literature, environmental scans of other Canadian Colleges, and consultations with stakeholders. Second, a holistic model for mature student admissions was conceptualized, comprising a discussion with a member of CNA's counselling team, document review to determine if work and educational experience indicated the applicant's academic readiness for a post-secondary program, and pathway co-development that captured the applicant's way to achieve their career goals. Importantly, the model shifted CNA away from a test-decide model; mature student assessments are only completed if there are questions about the applicant's readiness and are no longer the default. In the third phase, the evaluation found that the shift to a more holistic mature student placement model increased the number of applicants who were successfully admitted to their programs and decreased the number of applicants who are required to complete testing. Moreover, the opening of the College did not impact mature students' abilities to complete the first semester in their program of choice. In response Readiness Project's early findings, CNA modified its admissions policy and procedure and deadlines.

There are still some areas for improvement in CNA's mature student admission approach:

(1) Removing temporal restrictions from the admissions policy.

(2) Formalizing the holistic mature student placement model in the operational procedure for admissions.

(3) Replacing standardized test with an in-house developed assessment for all programs.

(4) Creating more bridging and flexible program options

(5) Strengthening connections with Indigenous communities.

(6) Establishing culturally appropriate approaches to data collection with Indigenous Stakeholders.

(7) Developing a communications plan for mature student admissions.

Moreover, the report outlines three key recommendations for government:

(1) Explore opportunities to fund bridging programs.

(2) Review the feasibility of aligning Industrial Trades Program Foundational Competencies and High-School Requirements

(3) Continue to fund impactful research that informs systemic changes to increase Equity, Diversity, and Inclusion in Newfoundland and Labrador.

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The Readiness Project respectfully acknowledges that its research has taken place across Labrador, the unceded traditional and ancestral homelands of the Innu of Nitassinan, the Inuit of Nunatsiavut, and the Inuit of NunatuKavut, and the island of Ktaqmkuk (what is now known as Newfoundland), the unceded, traditional territory of the Beothuk and Mi'kmaq peoples. The research presented in this document would not have been possible without the support, assistance, and valuable input provided by stakeholders from Miawpukek First Nation, Mushuau Innu First Nation, Nunatsiavut Government, NunatuKavut Community Council, Qalipu First Nation, and Sheshatshiu Innu First Nation. The privilege that the Readiness Project was afforded in its opportunity to learn from and work with Indigenous stakeholders in the hopes of establishing a more equitable admissions process at CNA was an honour. Members of the advisory committee dedicated an uncountable number of hours to working on this project and developing the best vision for CNA's mature student admissions going forward. The Readiness Project is also thankful for the support provided by the Labrador Aboriginal Training Partnership (LATP), Mamu Tshishkutamashutau Innu Education (MTIE), and the Happy Valley-Goose Bay CNA campus for hosting and assisting with consultations.

A thank you also goes to the CNA Counselling Team for their input, advice, and recommendations on the project and the Newfoundland and Labrador Workforce Innovation Centre (NLWIC) for providing the funding necessary to undertake this research. Last, but certainly not least, a huge amount of gratitude goes to the immense amount of people who helped us along the way, including but not limited to:

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This report has been the product of several iterations of the research team, with Frank Walsh, Amy Dowden, and Malin Enström all contributing to the research and the report at various stages. In particular, section 3.1, Phase 1: Preliminary Research, summarizes three key reports written by previous members of the Readiness Project:

- Dowden and Williams (2019): "Considerations for the Admission of Indigenous Mature Student Applicants to Post-secondary Institutions: A Review of the Literature"
- Dowden and Williams (2020): "Alternate Admission Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges"
- Dowden (2020): "What we Heard from Indigenous Partners and CNA Stakeholders: Recommendations for CNA's Mature Student Admission Pathway and Other Supports"

Making changes to long-standing processes requires a commitment to move beyond what has always been done. As research participants bravely shared their experiences with CNA and their vision for how the College could be and do better, CNA must be brave in its commitment to Indigenization and Decolonization as part of its broader aims to become a more equitable, diverse, and inclusionary post-secondary institution. This report aims to hold the College accountable for realizing the important recommendations that were co-produced over an intensive period of research engagement. May it not go unread and unimplemented.

Executive Summary

As early as the 1990s, Indigenous governments and organizations had expressed concerns with how the College of the North Atlantic (CNA) approached admission assessments of Indigenous adults applying to the college as mature students. To meet the requirements, CNA required that individuals complete the Canadian Adult Achievement Test (CAAT) and achieve the minimum scores required for their program of choice. If an applicant met the threshold, they were admitted into their program. If they did not, their application was rejected. Indigenous applicants, governments, and organizations perceived the CAAT to be unnecessarily arduous and culturally inappropriate. Its content was also largely outdated, and the test was not aligned with the best practices for assessing competencies.

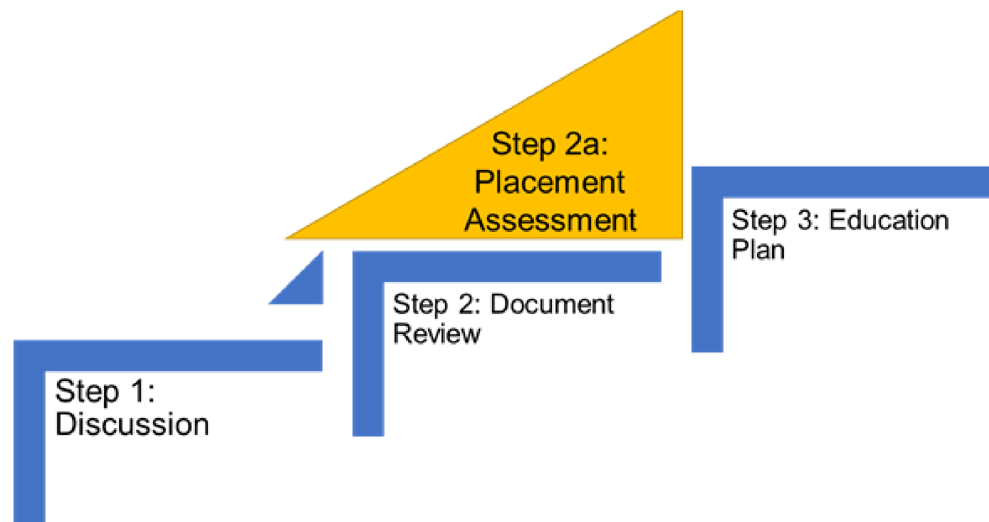
CNA conceptualized the Readiness Project as a collaborative research project with Indigenous partners to improve the admissions pathway for Indigenous mature student applicants that would help to reduce barriers and increase access to CNA programs. It started from the research question: What are the current best practices in academic admissions processes, pathways and tools for indigenous students that are reliable, valid, culturally sensitive and appropriate to inform the development of an assessment model and tools for use in admissions at College of the North Atlantic, Newfoundland and Labrador?

To develop a culturally relevant and supportive admissions process for mature Indigenous students, The Readiness Project adopted a mixed-method, collaborative research approach. To complete the data collection, analysis, and model conceptualization, the Readiness Project formed an advisory committee comprising stakeholders from Miawpukek First Nation, Mushuau Innu First Nation, Nunatsiavut Government, NunatuKavut Community Council, Qalipu First Nation, and Sheshatshiu Innu First Nation as well as the Labrador Aboriginal Training Partnership (LATP) and Mamu Tshishkutamashutau Innu Education (MTIE). The project comprised three main phases. Phase 1 included preliminary research with a literature review and environmental scan, a series of consultations, and the development of a new holistic admission model. In Phase 2, the pilot process was finalized through consultations with key stakeholders, after which the pilot was launched. In Phase 3, the proposed model as well as CNA's revised model for Mature Student admissions was evaluated. To ensure the feasibility of the pilot study, the model developed for mature student admissions was implemented for Indigenous mature students applying to Industrial Trades programs in the School of Natural Resources and Industrial Trades.

Preliminary research pointed to the benefits of a holistic approach to admissions for mature students. This would require admission decisions that consider the whole person, including their previous work, life, and learning experiences and their literacy and numeracy skills. Using a holistic approach would provide a more complete picture than decisions that rely primarily on test scores. Furthermore, many of the challenges applicants face during the application process could be mitigated by supports, including discussions on program offerings and entrance requirements, expected careers, assistance filling out the application form, and guidance on how to obtain documents required for admission.

In terms of assessment, the preliminary research underscores that while standardized tests can be useful, they also risk marginalization. As such, tests should only be used when it is necessary to determine whether an applicant has the literacy and numeracy skills necessary to be successful in their program of choice. For a test to be appropriate for Indigenous adults, it must be culturally relevant, program-specific, and have a difficulty level appropriate for the program. Moreover, the preliminary research made it clear that the mature student admission process should be updated for *all* students, as the CAAT is not appropriate for anyone.

Based on the findings from phase one, the Readiness Project conceptualized a Holistic Mature Student Placement Model for mature student admissions.



The process takes place across three steps:

1. **Discussion,** which guides the applicant to narrate how the program fits their career goals and their previous work and educational experiences. It also provides an opportunity for the Counsellor to explain the academic support available on campus, in the community, and from their funding agency. Importantly, the applicant is supported in

preparing the admissions form and gathering the documents needed to apply (e.g., transcripts).

2. **Document review,** whereby the Counsellor then reviews whether the applicant's education, training, work experience, and community work indicate their readiness for their program of choice and recommends either program enrollment or further assessment. If there are questions about an applicant's readiness, they will be asked to complete a placement assessment (or parts thereof; Step 2a: Placement Assessment) to identify their strengths and weaknesses and inform the co-creation of an education pathway.
3. **Education pathway and plan co-creation,** when the Counsellor meets with the applicant to review the results of the assessment (where applicable), the applicants' strengths as well as any areas where they might need to improve or avail of supports.

The Readiness Project determined that the best course of action was to develop an in-house, program-relevant assessment that could inform mature student placement. This test would not be the sole determinant of admissions decisions but would be used in cases where questions existed about applicants' academic readiness. The development process followed Niessen and Meijer's (2017) guidance that admission criteria should focus on what students *should* be able to do in their program of choice.

In Phase Three (2022-2023), the Readiness Project focused on evaluating the new model, focusing on trends in mature student enrolments, mature student retention, the DISK method implemented by CNA in 2022, and the barriers that mature students face in returning to school. It found that:

1. Mature student profile
    - Indigenous[1] students account for 6% of the average intake of new students per fall admissions cycle. By contrast, Statistics Canada (2021) data indicates that 12% of (36,640) people in Newfoundland and Labrador between the ages of 20-64 identify as an Indigenous person. As such, Indigenous students are underrepresented in CNA student admissions (with only 50% of the population represented). While these numbers may be

[1] References to Indigenous-identifying students depend on self-identification. As such, Indigenous-identifying students may not be accurately represented in the quantitative data. See Section 3.3.3. Data Collection for more information.

impacted by choices not to self-identify, they do seem to indicate a gap in representation.

  - Mature students are unrepresented at CNA, averaging less than 5% of new student admissions in these three schools, which is less than half of all people between the ages of 19 and 65 without a high school diploma. On average, Indigenous Mature Students comprise 9% of all mature student admissions. By contrast, 17% of the population of Newfoundland and Labrador between 20-64 without a high school diploma or equivalent identify as an Indigenous person. Accordingly, Indigenous-identifying students are also underrepresented among mature student admissions as current numbers only represent 52% of the community profile.
  - Women comprise 46% of new student admissions while men average 53.5% of new student admissions, with students identifying as X or undefined averaging less than 0.2%. For new admissions who identify as an Indigenous person, the average is similar, 55% male-identifying and 45% female-identifying, compared to 48% male and 52% female representation in the population more generally. The same distribution is found for non-Indigenous identifying Mature Students. For Indigenous Mature Students, however, women are underrepresented at only 25% of new admissions.
  - The majority of Indigenous-identifying mature students were enrolled in programs at Happy Valley-Goose Bay. Over the period observed, Indigenous-identifying new students were enrolled in programs at Bay St. George, Corner Brook, and Distributed Learning.
  - Mature students tend to enrol in programs in Business and Information Technology, averaging 45% of all new mature student admissions. Industrial Trades programs, mature student admissions in Industrial Trades program had the lowest average of new mature student admissions at 19% compared to 36% of mature students enrolling in Academic, Applied Arts & Tourism programs.
- New policy and process for CNA mature student admissions
  - At the beginning of the 2021-22 academic year, CNA's Admissions Procedure was modified based on the Readiness Project's findings and the requirement that "applicants must complete the **standardized assessment** instrument at a level approved by the College and attain the required **scores** for the program" (CNA, 2016) was replaced with

the requirement that "applicants must engage in CNA's Mature Student Admissions Process"[2].

- This allowed for the adoption of a more holistic approach to mature student admissions, with the Counselling Team adopting the DISK method in 2021-22. The DISK method moves away from the old process of assessment-recommendation towards an applicant-centred approach that draws on discussion and documents to establish pathways into education for mature student applicants. Importantly, the DISK method uses assessment (the CTBS-R) only in cases where readiness is not explicitly demonstrated in documentation. This process therefore represents a more nuanced way of considering applications than simply using the CAAT, a key change influenced by the Readiness Project's recommendations. This resulted in fewer applicants completing testing and an increased success rate for mature student applications.
- During the Stakeholder Consultation, students commented that temporal restrictions on CNA's timing for releasing course offerings does not coincide with funding agency deadlines, which meant that some may miss the deadline to obtain funding, which furthered complicated an already unfamiliar and difficult process (Dowden, 2020). In response, CNA began opening admissions earlier in the academic year, with the aim of having course offerings released in November rather than February.

- Relevant assessment
  - The evaluation of the CTBS-R found similar problems with that standardized test as those that were identified for the CAAT. The assessment is not aligned with CNA programs and is not culturally relevant for Indigenous applicants. Moreover, there is sparse research on its effectiveness for use at the post-secondary level. These issues will also likely be found in any standardized test. The only way to ensure program relevance is to create an in-house assessment and consult with Indigenous stakeholders about its cultural relevance and cultural safety before it is officially implemented. Such an assessment should be designed based on the Trades and College bridging programs for CAS transition and CAS transition courses for all other CNA diplomas and certificates.

[2] https://www.cna.nl.ca/about/pdfs/policies-and-procedures/Academic/Admission/2Procedure/AC-102-PR_Admission.pdf

- Bridging programs
    - The Readiness Project heard that CNA needed to develop more pathways into education for applicants who may be missing some course prerequisites for their program of choice. To this end, CNA established the College and Trades Bridging programs to replace the former Aboriginal Bridging and CAS Trades programs. These new programs are being piloted at the Happy Valley-Goose Bay Campus and will eventually be rolled out to other campuses.
- Alignment
    - In its review of Industrial Trades foundational skills, the Readiness Project identified that there is a lack of alignment between what is required to graduate high school and what is required to be successful in an Industrial Trades program.
- Connecting to Community
    - The fruitfulness of the Readiness Project's findings is directly connected to the level of commitment Indigenous partners had to ensuring the project's success. There is a strong demand for CNA to engage more with Indigenous communities, to bring the College to them, and to consult with them to address their heterogeneous needs.

In its evaluation, the Readiness Project identified key areas for improvement. The Readiness Project recommends that CNA address the following areas:

1. Temporal Restrictions: Mature student admission at CNA is only available for programs following the "First Qualified, First Accepted" admission process, and requires applicants to be at least 19 years old when they apply and out of school for at least one year (CNA, 2019). Waiting for applicants to be 19 years of age is common across Canada. The one-year waiting period is, however, uncommon. If a person leaves school in, for example, their fourth year of high school, under the mature student policy they must wait a year from their school leaving date. As delaying a person's ability to complete post-secondary studies keeps them in a position of waithood, a suspended period between youthhood and adulthood (Honwana, 2014), and every year a person is out of education reduces their earning potential, temporal and age restrictions should be removed from the policy or replaced with a requirement that a person will be 18 within that calendar year.
2. DISK Method: While the DISK method is a more holistic approach to Mature Student Admissions that has had positive impacts on mature students, specific guidelines are required to ensure consistency across the campuses.

3. Eliminating the standardized test: The CTBS-R is a Canadian revision of the Iowa Test of Basic Skills, which is commonly used across the United States (ITBS; Duma, 1989). There is limited data on this assessment's use for post-secondary admissions. If CNA decides to maintain assessment as part of its procedures, in-house assessments should be developed building upon the College's already developed CAS Transition Bridging program. Using a curriculum sample of the related reading, writing, and numeracy learning outcomes from these programs would be better able to show whether an applicant is ready for their program of choice than a standardized test.
4. Establish more bridging options for all schools: Current bridging options are restricted to Indigenous students or the Trades. In addition to these programs, CNA should explore options to develop bridging programs for all schools and determine whether provisional admissions could also be included in its admission policy.
5. Increase Connections to Indigenous Communities: Bringing CNA to Indigenous communities is an important step forward. CNA should investigate the feasibility of establishing satellite campuses and make more effort to communicate educational opportunities with the entire community rather than limiting the scope to grade twelve students.
6. Develop culturally appropriate data collection processes in collaboration with Indigenous Stakeholders: As Oldford and Ungerleider's (2010) report on Indigenous students in post-secondary education in Ontario cautions, program design, delivery, and monitoring are impossible without accurate, consistent, and reliable data.
7. Establish a communication plan for mature student admissions: Under the current mature student procedures, applicants are only informed of the mature student admissions process when it is determined that their program and their application fit the criteria for a mature student application. Although the policy is outlined on a publicly available website, applicants need to be informed of the option. There is no standardized procedure for how this happens: sometimes applicants reach out to the counselling team directly, sometimes they are told about the possibility at an information session, sometimes they learn about it through an admissions officer, and sometimes they hear about it from other people. CNA should therefore develop a communication plan to get the message out about its Mature Student admissions and its current bridging programs. Additionally, consideration should be given to adopting the practice used at other

Canadian colleges whereby applicants who do not meet requirements are automatically considered under the MS process.

The Readiness Project recommends that the Government of Newfoundland and Labrador:

1. Explore opportunities to fund bridging programs: Deciding to go back to school can be a significant undertaking for individuals. Financial concerns can be a major barrier. This is especially the case for individuals who need to complete upgrading before they can enter their programs. Options should be explored to determine the feasibility of funding bridging programs to ensure equitable access to education.
2. Review the feasibility of aligning Industrial Trades Program Foundational Competencies and High-School Requirements: As the Readiness Project sought to find a way to align prerequisite competencies for programs in the Industrial Trades with CNA programs and courses, it became apparent that this process is difficult as high-school requirements go above the foundational competencies needed to complete the first semester in the Industrial Trades. The Government of Newfoundland and Labrador should draw on other models to assess the current high-school demands, including the vocational training approach in Quebec or the German approach of vocational schools, to identify opportunities to develop a trades-oriented high school program.
3. Continue to fund impactful research that informs systemic changes to increase Equity, Diversity, and Inclusion in Newfoundland and Labrador: This research would not have been possible without funding from Newfoundland and Labrador's Workforce Innovation Centre (NLWIC). This allowed CNA to confront a long-standing challenge and identify the best practices for addressing the issue by developing a research project that not only conceptualized but also tested a new model. This model has had positive impacts on the lives of a vulnerable student population and similar research is expected to have equally as positive results.

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1 Introduction

As early as the 1990s, Indigenous governments and organizations in Newfoundland and Labrador had been expressing concerns about the process that the College of the North Atlantic (CNA) had been using for admission assessments of Indigenous adults applying as mature students to CNA. Under the mature student category, individuals could apply to college programs without a high school diploma, or program prerequisites could be waived provided the applicant was 19 years of age or older and had been out of school for at least one year. The mature student category had been established to help ease the transition for individuals out of education back into education, to increase their employability and earning potential.

To meet the requirements of the mature student category, however, CNA required that individuals complete the Canadian Adult Achievement Test (CAAT) and achieve the minimum scores required for their program of choice. If an applicant met the threshold, they were admitted into their program. If they did not, their application was rejected. In some cases, applicants would be advised to complete upgrading by, for example, receiving their high school diploma through the Adult Basic Education (ABE) program.

Indigenous applicants, governments, and organizations perceived the CAAT to be unnecessarily arduous and culturally inappropriate. Its content was also largely outdated, with questions about rolls of film and 4 4-dollar hourly wage. How it assessed knowledge, for example, using defining terms as a means to assess literacy skills, was also questionable in terms of best practices for assessing competencies, although the literature emphasizes the complexity of measuring reading comprehension and literacy (see, e.g., Fletcher, 2006; Leu et al., 2018; Snyder, Caccamise, and Wise, 2005).

In 2016, as part of a project examining economic development in Indigenous communities, CNA partnered with the Atlantic Aboriginal Economic Development Integrated Research Program (AAEDIRP) to host a two-day workshop at the Happy Valley-Goose Bay campus with Elders, representatives from Indigenous governments, Indigenous students, and representatives from industry (AAEDIRP, 2016). During those discussions, Chief Eugene Hart from Sheshatshiu Innu First Nation reiterated that there were issues around admission assessments for Indigenous applicants. He asked CNA to provide a culturally appropriate pathway for Indigenous adults. In response to these concerns, CNA conceptualized the Readiness Project as a collaborative research project with Indigenous partners to improve the admissions pathway for Indigenous

mature student applicants so that it respects Indigenous identities and ways of knowing. The aim was to provide a culturally appropriate process for Indigenous mature students that would help to reduce barriers and increase access to CNA programs. It started from the research question: What are the current best practices in academic admissions processes, pathways and tools for indigenous students that are reliable, valid, culturally sensitive and appropriate to inform the development of an assessment model and tools for use in admissions at College of the North Atlantic, Newfoundland and Labrador?

1.1 College of the North Atlantic

College of the North Atlantic (CNA) is a public college in the province of Newfoundland and Labrador. The College has its roots in the development of post-secondary education in the 1960s, including the distinct vocational schools (DVS) opened in 18 rural communities across Newfoundland and Labrador as well as the College of Trades and Technology in St. John's and the Heavy Equipment School and Adult Upgrading Centre in Stephenville. In 1977, the DVS, Adult Upgrading Centre, and Heavy Equipment School merged to form the Bay St. George Community College in Stephenville, marking the first community college in Newfoundland and Labrador. By 1987, other DVS were merged to expand the community college format across Labrador and the Avalon, Eastern, Central, and Western districts of Newfoundland along with the establishment of the Cabot Institute and Fisher Technical College (renamed the Fisher Institute of Applied Arts and Technology in 1991). The regional community colleges established the foundation for College of the North Atlantic, which was officially established in 1997.

Currently, the College is one of the largest post-secondary institutions in Atlantic Canada, and it is headquartered in Stephenville, Newfoundland with 17 campus locations across the province and a global presence in China, South America, Southeast Asia, Africa, the Caribbean, and Qatar.

Campus Locations

Baie Verte	Happy Valley-Goose Bay
Bay St. George	Labrador West
Bonavista	Placentia
Burin	Port aux Basques
Carbonear	Prince Philip Drive
Clarenville	Ridge Road
Corner Brook	Seal Cove
Gander	St. Anthony
Grand Falls-Windsor	

Annually, CNA offers more than 100 full-time programs across five schools—Academics, Applied Arts and Tourism; Business and Information Technology; Engineering Technology; Health Sciences; and Natural Resources and Industrial Trades—in certificate, diploma, post-diploma, and degree programs. It also provides more than 400 courses online in areas such as Business Administration, Comprehensive Arts and Science (CAS) Transition, Early Childhood Education (ECE), Journalism, Industrial Trades, Executive Office Management, Medical Office Management, and Records and Information Management. Additionally, CNA trains apprentices so that they can write their journeyperson certification examination.

In the 2022-23 Academic Year, CNA enrolled approximately 7,000 students. Most students are enrolled in programs in the schools of Academics, Applied Arts and Tourism (27%), Natural Resources and Industrial Trades (25%), Business and Information Technology (24%), and more than 12,379 enrolments in customized and continuous learning courses.

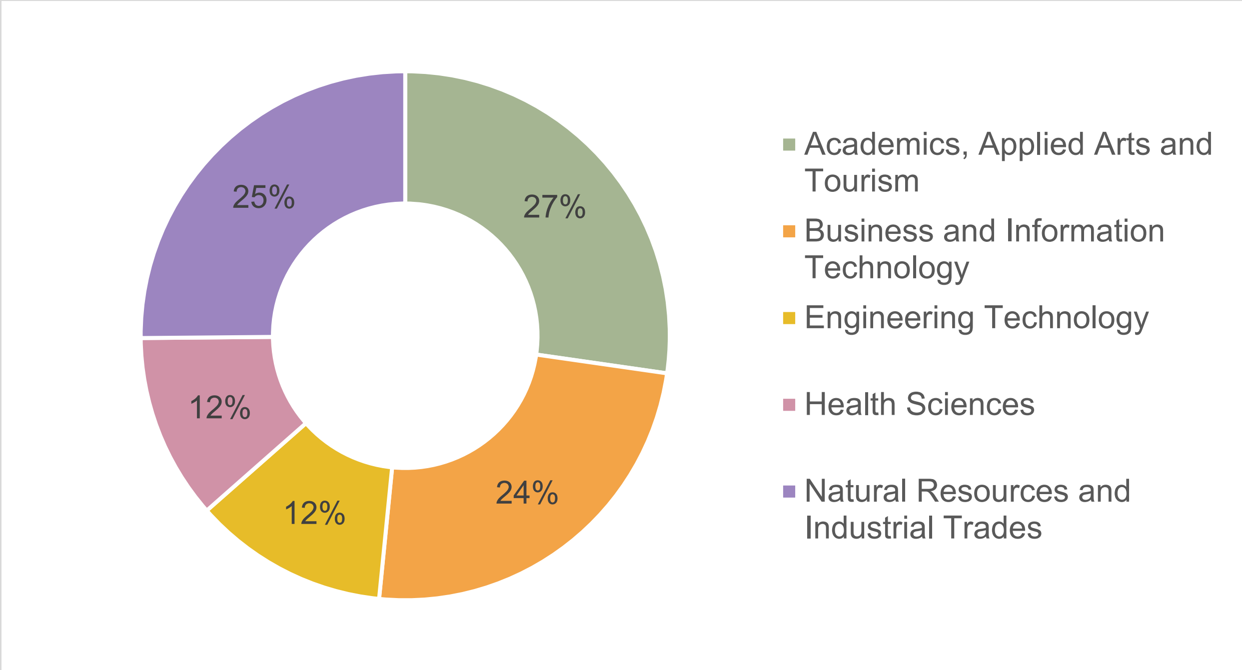
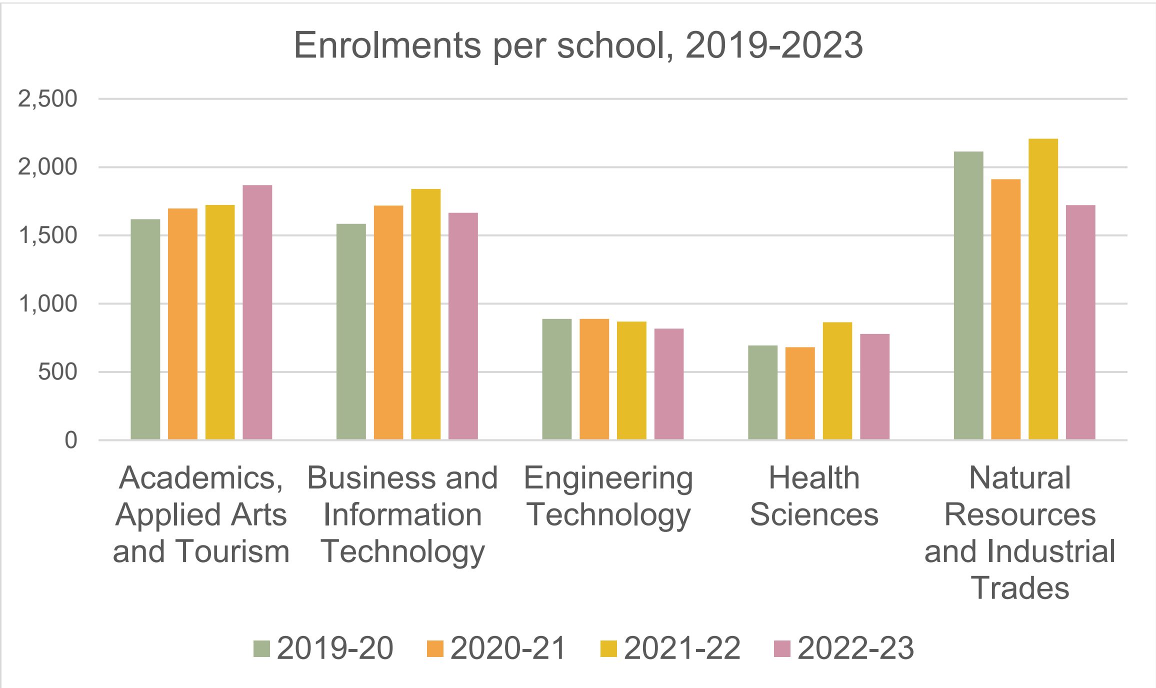
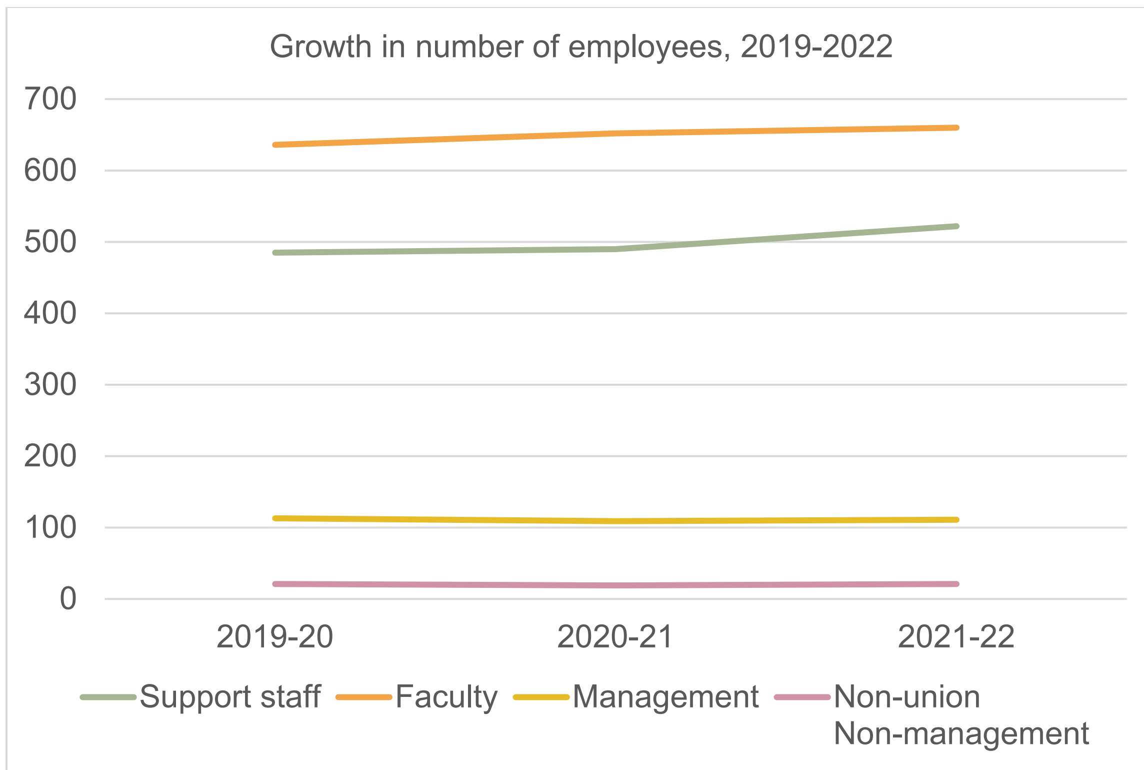


Figure 1: Enrolments, CNA (2020-21)

Historically, these three schools have also had the highest number of student enrolments, with Academics, Applied Arts, and Tourism seeing a steady increase.



At the same time, the total number of staff has grown by 3%, with faculty growing by 5% to meet increased student demands.



1.2 College Admission in the Canadian Context

Admissions is a key component in post-secondary management. Strong admissions processes can ensure that there are enough students to provide programs to and that available resources can meet the demand. Moreover, admissions ensures that students can complete the programs they are enrolled in and that they are both prepared for and motivated to succeed at the post-secondary level. In short, a strong admissions process is important for student satisfaction.

College admissions in Canada vary depending on the province, type of institution, and program of study. Moreover, the type of parchment awarded by Canadian Colleges ranges from certificates to diplomas to associate and bachelor's degrees. Common key features and factors play a role in college admissions across the country, including admissions processes and academic, language, and program-specific processes.

The application process generally begins with the creation of an online application account through a college's online application portal. Some colleges, such as CNA, still accept paper

application forms. Completing the application form generally requires personal information, educational history, program choices, and any other required information specific to the college or program. Depending on the college and program, admission requirements vary but generally include a minimum grade or average. Applicants may also need to upload documents—e.g., transcripts, proof of language proficiency, letters of recommendation, personal statements—and pay an application fee to officially submit their application.

Across Canada, applicants must submit and pay for their applications for each school that they apply to. As an exception, Alberta, Ontario, and Montreal have engaged outside organizations to streamline the application process. Applicants submit their applications to a portal, which processes applications, determines which applications meet program requirements, and then directs applications to the appropriate college to make the final decision about admissions. This one-stop-shop approach centralizes applications and cuts down on the number of applications that an applicant must submit.

CNA's admissions process largely parallels the approach used by other Canadian colleges. Defined under policy AC-102[3], CNA applicants are admitted using either a "First Qualified, First Accepted" or a Competitive Admissions process. For "First Qualified, First Accepted" admissions, CNA uses a standardized admissions process to ensure consistency across its campuses. Applicants are ranked based on specific criteria in competitive admission processes, with the highest-ranked applicants admitted to programs.

According to procedure AC-102-PR[4], prospective students must apply to CNA using the approved application form either online or in writing and pay a non-refundable application processing fee. Their application is then reviewed to determine if it meets the educational and other requirements for entry into the particular program. To facilitate such a review, prospective students must provide an official copy of their high school transcript (or Record of Achievement for ABE Students) and this official copy must be translated if it is issued in a language other than English. Prospective students who do not meet program requirements or program requirements can be considered under special admissions or as a mature student applicant.

The Academic Calendar outlines the specific academic course prerequisites for each program. Applicants are not permitted to apply for more than two programs in the same academic year

[3] CNA Operational Policy: Admission

[4] CNA Operational Procedure: Admission

and they must identify what is their primary and what is their secondary choice. Required documentation must be submitted within three months of application or the application is withdrawn; applications are considered incomplete until all documentation is received. CNA obtains transcripts for applicants enrolled in the Newfoundland and Labrador School System directly from the Department of Education when final marks are released, which limits the amount of documentation that Newfoundland applicants are required to submit. Additionally, applicants who are completing Level III in the Newfoundland and Labrador School system can submit their transcript of grades from Level I and Level II and a list of courses they are completing in Level III at the time of their application. Provisional admissions decisions are made based on these documents until the final transcript from Level III is received.

Applicants applying from outside the Newfoundland and Labrador School System must submit their documentation directly to CNA. Additionally, applicants who are second-language English speakers may have to complete a test of English proficiency. All documents must also be translated into English and the original documents, and the translations must be submitted to CNA.

1.2.1 Mature Student Admissions

Colleges across Canada offer a wide variety of alternate admission processes for applicants who do not meet entrance requirements. The most common process is the mature student admissions process. Under this process, applicants are required to meet a minimum age requirement, ranging from 17 years to 23 years, with 19 years of age the most commonly used (Dowden and Williams, 2020). Additionally, colleges can also require that applicants are out of school for a particular amount of time before they apply as mature students. This can range from 1 year to 3 years (Dowden and Williams, 2020).

To determine whether mature student applicants are ready for college programs, colleges across Canada often use standardized or in-house tests (Dowden and Williams, 2020). They might also be required to meet with someone from the college, complete a prior learning assessment, submit a CV or other document documents, and complete challenge exams for specific courses. In some cases, letters of recommendation and instructor permission are also used (Dowdon and Williams, 2020).

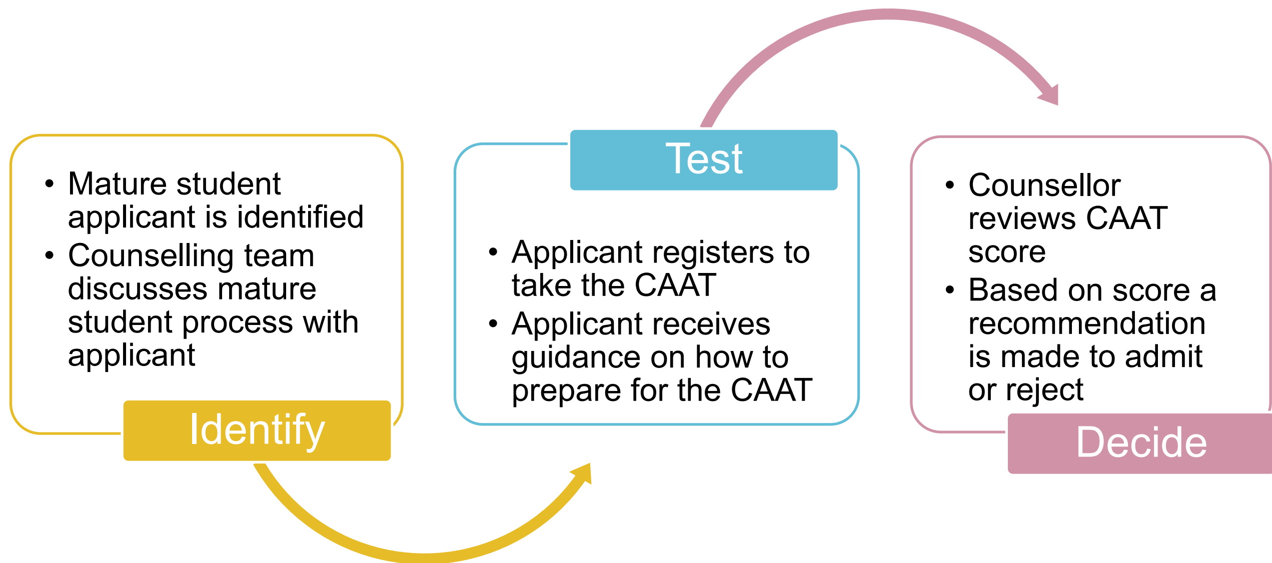
CNA has two alternate admission procedures for applicants who do not meet minimum entrance requirements: mature student admission and special admission. Mature student admission is

only available for programs following the “First Qualified, First Accepted” admission process, and requires applicants to be at least 19 years old when they apply *and* out of school for at least one year (CNA, 2019). The special admission procedure allows CNA to “designate groups comprised of individuals who face traditional barriers to post-secondary entry” (CNA, 2019, p. 4), and these admission decisions are made by a committee. Through special admissions, applicants may be asked to provide a letter of recommendation and/or meet other requirements as determined by the College. Applicants with disabilities who have completed a modified high school curriculum can also apply under special admissions.

Under the category of Mature Student, applicants who do not meet the educational prerequisites for programs with “First Qualified, First Accepted” admissions process and who are at least 19 years of age and out of school for at least one (1) year can engage in CNA’s mature student admissions process to determine if they have the knowledge and experience that could be equated with high-school completion. As Mature Student applicants can only apply to non-competitive admissions programs, their program options are limited. Most programs at CNA have a minimum entrance requirement of a high school diploma or equivalent. Moreover, some CNA programs have specific course prerequisites (in addition to minimum entrance requirements) that cannot be waived through the mature student process.

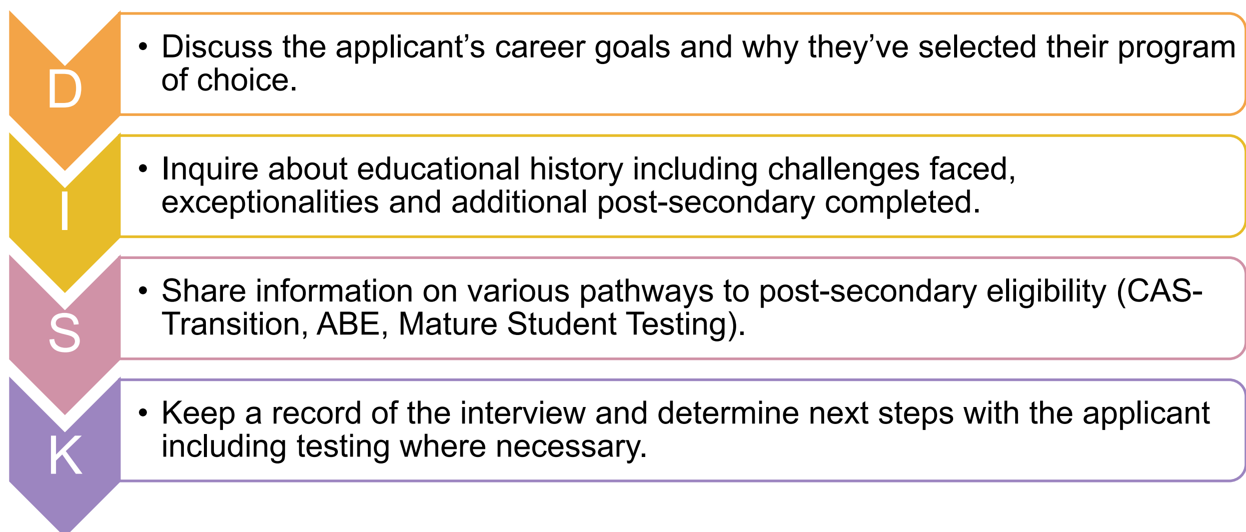
Once it is determined that a person is applying to a program that will allow for mature student admissions, applicants are informed of the mature student admissions process. There is no standardized procedure for how this happens: sometimes applicants reach out to the counselling team directly, sometimes they are told about the possibility at an information session, sometimes they learn about it through an admissions officer, and sometimes they hear about it from other people. Importantly, hearing about mature student admissions can often occur when people have been rejected after applying to a program if they have completed high school but lack the requirements for a specific program.

Before the pandemic, CNA’s standard process for mature student admissions followed a process of identify-test-decide across the following procedure:



When Newfoundland and Labrador closed its post-secondary institutions to in-person learning to stop the spread of COVID-19, CNA had to adapt its mature student process. Applicants who applied to CNA before March 2020 would have undergone CAAT testing but after March 2020, applicants were asked to submit a letter of recommendation. This process continued until May 2021, when the Counselling team brought forward concerns about whether references could be used effectively to determine applicants' readiness for all programs. In response, the Counselling Team sought to find a test that could be written remotely, and CNA began to use the Canadian Test of Basic Skills (revised version). Additionally, the Counselling Team began discussing the implementation of a method similar to what the Readiness Project had proposed, which shifted the process from an identify-assess-decide method to a method that included a discussion with applicants first and testing only in those cases where there were questions about the applicant's readiness and competencies in core foundational subjects such as math, reading, and writing.

At the beginning of the 2021-22 academic year, the counselling team implemented the DISK method, which draws on early findings of the Readiness Project.



Although the DISK method still includes a standardized assessment, CNA has moved towards a more holistic approach that helps applicants envision their pathway back into education rather than simply writing a test and having an admissions decision made based on their score. In this approach, testing is the exception rather than the rule, which has led to an increased rate of acceptance for mature student applicants (See Section 4.3.5 The DISK Method for more information).

1.2.2 Upgrading and Bridging Options

Across Canada, colleges offer upgrading and/or transition programs for applicants who do not meet entrance requirements. This can range from tuition-free high-school equivalency programs to enrolling people without a high-school diploma in specific pre-requisite courses to meet entrance requirements for their program of choice to bridging programs (Dowden and Williams, 2020). CNA offers four bridging programs:

1. College Bridging

This program offers foundational courses to help bridge any gaps between high school and college, offering a preparatory certificate that can help refresh and/or build upon learners' knowledge of core competencies such as reading, writing, math, research, scientific experimentation, study skills and time manage, and critical thinking. Designed specifically for Indigenous learners, the program incorporates cultural supports, relevant materials, and community participation. It aims to provide learners with a solid foundation that helps establish a pathway in other college programs, and learners can receive credit for courses that are

transferable to the Comprehensive Arts & Science (CAS) Transition program (see below for description). According to its program description[5], the program aims to help learners:

- Apply the necessary academic skills and foundational knowledge to succeed in college-level coursework, including critical thinking, writing, and study skills.
- Develop self-confidence through positive feedback, support, and encouragement.
- Adjust to college culture, including norms, expectations, and resources available.
- Create opportunities for personal growth, including leadership development, goal setting, and self-reflection.
- Connect with peers, faculty, and staff, building a supportive community that can aid in their academic success.
- Set and achieve academic and personal goals, ensuring that they are well-prepared for their college experience.
- Improve fundamental employability skills to enhance employment opportunities.

To apply for entrance into the program, applicants should have graduated high school or be at least 19 years of age at the commencement date of the program with a minimum of grade 9. Applicants can also apply under the Mature Student procedure (AC-102-PR Admission).

2. Comprehensive Arts & Science (CAS) Transition

The Comprehensive Arts and Science (CAS) Transition program offers learners an opportunity to complete courses needed to apply to their program of choice. It has been designed with the mature learner in mind with a balance of new and refresher information in core competencies such as English, Mathematics and Sciences. Like the College Bridging program, the program also offers courses on essential skills for postsecondary success such as Critical Thinking and Effective Learning and an opportunity to think critically about their future career plans and the programs that might enable them to realize such goals. To apply, applicants should have a high-school diploma or an ABE certificate with a General College Profile (or a Business-Related College Profile or Degree and Technical Profile). Additionally, mature student applicants can

[5] More information on requirements and program description can be in the program guide for College Bridging

apply under the Mature Student Procedure (AC-102-PR Admission).[6]

3. Trades Bridging

The Trades Bridging program was designed specifically for applicants who are interested in completing a trades program but are unable to meet the program requirements. It provides courses that allow mature students who have been out of education for some time the opportunity to refresh their knowledge before applying to an industrial trades program. To apply, applicants must either have a high-school diploma or be 19 years of age at the commencement date of the program with a minimum of Grade 9 completion. Individuals can also apply for admission under the Mature Student procedure.[7]

Upon completion of the program, students will have completed courses in English, mathematics, and science as well as certificates in Standard First Aid, fall protection, and confined spaces. They are also provided an opportunity to explore trades like Carpenter, Electrician, and Heating Systems Technician. Importantly, if an applicant decides to complete a program outside of Industrial Trades, they can also apply for admission to the Comprehensive Arts and Science (CAS) Transition program upon completion of Trades Bridging.

4. Comprehensive Arts & Science (CAS) Transfer: College-University

This program provides students who intend on enrolling in university the opportunity to complete university-level courses at a smaller campus and often closer to their hometown. This helps to eliminate part of the transition to post-secondary studies that young people struggle with, leaving their homes behind and learning how to live on their own outside their parents' homes (see, for example, Chow and Healey, 2008; Palmer and Owens, 2009; Pokorny et al., 2017). Students must have completed high school with an average of 60% in English, math, and science courses (biology, chemistry, physics, and earth systems) at the 3000 level. Additionally, applicants must have two credits at the 3000 level in a Social Science or a Modern/Classical Language, e.g., History, Geography, Religious Studies, or French.[8] As Memorial University of

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[6] More information on requirements and program description can be found in the program guide for CAS Transition

[7] More information on requirements and program description can be found in the program guide for Trades Bridging

[8] More information on requirements and program description can be found in the program guide for CAS Transfer

Newfoundland and Labrador requires that applicants have a minimum of 70% to apply for entry[9], this program can also act as a bridge to university for applicants who are just short of the required average. Applicants can also complete CAS Transition before applying to complete CAS transfer (for information on this program see below). Applicants who have completed Adult Basic Education with a degree and technical profile are also eligible to apply. Importantly, applicants who do not meet the education prerequisites for this program, and who meet the requirements of mature student admissions can apply under the Mature Student Requirements (Procedure AC-102-PR Admission).

In contrast to other Canadian colleges, CNA does not offer a high-school equivalency program. Although CNA used to offer ABE at 16 of its campuses and satellite learning centres in northern Indigenous communities, the service was privatized in 2013. Newfoundland and Labrador is currently the only Canadian province that does not offer adult basic education at a public college.[10] Currently, 36 sites have been approved to offer ABE in Newfoundland and Labrador[11], and the government provides funding for individuals who want to complete ABE, including a start-up allowance, monthly stipend, transportation, and subsidized child care[12].

1.2.3 Indigenous Supports in College Admissions

Although colleges across Canada offer additional supports for Indigenous people during the application and admission phase, they do not necessarily have special admissions processes for Indigenous students. Commonly, support includes assistance with school and funding applications, Indigenous student recruiters, dedicated or priority seats for Indigenous students, and bursaries, scholarships, or awards offered by the college (Dowden and Williams, 2020). After admissions, Indigenous students can avail of such resources as an Indigenous Coordinator, Advisor, or Navigator, gathering/ cultural spaces, Elders, or other knowledge keepers onsite, and cultural and/ or social events (Dowden and Williams, 2020).

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[9] More information on requirements and program description can be found in Memorial University's Admission Requirements

[10] CBC, "N.L. government calls tender for Adult Basic Education"

[11] Government of Newfoundland and Labrador, ABE Service Providers

[12] Government of Newfoundland and Labrador, Supports to Attend Adult Basic Education (ABE) Literacy Training

CNA does not have dedicated resources for helping Indigenous students apply to CNA programs and does not have a specific process for Indigenous student admissions. Instead, CNA's supports for Indigenous students are largely limited to the Happy Valley-Goose Bay Campus in Labrador, which is on traditional Innu and Inuit territory and has the highest percentage of Indigenous student across all CNA Campuses. There are two positions dedicated to supporting Indigenous students, the Aboriginal Support Coordinator and Aboriginal Support Specialist, and an Aboriginal Resource Centre.

1.3 Indigenous Peoples and Newfoundland and Labrador

In Newfoundland and Labrador, most Indigenous people are represented by five major Indigenous governing bodies, each with their own unique histories, cultures, and experiences with education. Innu First Nation, NunatuKavut Community Council, and Nunatsiavut Government govern their respective traditional territories of what is now the Labrador portion of the province, while Miawpukek First Nation and Qalipu First Nation are based on what is now known as the island of Newfoundland. The Beothuk, who had lived for generations on the Island, did not survive European colonialization that pushed them from the coastal to inland regions and away from their traditional food sources and brought them into contact with European settler violence and infectious disease (Marshall, 1996). Although the genocide of the Beothuk long dominated the historical narrative of the European Settlement of what is now Newfoundland and Labrador, these lands are also the traditional homes of the Innu, the Inuit, and the Mi'kmaq who have lived there for generations and will live here for generations to come.

Innu Nation is the governing body for over 3000 people who live in two communities, Sheshatshiu where the Sheshatsiu Innu live and Natuashish where the Mushuau Innu live. It was first organized in 1976 as the Naskapi Montagnais Innu Association (NMIA), officially changing its name to the Innu Nation in 1990. It has been involved in an ongoing land claim and self-governance negotiation since the organization was first founded. It was not until 2002 that the Canadian Government recognized the people of Innu Nation as status Indians under Canada's *Indian Act*.[13] Before European, Canadian, and Newfoundland and Labrador's interference, the Innu had been hunter-gatherers, who had followed their prey across Labrador

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[13] Unless otherwise noted, information on the Indigenous organizations of Newfoundland and Labrador are taken directly from the respective organization's official websites and public relations. For Innu Nation, see the Innu.ca

and Quebec. By the 1950s, the Innu had been driven from their nomadic lifestyle into communities and stationary homes. Settled into the communities of Davis Inlet and Sheshatshiu, their territories continued to be placed under pressure, flooded during the development of the Upper Churchill Falls and their main source of hunting was also driven from the land by NATO military exercises.[14] As the Innu belong to a territory that spanned vast areas of what has been carved up by Western-influenced mapping techniques, their lands cannot be represented in a conclusive map (Samson, 2003). Innu Nation seeks to prevent further encroachment and works to ensure the social and economic development and well-being of its communities. Mamu Tshishkutamashutau Innu Education (MTIE) was established in 2009 to provide schools that "honour and celebrate Innu culture, Innu traditions, and Innu-aimun (language)"[15] in Sheshatshiu and Natuashish.

In 1973, the Labrador Inuit Association (LIA) was established to work on behalf of Labrador Inuit interests in Newfoundland and Labrador and settle claims with Canada. In 1977, the LIA filed a statement of claim with the Government of Canada to the land and sea ice of Northern Labrador. This struggle continued until 2005 when the Labrador Inuit Land Claims Agreement was officially signed.

This led to the establishment of the Nunatsiavut Government and Nunatsiavut as an autonomous region comprising the communities of Hopedale, Makkovik, Nain, Postville, and Rigolet. The Nunatsiavut Government oversees the social and economic development of Northern Labrador and provides the necessary assistance to ensure the education and health of the residents and the heritage of its communities.[16]

Source: Tourism Nunatsiavut

[14] Sheshatshiu Innu First Nation

[15] Innu Education

[16] Nunatsiavut Official Website. Map from: Explore Nunatsiavut.

The NunatuKavut Community Council (NCC) represents nearly 6,000 Inuit in southern and central Labrador. It was officially established in 1981 and received legal recognition in 1985. It represents the traditional territory of NunatuKavut Inuit travel routes, hunting, trapping and harvesting areas, spanning the Labrador straights, including L'anse au Loup, L'anse au Clair, Forteau, Red Bay, West St. Modeste, Capstan Island, Pinware, L'Anse Amour, Battle Harbour, Port Hope Simpson, Charlottetown, Norman Bay, Pinsent's Arm, Sandwich Bay/Island of Ponds, including Cartwright, Paradise River, Black Tickle/Domino as well as places in central and Northern Labrador and Labrador West. NCC defines its vision "to govern ourselves, providing and caring for one another, our families, and our communities while nurturing our relationship with our land, ice, and waters."[17]

Source: NunatuKavut Community Council Website

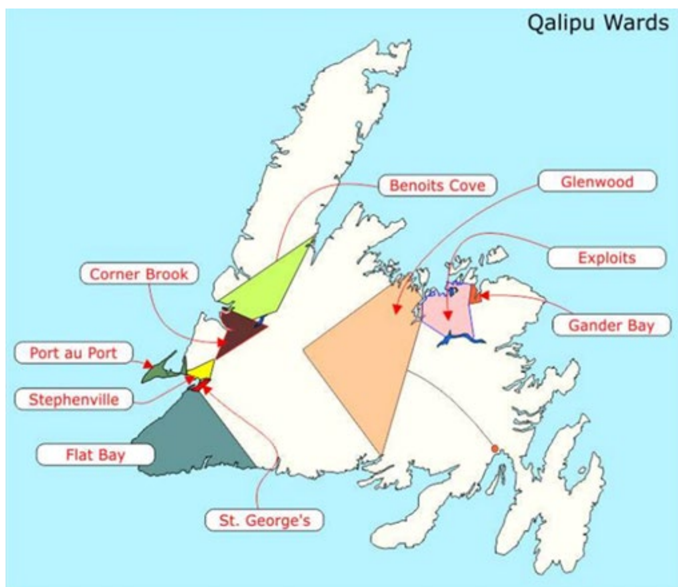
Miawpukek Mi'kamawey Mawi'omi is a First Nation Reserve located on the south coast of the island of Newfoundland, at the mouth of the Conne River. The Nation has long been a Mi'kmaq site in what is now known as Newfoundland, first as a semi-permanent camping site, as a permanent settlement since at least 1822, and a reserve since 1870. Despite such a long history, Miawpukek Mi'kmaw Mawi'omi was not officially recognized under the *Indian Act* until 1987. With a population of over 3000 people in 2022, with 822 living on-Reserve and 2238 off-Reserve, Miawpukek

Source: Embedded Google Map, Miawpukek First Nation website

[17] NunatuKavut Community objectives

Mi’kmaw Mawi’omi is one of the fastest-growing communities in Newfoundland and Labrador. Its government is responsible for intergovernmental relations, financial matters, capital, lands, housing, health and social services, and education, training, and economic development. Miawpukek Mi’kmaw Mawi’omi First Nation owns the local school, Se’t A’newey Kina’matino’kuom, and provides educational materials to all its members, regardless of age. The curriculum includes the spiritual and cultural teachings of the Mi’kmaq people, contributing directly to Miawpukek Mi’kmaw Mawi’omi’s mission: “To Preserve, Promote and Advance The Culture, Health, Economic, Educational And Social Well-Being of Our People – Including Our Language, History And Spirituality.”[18]

Qalipu First Nation is part of the Mi’kmaq Nation, which extends along the eastern seaboard of North America from Maine to Newfoundland. With nearly 25,000 recognized members, it is one of the largest bands in Canada with members across Newfoundland and Labrador and in other provinces and countries. Despite its large size, the Government of Canada did not officially recognize it under the *Indian Act* until 2011. Qalipu comprises 67 traditional Mi’kmaq communities. It is governed by an elected Chief and Council, with Ward Councillors representing each of its diverse communities. Its central administrative office is located in Corner Brook. It offers education and training, tourism development, health and employment programs, registration assistance, environmental monitoring, and supports cultural and economic development; “Qalipu Mi’Kmaq First Nation exists to achieve the advancement of our people.”[19]



Source: Qalipu Mi’kmaq First Nation Overview, Qalipu Website

Despite such diversity, however, there is a significant lack of understanding of the Indigenous Peoples in Newfoundland and Labrador. Research has pointed to the inadequacies of the Newfoundland and Labrador curriculum in addressing the history of the Indigenous Peoples of

[18] Miawpukek First Nation Website

[19] Qalipu First Nation, Building Our Nation: Strategic Plan 2020-2029

Newfoundland and Labrador. Godlewska et al. (2017a) summarize that learning outcomes generally overlook major aspects of the history of Indigenous peoples, with the history of settlement and settlers dominating the history curriculum. This has led to a paucity of knowledge among high-school graduates about Indigenous history and, concerningly, thinking marred by racism, stereotypes, and a lack of understanding of the diversity of Indigenous people across Canada, views which are often reinforced rather than dispelled by the high-school curriculum (Godlewska et al., 2017b). As the overview here shows, erasure has been a mainstay of settlers' positioning of the Indigenous Peoples of what is now Newfoundland and Labrador. This extends from John Cabot up to today's current—albeit recently revised[20]—educational curriculum. As recently as 2020, the Government of Newfoundland and Labrador's Heritage Website page on the Indigenous history of Newfoundland and Labrador narrated that the Beothuk "became extinct" after the nineteenth century with little mention of who was behind the extinction (see, for example, Murphy, 2020)[21]. In addition to a focus on extinction, popular belief

[20] For example, Unit 2 in the Grade 8 social studies program (revised in 2005) includes the learning outcome, "students will be expected to demonstrate an understanding of the Aboriginal [sic] peoples who lived in Newfoundland and Labrador in the 19th Century". It also explores Indigenous rights and land claims, environmental concerns, and the evolution of Indigenous organizations. The Grade 9 social studies curriculum, which focuses on Canadian identity with the aim of expanding their understanding of what it means to be Canadian, encourages students to explore what it means to be Canadian and to think critically about, for example, why there has been a decline in traditional activities of Indigenous Peoples and who should take responsibility for such changes (p. 56). The program also addresses Indigenous treaty rights. Mandatory Social Studies courses in the high-school curriculum, which are not focused on Canada, include learning objectives on cultural differences among Indigenous groups (2201, revised in 2019). Often learning outcomes lend themselves to discussing Indigenous history and issues but the inclusion of such topics are teacher-dependent. For example, 3201 (revised in 2020), includes the guidance: "students can examine the issues in First Nations, Inuit and Métis communities that have contaminated, toxic or faulty water treatment. This lack of safe drinking water across 133 Indigenous communities negatively affects quality of life, culture and the economy" (p. 266). Government of Newfoundland and Labrador, Social Studies Curriculum.

[21] The mention can be found here: Heritage NL, Indigenous Peoples. Heritage NL has since added the disclaimer, "The following article reflected the best scholarship in 1997, and since then additional research has revealed new perspectives. Some information is also now out of date and should be used cautiously. The Heritage Newfoundland and Labrador Website is committed to updating these articles as resources allow." It is, however, questionable that additional research was needed post-1997 to show that the Beothuk did not simply disappear from the island of Newfoundland.

has often also long pointed to the role of the Mi'kmaq people in the death of the Beothuk based on the false historical claim that the French had brought them to Newfoundland to fight the Beothuk (Mi'sel Joe, 2018).

Scholars have also pointed out that the history of the genocide of the Beothuk has also allowed for the elimination of other Indigenous peoples from the history of the province. As Polack (2018) contends, the settler genocide of the Beothuk provided narrative space for settlers to claim Newfoundland as their native land. Such an erasure can be viewed considering what Wolfe (2006) calls the settler logic of elimination, whereby Indigenous people, their culture, and their territories, were displaced by a dominant settler population, culture, and claim to territory. As Maura Hanrahan's (2003) report to the Royal Commission on Renewing and Strengthening Our Place in Canada (2003), the 1949 Terms of Union between Newfoundland and Canada did not mention the Indigenous people of the province, which meant that Indigenous people were not recognized by the Canadian government under the *Indian Act*. This means that the Innu, Inuit, and Mi'kmaq peoples in the province were denied legal recognition of their sovereignty and had restricted access to programs and services. As the Royal Commission on Renewing and Strengthening Our Place in Canada (2003) explained, the omission of Indigenous people from the Terms of Union continues to impact Indigenous rights in the province, especially in terms of land claims and made it difficult for Indigenous communities in Newfoundland and Labrador to access federal funding (Hanrahan, 2003). The omission, however, is not mentioned in popular historical accounts of Confederation (see, e.g., Malone, 2012).

While the *Constitution Act, 1867* outlines the Rights of the Indigenous Peoples of Canada[22], and Newfoundland and Labrador would have to uphold those terms, the lack of recognition under the *Indian Act* and the time it took to obtain such recognition, helped to perpetuate the idea that Newfoundland and Labrador lacked Indigenous territories and Indigenous people (Hanrahan, 2003). A reflection on this omission on Qalipu First Nation's website summarizes the realities that Indigenous people faced after 1949: "Most Mi'kmaq ancestors who were denied rights when Newfoundland joined Canada in 1949 would not live long enough to see the government finally recognize their existence more than sixty years later."[23]

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[22] Rights of the Aboriginal Peoples of Canada

[23] Qalipu Cultural Information

1.3.1 Residential Schools

Since Europeans began their processes of transatlantic migration, Europeans engaged in violence against the Indigenous Peoples of what is now known as the Americas, including the taking of territories and attempts to forcibly assimilate Indigenous peoples into European culture. As the Truth and Reconciliation Commission's history of the European colonialists and the Canadian government's cultural genocide of the Indigenous peoples of Canada outlines, upon first contact, European powers were outnumbered and depended upon Indigenous people to survive the harsh Canadian climate and to explore a land that lacked the infrastructure of European life (TRCa, 2015). The fur trade was particularly dependent upon Indigenous knowledge and Indigenous labour. Because of this power dynamic, the 15th and 16th centuries were characterized by complex diplomatic interactions between French and English colonial powers. This quickly changed, however, as Europeans positioned the Americas as *terra nullius* (a no man's or a "new found" land) so that it could use the land's abundant resources to enrich the colonial state by discounting Indigenous sovereignty and claiming that territories were unoccupied (Asch, 2002). The peopling of the Americas was used to shift the balance of power and to justify pushing Indigenous people onto reserves and outside of the economic centre (TRCa, 2015). As Patrick Wolfe explains, settler colonialism was, therefore, the result of a desire for more land and more resources, making it appropriate to speak of settler colonialism as a "structure rather than an event" (Wolfe, 2006, p. 390).

Settler colonialism in Canada expanded substantially in the 19th century as the population of the Americas increased from 2.5 to 10.1 million, a 304% increase (Osterhammel, 2014). From 1811 to 1901, Canada's population grew from just over 500,000 to just over 5 million, much of which was the product not of immigration but of natural reproduction (Dillon, 2015). This increased population was often accompanied by significant decreases in Indigenous populations, and these numbers are less tracked and conclusive than for the non-indigenous population, ranging from estimates of half the population to full elimination for other groups, such as the Beothuk in Newfoundland (TRCa, 2015).[24] This was partially the result of new diseases that colonialism

[24] It is important to note that there is debate among scholars as to whether all Beothuk people and their relations died. DNA research has shown that there is both an indication of Beothuk lineage extinction, as well as possible continuity of Beothuk and Maritime Archaic lineages among modern Indigenous peoples. See, for example, Carr (2020). This corresponds to Mi'kmaq Indigenous knowledge, as oral histories depict a long-standing connection between the

had made Indigenous people particularly vulnerable, not only because they were "new" diseases but also because of the precarious life situation that many Indigenous people faced, with a lack of resources, space, and rights. This was spurred by the "doctrine of discovery," which had roots in the early colonial period of the 16th century. It had positioned Europeans as the Christian saviours who were bringing civilization to the heathen Indigenous people. This doctrine was not just an approach but a sanctioned church doctrine under the papal bull (Romanus Pontifex), which stated that Portugal had rights to what is now the Western Sahara) and the lands and islands yet to be discovered from the Canary Islands "to Guinea" (in Africa). Subsequent bulls deemed that Spain, which was in colonial competition with Portugal, had the rights to any lands it discovered that were not already possessed by another Christian power, provided the Indigenous people encountered were converted to Christianity. While Spain and Portugal contended that they had the religious right to new territories, French and English colonialism was built upon a supposed European divine right (TRCa, 2015).

This belief in superiority based on place of origin gave rise to the conviction that it was the European's duty to bring civilization to the rest of the "uncivilized world". This largely followed the process of a civilizing process that had been enacted first within Europe from the Crown to the populace through the evolution of manners and norms and the use of violence against anyone who did not conform (Elias, 1969). In the nineteenth century, this corresponded to growing imperialism, the attempt to establish Empires across the globe, and the institutionalization of public education in the wake of the Industrial Revolution (Lawson and Silver, 2013). As the TRC summarized, public education became a tool by which the state could ensure both a productive workforce and loyal citizens (TRCa, 2015).

With Canadian Confederation in 1867, education was deemed a provincial responsibility. *The British North American Act* had deemed, however, that Indigenous relations, including education, were the responsibility of the federal Canadian government (TRCa, 2015). With the *Indian Act* (1876), the federal government weaponized education to indoctrinate Indigenous people in European values, religion, and other cultural ideals (Anderson, 2007; Verwoord et al., 2011; Wang, 2013). 1878 marked a turning point for Canadian Indian policy as the Canadian government embarked on a strategy to settle the Prairies and that Indigenous people should be

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Mi'kmaq and Beothuk, including shared blood, with the idea of Beothuk extinction positioned as a myth (Aylward and Chief Mi'sel Joe, 2018, especially pp. 123-125).

educated in farming and the mechanical trades, which removed any agency that Indigenous people had to determine their own futures (TRCa, 2015). This aim included the establishment of specific schools for Indigenous people that would guide them in the process of achieving a state of civilization, which would require their removal from their homes to ensure that they were exposed to a Canadian way of living and so that they would "forget the customs, habits & language of their ancestors" (TRCa, 2015, p. 159).

In 1883, Edgar Dewdney, the lieutenant governor and Indian commissioner for the North-West Territories, proposed that Canada adopt a wider policy of Indian education, arguing that there was strong evidence that the schools would be successful (TRCa, 2015). The Church could provide such schools and help to realize cost savings for the Canadian government. Public Works Minister Hector Langevin argued that children would have to be removed from their families as "[…] by separating them in the way proposed, they acquire the habits and tastes—it is to be hoped only the good tastes—of civilized people" (TRCa, 2015, p. 161). The first two residential schools were quickly established in Qu'Appelle and in Treaty 7 territory, with the Catholic church overseeing Canadian government-funded schools. By 1900, there were more than 60 such schools with the term residential schools becoming commonplace by the 1920s. The Residential School system remained in place until the mid-1990s (TRCa, 2015).

As Justice Murray Sinclair, chairman of the Indian Residential Schools Truth and Reconciliation Commission, pointedly surmised: "While some people regard the schools established under that system as centres of education, they were, in reality, centres of cultural indoctrination" (TRCa, 2015, p. viii). The idea of removing children from their families and communities was part of a larger plan to eradicate Indigenous identity. This was, as the TRC concluded, "the predetermined and desired outcomes built right into the system from the outset" (TRCa, 2015, p. 162). In his 2008 apology to residential school survivors, then-Prime Minister Stephen Harper acknowledged that the schools were designed to remove and isolate Indigenous children from the influence of their families, cultures, and homes, and assimilate them into mainstream Canadian culture (Hanson, 2009).

The Canadian Government's 2008 apology and the Canadian reconciliation process were not directed at Newfoundland and Labrador. It was not until 2017 that Prime Minister Justin Trudeau issued an apology for Canada's role in the oversight of residential schools in Newfoundland and Labrador after 1949; the provincial government only began to issue its apologies in September 2023. Despite their separate treatment and lack of federal oversight, the history of residential

schools in Newfoundland and Labrador mirrors the broader Canadian history: with roots in nineteenth-century attempts to assimilate and “civilize” Indigenous children in Newfoundland and Labrador by replacing Indigenous culture and languages with Christian beliefs and European culture, residential schools were officially opened in the 1920s (Procter, 2020). The Moravian Church operated the Makkovik Boarding School (1914-1955) and the Nain Boarding School (1929-1972), while the International Grenfell Association, an educational and medical charitable organization, established the Labrador Public School in Muddy Bay (1920-1928, the Lockwood School in Cartwright (1920-1964) and the Yale School in Northwest River (1926-1980), as well as an orphanage at St. Anthony. According to Procter (2020), more than 2,000 children were institutionalized in these residential schools.

In 2007 and 2008, children who had attended these schools filed class action lawsuits against the Government of Canada and other parties for their oversight of residential schools in Labrador and Newfoundland and thus the cultural and language loss, sexual and physical abuse, and neglect experienced while Inuit and Innu children were wrongfully institutionalized in residential schools. A settlement was reached in 2016, and following the Prime Minister's apology, community healing and commemoration sessions were scheduled from February to May 2018. Importantly, the Innu First Nation rejected the federal government’s apology because of a narrow focus on only the schools and not the larger program of cultural genocide enacted against the Indigenous Peoples of Canada.[25]

The operation of residential schools in Newfoundland and Labrador led to the forced separation of Indigenous children from their families, resulting in profound emotional, cultural, and psychological trauma. The schools aimed to assimilate children into Western ways of life, often suppressing Indigenous languages and traditions. For the Inuit, experiences at the school ranged from extreme loneliness and disconnection from family and community to an extreme lack of freedom, with a fully routinized life and discipline, including corporeal punishment, the use of food restrictions and labour and chores as punishment. The International Grenfell Association also enforced a strict British class distinction, engaging students as domestic help. Students were far from their support systems, which made them vulnerable to bullying and physical, mental, and sexual abuse. Moreover, the schools severed them from their homes, restricted their ability to see their families and attempted in any way possible to annihilate their identities and cultures and attack their dignity, which for many, the arrival at the school

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[25] APTN, Innu Nation says it will refuse Trudeau’s Labrador residential school apology

coinciding with lice checks, baths, and forced haircuts (Procter, 2020). For the Innu, the Catholic church used education as a guise—alongside the promise of jobs to parents—to promote settlement. When people could not be bribed, they were threatened and shamed so that they would allow their children to attend school (Procter, 2020). Here, too, corporeal punishment and there were also fifty charges of sexual abuse against individual priests by 2001. In other cases, Innu children were also institutionalized at Grenfell residential schools, especially when a parent or a child was sick and needed medical care (Procter, 2020).

While the historical narrative often focuses on how the organizations, in NL's case, the Moravian Church and the International Grenfell Association, began to close residential schools in the second half of the twentieth century, the actual historical experience differs. Although government policy shifted away from supporting rural communities and towards resettlement and a movement away from institutionalizing children in schools and orphanages towards foster programs, residential schools were also closed because Indigenous community members refused to send their children to these institutions, demanding the construction of day schools in their own communities, and simply calling on the government to close the schools. In the 1970s, Indigenous leaders began a long fight to oversee the education of Indigenous children. The story of residential schools must be seen as a history of Indigenous resilience and survival of every attempt to eliminate their very existence.

1.3.2 Truth and Reconciliation

In 2008, the Canadian government issued an official apology to survivors of residential schools, acknowledging the harm caused by these institutions. Subsequently, the Truth and Reconciliation Commission of Canada (TRC) conducted hearings, including in Newfoundland and Labrador, to document the experiences of survivors. This was followed by the Federal Government's apology to the Indigenous people of Newfoundland and Labrador and the Government of Newfoundland and Labrador's commitment in 2023 to fulfill a promise made in 2017.

In 2015, the TRC released its findings that the Government of Canada's residential schools policy was an operationalization of cultural genocide against the Indigenous peoples of what is now Canada. It released 94 “calls to action” to help facilitate reconciliation between Canadians and Indigenous Peoples. These calls to action are clustered around key components that must be realized if reconciliation is to be achieved:

1. Recommendations pertaining to the legacy of residential schools, including reducing the number of Indigenous children in care, equality in the treatment for Indigenous and non-Indigenous children, and offering culturally appropriate parenting programs for Indigenous families.
2. Recommendations pertaining to education, including removing teachers' rights to use force from the Criminal Code of Canada, eliminating educational and employment and funding gaps between Indigenous and non-Indigenous Canadians at both the secondary and post-secondary levels, developing culturally appropriate early childhood education programs for Indigenous families, the development of professional development and training for public servants, revising the education curriculum, and establishing youth programs.
3. Recommendations pertaining to language and culture, including acknowledging Indigenous language rights and allowing residential school survivors to reclaim their identities by removing bureaucratic roadblocks to readopt Indigenous names.
4. Recommendations pertaining to health, including acknowledging the impact of the Canadian government's policies on Indigenous People's health, recognizing Indigenous People's healthcare rights, closing health gaps between Indigenous and non-Indigenous peoples, providing access to Indigenous healthcare and healing practices, and modifying medical school training to include Indigenous health and history.
5. Recommendations related to the justice system, including establishing legal processes by which survivors can be heard by allowing the Royal Canadian Mounted Police to investigate crimes in which the government has its own interest, eliminating the statute of limitation to allow for the prosecution of historical abuse and eliminating the overrepresentation of Indigenous People in the criminal justice system, and creating victim-specific programs for Indigenous People, as well as a public inquiry into the missing and murdered Indigenous women.
6. Calls for action pertaining to reconciliation, including the adoption of the United Nations Declaration on the Rights of Indigenous People to the implementation of a Royal Proclamation and Covenant of the Reconciliation, and ensuring equity for Indigenous People in the legal system, implementing programs of reconciliation, including a National Council for Reconciliation and National Centre for Truth and Reconciliation.

It is difficult to track the degree to which the calls to action have been implemented. The Government of Canada has created an online portal that tracks their completion, but it relies on

qualitative descriptions of what has been done rather than a quantitative calculation of completed or not.[26] For some calls, an update has not been provided since August 2021, while others have been updated in 2023. In a news release issued on the report's fifth anniversary, the Government of Canada highlighted the following accomplishments: the implementation of respecting Indigenous languages and for Indigenous youths and families, improvements to the security of Indigenous women and girls, LGBTQIA+ and Two-Spirit people, the implementation of Jordan's Principle, and funding for Indigenous education on reserve. According to the Yellowhead Institute in 2022, 13 calls have been completed and if the Government of Canada continues at this rate, the calls to action will not be fully completed until 2065 (Jewell and Mosby, 2022). This matches CBC's assessment as part of its Beyond 94 project, which assesses that 13 calls have been completed, 18 have yet to be started, and 63 are in progress between the proposal to the implementation stage.[27]

Importantly for this report, call 7, to develop a joint strategy with Indigenous groups to eliminate educational and employment gaps between Indigenous and non-Indigenous Canadians, has yet to be completed. The Government of Canada (2023) reports that it has begun the process of closing the education gap between Indigenous and non-Indigenous students across primary, secondary, and post-secondary education while also investing in preschool programming to eliminate barriers faced before Indigenous students enter school. The Government of Canada is also investing funding into Indigenous-operated and conceptualized schools to help alleviate the financial costs of obtaining a post-secondary education. Additionally, the Indigenous Skills and Employment Training Program supports Indigenous peoples in reaching their long-term career goals using a holistic approach that includes locally designed programs to provide employment and career-related guidance, coaching and mentorship, wrap-around services, and financial and social supports.[28] The Skills and Partnership Fund focuses on delivering skills training for Indigenous peoples to increase access to training for in-demand skills as a means to reduce the employment gap.[29]

As the TRC (2015b, p. 3) frames it, "the closing of residential schools did not bring their story to an end. The legacy of the schools continues to this day. It is reflected in the significant

[26] Government of Canada, Delivering on Truth and Reconciliation Commission Calls to Action

[27] CBC, "Beyond 94: Truth and Reconciliation in Canada"

[28] Government of Canada, About the Indigenous Skills and Employment Training Program

[29] Government of Canada, Skills and Partnership Fund

educational, income, and health disparities between Aboriginal people and other Canadians." Indigenous trust in education was permanently eroded by residential schools that taught Indigenous children that they were lesser than and, despite calling it school, employed poorly trained teachers to provide a substandard education. Taking up Call 7 requires addressing the roots of educational and employment gaps and working with Indigenous communities to help alleviate barriers that continue to keep Indigenous students outside the post-secondary institution. As the TRC (2015b, p. 4) summarizes:

> The beliefs and attitudes that were used to justify the establishment of residential schools are not things of the past: they continue to animate much of what passes for Aboriginal policy today. Reconciliation will require more than pious words about the shortcomings of those who preceded us. It obliges us to both recognize the ways in which the legacy of residential schools continues to disfigure Canadian life and to abandon policies and approaches that currently serve to extend that hurtful legacy.

1.4 Education in Newfoundland and Labrador

The Department of Education of the Government of Newfoundland and Labrador is responsible for the provision of education for students in Newfoundland and Labrador. The Department is responsible for the development, implementation, and evaluation of English and French programs as well as for monitoring student performance. Importantly, it also establishes graduation requirements. The Newfoundland and Labrador English School District (NLESD) is responsible for English-language programming and the Conseil Scolaire Francophone Provincial oversees the provision of a French education system in the province.[30] While K-12 education for Nunatsiavut, NunatuKavut, and Qalipu First Nation falls under the jurisdiction of the Department of Education, Mamu Tshishkutamashutau Innu Education (MTIE) oversees education programming for Innu Nation in Labrador and Miawpukek First Nation operates their own school, Se't A'newey Kina'matino'kuom (Saint Anne's School). Both Indigenous school programs have Indigenized curricula with cultural aspects included in their curricula delivery.[31]

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[30] The process of merging NLESD with the Department of Education was ongoing in Fall 2023. VOCM, NLESD, Department of Education Set to Merge

[31] For information Innu First Nation Education, see Innu Education. For Miawpukek see the First Nation's Departmental Overview

To satisfy the requirements for graduation, students in Newfoundland and Labrador must complete courses in language arts, mathematics, science, social studies, career education, fine arts, and physical education. These requirements include:

Requirement Groups	Required Credits
Core Language Arts	6
Optional Language Arts	2
Mathematics	4
Science	4
World Studies	2
Canada Studies	2
Career Education	2, with 30 hours of community contribution
Fine Arts	2
Physical Education	2
Other Required Credits (Enterprise Education, French, Religious Education, Technology Education, Family Studies)	4
Any Subject Area	6
Total	36

Students can be awarded a graduation status at one of three levels:

1. Honours: minimum graduation requirements for high school as set down by the Department of Education and Early Childhood Development and obtained credits in the following subject areas and courses listed with an overall average of not less than 80%.
2. Academic: with an overall average of not less than 50% in specified courses
3. General: with an overall average of not less than 50% but lacking the coursework required for honours or academic status

Additionally, students who do not meet the graduation requirement but who have achieved the goals outlined in an Individual Education Plan (IEP) are eligible for a School Achievement Certificate. High-school graduation status can also be achieved by completing a maximum of six

high school credits through Adult Basic Education (ABE) with prior approval to transfer credits back to the high school program from the Manager of Evaluation.

Data from 2019 reports a 94% graduation rate in Newfoundland and Labrador, compared to 89% in 2016. For Canada, on-time graduation rates have increased from 81 percent in 2018/2019 to 84 percent in 2019/2020. The 2021 census reported that 86% of all adults in Newfoundland and Labrador between the ages of 25 to 64 have a high school diploma or equivalent.[32] The last report on indicators published by the Department of Education identifies an average early school leaver rate of just over 6% for the entire province and a dropout rate of 8.7%.[33]

Graduation rates in Newfoundland and Labrador have increased because of several key policy changes:

1. Education reforms: Education reforms have focused on improving the quality of education in primary and secondary institutions. These reforms have included changes in curriculum, teaching methods, and assessment practices. For example, the Newfoundland and Labrador English School District Policy, Assessment, Evaluation and Reporting (PROG-317) defines that assessment must include a variety of assessment types that focus on the holistic development of the student. Such changes have resulted in better academic outcomes and more inclusive education, which have resulted in increased and more equitable graduation rates.
2. Improved teaching and learning environments: Efforts have been made to create a positive and supportive teaching and learning environment in schools. This has been achieved through the implementation of policies that promote inclusive and equitable

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[32] There is no real difference between high-school completion rates between Indigenous and non-Indigenous people in Newfoundland and Labrador. Statistics Canada. 2023. (table). *Census Profile*. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed December 4, 2023)

[33] The Early School Leaver Rate (ESLR) is calculated based on high school enrolment and captures the number of students who enrolled in school in one year but did not enroll in the subsequent year. The dropout rate was calculated based on the number of people between 20 and 24 years of age without a high-school diploma and also not attending school. Government of Newfoundland and Labrador, Indicators 2014/15: A Report on Schools

schools, teacher training and support, and the provision of resources that foster student engagement. Administrators and teachers are required to use assessment data to support students who may have difficulty achieving curriculum outcomes (PROG-317), while formative and summative assessment practices also lessen reliance on zero-sum assessments, such as public exams.

3. To move away from high-stakes, zero-sum assessments, the NLESD has also adopted processes to support students who were unsuccessful in a course. (i.e., credit recovery, supplementary exams, and other appropriate interventions; see High School Certification Handbook 2019-2020) as well as second-chance opportunities throughout the school year (PROG-317). It has also adopted a policy on Late or Missed Assignments (PROG-317, 4.34), which stipulates that teachers "engage in intervention strategies to the degree possible and practical" to help ensure students meet course requirements.

1.4.1 Benefits of Education

Data from Statistics Canada show that the more years of education a young person attains, the lower the risk of unemployment. In 2021, Canadians without a high school diploma reported nearly 15% unemployment, while those with a high school diploma had a rate of 12%. Unemployment rates for college graduates average 7% while university graduates have an unemployment rate of 6%. In terms of average earnings, people without a high-school diploma average just above $32,000, while people with a high-school diploma average nearly $40,000, which rises to just over $47,000 for those with a college diploma and bachelor's degrees, and to nearly $70,000 for those with graduate degrees.[34] For mature students, research shows that opportunities to obtain post-secondary certifications can open up employment opportunities and improve feelings of self-worth (see, e.g., Youmans, Godden, & Hummell, 2017).

Despite similar rates of high-school completion, Indigenous people have a 10% lower rate of college completion than non-Indigenous adults in Newfoundland and Labrador. 35% of all adults between the ages of 25 and 64 in Newfoundland and Labrador have a college certificate or diploma; for Indigenous Peoples in Newfoundland and Labrador, this number is slightly lower at

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[34] Statistics Canada. Table 37-10-0196-01 Percentage of 15-to 29-year-olds in education and not in education by labour force status, highest level of education attained, age group and sex

25%.[35] Thus, although the difference is not as pronounced in other Provinces, the 10% difference does prevent the realization of equitable attainment of education. It is therefore important to address the barriers that might contribute to this 10% difference.

1.4.2 Barriers to Education

Barriers to post-secondary education in Canada can be multifaceted and may vary based on individual circumstances. These barriers can include financial barriers such as high tuition fees and limited financial aid (Belley, Frenette, and Lochner, 2014) and geographic barriers, including limited access to education in rural areas (Task Force on Northern Post-Secondary Education, 2022). Additionally, reports have identified insufficient career counselling opportunities, especially for equity-seeking students, and complex admissions processes. Zeman and Frenette's (2021) study for Statistics Canada emphasizes how parents with higher levels of education can help their children navigate post-secondary education. Such findings are especially important as increasing numbers of youth whose parents are in the bottom quintile of income are enrolling in post-secondary programs at a time when a significant gap remains between postsecondary enrolments for the top and bottom income quintiles, at 77% to 43%, respectively Frenette (2017), a gap that has largely been attributed to systemic inequalities than financial or geographic barriers.

The Readiness Project's environmental scan (Dowden and Williams, 2020) identified similar barriers to education that some Indigenous students must overcome to access and complete post-secondary education, compounded by loneliness, isolation, and social discrimination (Restoule et al., 2013), family obligations (ACCC, 2010; McQuarrie, 2013; Youmans et al. 2017), personal barriers including a lack of self-esteem and feelings of powerlessness, and systemic barriers (Ottmann, 2017). While many students undergo an adjustment period during their first year of post-secondary education, the gap between home culture and Western school culture can be larger for Indigenous students than for other groups (Trumbull & Nelson-Barber, 2019). This cultural gap can lead to more acute feelings of alienation, isolation, and homesickness than majority-group students (Anuik et al., 2010; Foxall, 2013; Pechenkina & Anderson, 2011; Restoule et al., 2013). Post-secondary institutes often expect Indigenous

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[35] Statistics Canada. Table 98-10-0425-01 Highest level of education by Indigenous identity and labour force status: Canada, provinces and territories, census divisions and census subdivisions with a population 5,000 or more

students to adapt and assimilate to a Eurocentric learning style and have a poor understanding of Indigenous cultures (Aboriginal Nurses Association of Canada, 2009; Anuik et al., 2010; Battiste, 1998; Gallop & Bastien, 2016; Foxall, 2013).

Public post-secondary institutions in Canada have started implementing policies and procedures to ensure equitable access to post-secondary education. Calls to Indigenize post-secondary institutions are also becoming more commonplace. Indigenous students have been both positively and negatively impacted by such strategies (see, for example, Efimoff, 2022). On the one hand, students recognize the importance of Indigenization for representation and centring Indigenous values and knowledges while others have reported exhaustion with discussions and a lack of resources in general. Engaging with Indigenous communities is critical to mitigate negative impacts in the development of programs and training opportunities that can meet the needs of Indigenous communities.

One such Indigenization strategy is to engage in the active recruitment of Indigenous students. According to a 2010 environmental scan of Canadian colleges by the Association of Canadian Community Colleges, 98% of colleges surveyed had a recruitment strategy in place specifically aimed at increasing Indigenous participation in their programs. In a 2018, environmental scan of public colleges in Ontario, Colleges Ontario reported that a “large majority” worked with Indigenous workforce development boards, held community engagement sessions, and/ or promoted post-secondary pathways. Admission policies can support Indigenous students, for example, by offering reserved seats in some programs, waiving application fees, offering flexible deadlines to allow for funding agency requirements and creating opportunities for Indigenous applicants to upgrade their academic knowledge and skills during the admission process (ACCC, 2010; Karpinsky, 2016).

To help address the concerns expressed by Indigenous partners, the Readiness Project was conceptualized to help mitigate barriers to education, especially those faced by Indigenous mature students, and to help develop a mature student admissions process that best support Indigenous mature students that can also help improve access to education for mature students more generally in Newfoundland and Labrador. As the following sections outline, in a collaborative process, an admission pathway to CNA for Indigenous mature student applicants that respects Indigenous identities, languages, and ways of knowing was developed across three phases: (1) preliminary research, (2) model conceptualization, and (3) evaluation.

2 Methods

A mixed method, collaborative research approach was adopted to answer the research question. A mixed-methods research approach seeks to capitalize on the strengths of both qualitative and quantitative methods by combining both data collection approaches in the same study (Creswell, Fetters, and Ivankova, 2004). This allows researchers to gather a more comprehensive understanding of a research question or problem by integrating different types of data, perspectives, and insights. Quantitative data, such as data about the number of mature students and their performance at CNA more generally, offered insights into general trends while qualitative data collected through interviews and focus group discussions allow for the development of in-depth explanations and for contextualizing the trends identified in the data (see, e.g., Johnson and Onwuegbuzie, 2004; Creswell, and Plano Clark, 2017). Because of the multifaceted nature of the research question and its inherent complexity, a mixed-methods approach allowed for an exploration of the dynamics of admissions, the transition from being out of education to being in education, and the realities that mature students face in the decision to return to education and throughout the admissions process.

Additionally, the data collection, model conceptualization, and evaluation followed a collaborative research approach. First, the Readiness Project formed an advisory committee comprising stakeholders from Miawpukek First Nation, Mushuau Innu First Nation, Nunatsiavut Government, NunatuKavut Community Council, Qalipu First Nation, and Sheshatshiu Innu First Nation as well as the Labrador Aboriginal Training Partnership (LATP) and Mamu Tshishkutamashutau Innu Education (MTIE). Through this approach, the Readiness Project aimed to tap into the benefits of collaborative research by pooling expertise, resources, and perspectives to answer the research question and to develop more comprehensive and impactful recommendations (Cummings and Kiesler, 2005). To foster collaboration, the Readiness Project met at least bi-annually with its advisory committee and requested feedback and approvals on each step of the research and model development.

The project comprised three main phases: Phase 1 included preliminary research with a literature review and environmental scan, a series of consultations, and the development of a new holistic admission model. In Phase 2, the pilot process was finalized through consultations with key stakeholders, after which the pilot was launched. In Phase 3, the proposed model as well as CNA's revised model for Mature Student admissions was evaluated. To ensure the

feasibility of the pilot study, the model developed for mature student admissions was implemented for Indigenous mature students applying to Industrial Trades programs in the School of Natural Resources and Industrial Trades. This decision was made for two key reasons:

1. To ensure the development of an assessment that was relevant across all programs in a single school.
2. To ensure Counselling Team resources would be adequate to spend time with each applicant.

This eventually limited the Phase 3 evaluation (see Section 4.3.1 **Error! Reference source not found.**). Nevertheless, the project was able to collect significant data to help inform recommendations for how CNA approaches mature student admissions in the future. In the following section, the findings from each phase will be described.

3 Findings

3.1 Phase 1: Preliminary Research

In the first research phase, preliminary research was completed to help inform the development of a model for mature student admissions. This phase included a literature review, an environmental scan of practices at other Canadian colleges, and a series of consultations. For the review, literature relating to mature student post-secondary admission and Indigenous education was identified using a keyword search for the following terms: decolonizing assessment; Indigenizing assessment; cultural safety in education; cultural safety in assessment; entrance assessment for Indigenous students; entrance assessment for mature students; entrance assessment for special admissions; cultural bias in assessment; and best and promising practices in college admissions. The scope of the review was limited to articles from 2012 to present, resulting in a review of 82 articles or books for review on the topics relevant to the Readiness Research Project. Special consideration was given to incorporating the values of Indigenous research methods (Barnes, 2018; Olson, 2017; Smith, 1999) and including Indigenous research on Indigenous ways of knowing and learning (e.g., Anuik, Battiste, & George, 2010; Green & Oppliger, 2007; Munroe, Lunney Borden, Murray Orr, Toney, & Meader, 2013), cultural safety (e.g., Aseron, Greymorning, Miller, & Wilde, 2013; Macfarlane, Glynn, Cavanagh, & Bateman, 2007; Ward, Branch Fridkin, & Fridkin, 2016), assessment (e.g.,

Curtis et al., 2015; Rameka, 2007; Verwoord, Mitchell, & Machado, 2011), and Indigenous experiences in post-secondary education (e.g., Day, Nakata, Nakata, & Martin, 2015; Hossain, Gorman, Williams-Mozely, & Garvey, 2008; Parent, 2017). Relevant research was also identified from reference lists, other frequently cited works, non-peer-reviewed research conducted by Indigenous and/or educational organizations, and news articles that highlight new programs or practices implemented at post-secondary institutions. In total, 107 articles (or book chapters) were reviewed.

The Environmental Scan focused on the 52 English colleges which had signed Colleges and Institutes Canada's (CICan) Indigenous Education Protocol (CICan, n.d.) as of June 2019. Since Prince Edward Island (PEI) did not have a signatory to the Protocol by June 2019, one non-signatory college from PEI was included to ensure that current practices in PEI were also captured. As such, 53 colleges were reviewed, including their websites and follow-up with admissions officials across Canadian Colleges.

Finally, consultations were completed with 63 people from October 2019 to April 2020, including 17 Indigenous students and alumni, 13 representatives from Indigenous governments and organizations, and 33 CNA faculty and staff of various backgrounds and experiences.

3.1.1 Literature Review[36]

The literature review found that the dominant approach to post-secondary admissions in Canada is to assess applicants based on their high school grades or transcripts. At the same time, however, literature on academic admissions shows that grades and transcripts lack important contexts that can allow for a more equitable review of applications. For non-traditional students like mature students, however, the predictive value of grades is limited. Moreover, while standardized tests can predict which students will do best in post-secondary programs, they have also been found to significantly disadvantage minority groups (including Indigenous students, see discussion under "assessments"), often resulting in fewer Indigenous (and other minority) applicants gaining admission to post-secondary institutes. This is particularly concerning in the Canadian context where Indigenous Peoples often face significant barriers to

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[36] This is a summary of the report, Dowden and Williams (2019): "Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature." The full document can be found in Appendix A.

education and where the Truth and Reconciliation Commission has called upon the Canadian Government to address inequities in education. As such, the literature underscores the need to create more equitable opportunities that decenter Western approaches to admissions and program development and delivery to help address the gap in educational attainment between Indigenous and non-Indigenous people. As the following sections explain, concepts such as adopting a culturally safe approach can help to remove an emphasis on a problem with students to look at the systemic problems with institutions.

3.1.1.1 Approaches to Post-Secondary Admissions

In Canada, post-secondary institutes generally make admission decisions based on high-school grades or transcripts (Restoule et al., 2013). In other countries, post-secondary institutes consider high-school grades, transcripts, and / or standardized test scores for admission decisions (Chesters & Watson, 2016; Masserini et al., 2016; Niessen & Meijer, 2017; Orr & Hovdhaugen, 2014; Stemler, 2012; Sternberg, 2012; Sullivan & Nielsen, 2013). Proponents of these methods argue they provide an impartial and fair means for admission decisions (Hirschman Berrey, & Rose-Greenland, 2016); however, grades and transcripts do not allow admission officers to consider context (such as lack of available courses or resources in high school). Importantly, standardized tests have been found to significantly disadvantage minority groups (including Indigenous students, see discussion under "assessments"), often resulting in fewer Indigenous (and other minority) applicants gaining admission to post-secondary institutes (Hazelrigg, 2016; Niessen & Meijer, 2017; Restoule et al., 2013; Sternberg, Bonney, Gabora, & Merrifield, 2012; Tranter, 2012).

Some argue that admission policies should be open so that any student who applies would be admitted to a post-secondary program. For example, Sullivan and Nielsen (2013) found that among students whose test scores indicated they were at serious risk of failing courses, many passed upgrading courses, and 25 percent of them went on to pass college-level courses. Sullivan and Nielsen contend that while those numbers are low, predicting success for individual students based on test scores is problematic and there is no clear cut-off on standardized tests that indicate that students would not be able to complete post-secondary studies. Open enrolment, however, also raises ethical questions and considerations especially around equity, access, and quality (see, e.g., Dougherty, and Kienzl, 2006; Gelmon, 2007), academic preparedness, student success, and graduation rates (e.g., DesJardins, Ahlburg, & McCall,

2006; Tobolowsky, Cox, and Tobolowsky, 2015), and resource allocation and constraints (Hearn, 2005; Heller and Callender, 2015).

To make post-secondary admissions more equitable, some competitive-entry post-secondary schools are turning to holistic admission processes (Choi, Flowers, & Heldenbrand, 2018; Hazelrigg, 2016; Hirschman et al., 2016; Sandlin, 2019; Schmidt, 2016; Zerwic, Scott, McCreary, & Corte, 2018). Holistic admission takes non-cognitive variables of applicants (such as attributes and experiences) into account in addition to high school grades and test scores, with the aim to diversify the student body and admit individuals who will meaningfully contribute to the school community (Choi et al., 2018; Grove, 2019; Sandlin, 2019). Holistic admission can include interviews, letters of recommendation, prior work and learning experiences, non-standardized assessments, and more to assess applicants (Choi et al., 2018; Fowler, 1997; Niessen & Meijer, 2017; Sandlin, 2019). While there is evidence that holistic admission policies increase diversity and have many benefits for the student body, they also tend to require more time and resources (Hazelrigg, 2016; Zerwic et al., 2018). Additionally, there is evidence that unconscious bias may play a role in holistic admission decisions. As such, unconscious bias and cultural competency training for admission officers are important (Sandlin, 2019; Schmidt, 2016).

Other efforts to create more equitable opportunities include considering historical marginalization making admissions decisions and holding designated seats in a program for historically marginalized students such as Indigenous students (Hirschman et al., 2016; Sutton, 2018; BCCAT, 2016). The University of Manitoba, for example, no longer uses an applicant's race as a proxy for disadvantage but asks direct questions about disadvantage (such as whether an applicant has ever used a food bank or was raised by a single parent) to discern whether their life circumstances acted as a barrier to their success (De Souza, 2019).

Multiple mini-interviews (MMIs) have proven to be a promising admission practice to assess non-cognitive attributes such as empathy, critical thinking, collaboration, reaction to challenges, knowledge of program applied to, and other traits important for post-secondary success (Choi et al., 2018; Curtis et al., 2015; Niessen & Meijer, 2017). Applicants take part in a series of eight- to ten-minute interviews, each with a different focus (such as career aspirations and academic preparation) and a different interviewer (Curtis et al., 2015). The interviewers then come together to decide whether the applicant is ready for their program of choice, based on non-cognitive skills demonstrated during the interview. The use of multiple interviewers reduces the

problems with biases in single-interviewer admissions and is therefore more reliable and valid for evaluating non-cognitive skills than other interview formats (Choi et al., 2018).

Due to legislation favouring wider diversity and inclusion in post-secondary education, many European post-secondary schools are focusing on “second chance” routes, assessing applicants on prior learning, life skills, and work experience rather than high school academic performance (Orr & Hovdhaugen, 2014). The “second chance” routes vary by country. For example, in Sweden, individuals who have not graduated from high school can gain access to post-secondary simply by completing prerequisite courses; in Norway, high school non-graduates can gain access to post-secondary programs based on prior learning assessments (Orr & Hovdhaugen, 2014). Italy takes a different approach, whereby all post-secondary applicants write a “non-selective test” before admission; students with low scores can still enroll in their program of choice but may need to take special courses (Masserini et al., 2016). Masserini et al. (2016) found that while Italy’s non-selective tests do not predict post-secondary performance better than high school grades, higher test scores increase the chances that a person will enrol in college. In general, European post-secondary institutes are open to students with below-average scores, allowing for enrolment based on work and prior learning experience or provisionally allowing them to enroll in their program of choice with course plans modified so that they can upgrade their skills with pre-requisite courses.

In Australia and New Zealand, pathways to post-secondary education include entry based on high school grades, bridging programs, other post-secondary training, age (over 21), professional or life experiences, interviews, and test scores (Chesters & Watson, 2016; Curtis et al., 2015; Pechenkina & Anderson, 2011; Tranter, 2012). To address disparities associated with typical admission practices, some Australian universities have adopted a capabilities approach (measuring traits such as motivation and time management) based on an applicant’s life, work, and volunteer experience and other formal and informal learning (Tranter, 2012).

3.1.1.2 Predicting Post-Secondary Success

Two predictors are continually identified in the literature as the best predictors of post-secondary performance: high school grades and standardized test scores (Curtis et al., 2015; Danilowicz-Gösele, Lerche, Meya, & Schwager, 2017; Fowler, 1997; Masserini et al., 2016; Schmitt, 2012; Westrick, Le, Robbins, Radunzel, & Schmidt, 2015). Danilowicz-Gösele et al. (2017) found that high school grades are the best predictors of both program completion and post-secondary GPA; marginal improvements to high school leaving grades improved a student’s probability of

completing a university program by approximately 21 percentage points per grade; and each full grade increase in high school translated to a 0.4-grade increase in university. Other research has corroborated that high school performance is the best predictor of post-secondary performance for regular admission students, or students who are expected to do well (Curtis et al., 2015; Fowler, 1997; Kim, 2015).

When it comes to students who enter post-secondary school via non-traditional pathways (such as enabling programs or mature student pathways), the research is less clear. In general, regular admissions students tend to have higher post-secondary GPAs than non-traditional students (Chesters & Watson, 2016; Kim, 2015), and high school grades are less predictive of post-secondary performance for students who have been out of high school for many years (Fowler, 1997; Masserini et al., 2016). One study found that high school grades were not as strong a predictor of college GPA for special admission students (those admitted to the institute despite not meeting minimum entrance requirements) than for regular admission students. High school grades were also found to be unable to predict college retention for special admission students (Kim, 2015). There has been much research into the relationship between non-cognitive variables and post-secondary performance, and while some of these variables show promise, none predict success as strongly as high school grades or test scores, and there is no consensus on which of these attributes are the best predictors of success for non-traditional students (Chesters & Watson, 2016; Curtis et al., 2015; Danilowicz-Gösele et al., 2017; Fowler, 1997; Kim, 2015; Masserini et al., 2016; Sandlin, 2019; Schmitt, 2012; Stemler, 2012; Westrick et al., 2015).

One of the most common tools Canadian colleges use to make admission decisions for mature student applicants is a standardized test (Association of Canadian Community Colleges, 2010). There is a discrepancy in the literature as to whether standardized tests are good predictors of students' potential achievement at the post-secondary level. On the one hand, research demonstrates that test scores are good predictors of post-secondary performance (Kim, 2015; Masserini et al., 2016; Niessen & Meijer, 2017; Schmitt, 2012; Sternberg, 2012; Westrick et al., 2015). On the other hand, research also shows that standardized tests disadvantage women, minorities, and those from low socio-economic backgrounds (Austin, 2017; Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Helms, 2006; Johnston & Claypool, 2010; Kim, 2017; Koljatic, Silva, & Cofre, 2013; Niessen & Meijer, 2017; Philpott, Nesbitt, Cahill, & Jeffery, 2004; Poortinga, 1995; Sternberg, 2012). Researchers also question the predictive validity of standardized tests (Belfield & Crosta, 2012; Brijmohan, Khan, Orpwood, Brown, & Childs, 2011;

Fowler, 1997; Helms, 2006; James, 2006; James & Francis-Pelton, 2005; Koljatic et al., 2013; Matthew & Kashyap, 2019; Medhanie, Dupuis, LeBeau, Harwell, & Post, 2012; Sullivan & Nielsen, 2013).

Some studies indicate that relying solely on standardized tests for course placement decisions can lead to errors, including placing students in the wrong courses, as they may not be strongly predictive of student success for some courses (Belfield & Crosta, 2012; Brijmohan et al., 2018; Fowler, 1997; James & Francis-Pelton, 2005; Sullivan & Nielsen, 2013).

Fowler (1997) examined the relationship between obtained scores on the Canadian Adult Achievement Test (CAAT) and college GPA for 32 mature students at a college in Newfoundland and Labrador, finding that there is no significant positive correlation between overall scores on the CAAT and college GPA. Instead, there was a negative correlation between CAAT reading comprehension scores and GPA. That is, students who scored higher on the reading comprehension subtest tended to have lower GPAs. In a 2006 survey of assessments used in Adult Basic Education in Canada, educators did not agree on whether the CAAT was reliable for student placement (Campbell 2006). Educators did agree, however, that the CAAT had a psychologically negative effect on test takers, describing it as “intimidating,” “scary,” or “overwhelming.” Educators also agreed that the CAAT was “not culturally sensitive” and favoured those from southern urban areas (Campbell, 2006).

Belfield and Crosta (2012) researched standardized tests used in a state-wide college system in the United States and found a weak correlation between test scores and grades for both remedial courses and college-level courses. They also found that three out of ten students were placed in the incorrect English course and two out of ten students were placed in the incorrect math course based on test scores. There was a positive correlation between test scores and college-level credits earned; however, the predictive power of the tests was low, explaining 6 percent or less variation in the number of credits earned. Belfield and Crosta were careful to point out that “the validity of the placement tests depends on how they are used” (p. 40). James and Francis-Pelton (2005) conducted a study to determine whether the Canadian Achievement Test 2nd Edition (CAT/2) could predict student success in an ABE mathematics course. Although the authors concluded that CAT/2 test scores were a ‘credible predictor’ of student performance, they noted that relying solely on test scores for admission decisions would have resulted in 15 (of 82) successful students not being admitted to the program. Sullivan and Nielsen (2013) argue that while standardized tests may predict performance tendencies in

groups of students, they cannot predict how an individual student will perform, as they do not measure perseverance, motivation, self-discipline, or other critical attributes that lead to success. Even studies which find high correlations between test scores and post-secondary performance still have a substantial amount of variance in GPA that is not explained by test scores alone (Philpott et al., 2004; Stemler, 2012).

Some researchers argue that standardized tests measure learning outcomes from education, and so students with opportunities for better quality education (such as attending a school with more resources, being able to afford a tutor, having highly educated parents, etc.) do better on standardized tests, leading to further inequities when these tests are used for admission or other high-stakes decisions (Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Koljatic et al., 2013; Sternberg, 2012). Others argue that standardized tests are culturally biased and test-makers do not include sufficient numbers of people from minority groups when developing and norming the tests (Fowler, 1997; Helms, 2006; Johnston & Claypool, 2010; Nunavut Department of Education, 2008; Philpott et al., 2004; Poortinga, 1995; Schmelkes, 2018; Solano-Flores & Nelson-Barber, 2001; Stoffer, 2017; Trumbull & Nelson-Barber, 2019).

In recent years, admissions testing has begun to focus on assessing the competencies needed to complete program outcomes Niessen and Meijer (2017) found that trial-studying tests, where applicants are asked to complete an assessment based on the first learning outcomes, were just as effective as high school grades in predicting first year college GPA, and applicants perceived the process to be more fair than other selection methods. Moreover, the development and administration of trial-studying tests are comparable in resources and costs to the development and administration of other tests.

Some Australian and New Zealand institutes offer special admission pathways for Indigenous students that include assessments, interviews, and bridging programs (Curtis et al., 2015; Pechenkina & Anderson, 2011). Pechenkina and Anderson (2011) found the schools with the highest rates of Indigenous enrollment were different from the schools with the highest rates of Indigenous program completion, indicating that increased access is not enough. The University of Auckland's admission pathway for Indigenous students is strongly associated with positive first-year outcomes (Curtis et al., 2015). Applicants write a math test, an English test, and take part in MMIs, and are then provided with a recommended starting point for their program (Curtis et al., 2015).

While increasing motivation to pursue post-secondary education is important for Indigenous students, increasing access without providing additional supports does not create opportunity (Aboriginal Nurses Association of Canada, 2009; Assembly of First Nations, 2018; Colleges and Institutes Canada, 2018; Gallop & Bastien, 2016; Hossain et al., 2008; Pechenkina & Anderson, 2011; Restoule et al., 2013). Many supports are recommended and / or are in place at post-secondary institutes to aid Indigenous students on their learning journeys, including providing dedicated cultural and social space for Indigenous students, personal, academic, and cultural counselling, mentoring programs, academic skills workshops, dedicated seats and funding for Indigenous students, community-based programs (Foxall, 2013; Hossain et al., 2008; Hunt, 2013; Indigenous Physicians Association of Canada, 2007; Penn, 2014; Restoule, 2011; Tranter, 2012). Danilowicz-Gösele et al (2017) found that having appropriate supports available can even decrease the impact of low high school grades on post-secondary performance.

3.1.1.3 Creating a Respectful Post-Secondary Educational Landscape

Research underscores that providing a learning environment that respects and includes Indigenous cultural values, skills, and information results in significantly better outcomes for Indigenous students (Anderson, 2007; Munroe et al., 2013; Kim, 2017; Sarra & Ewing, 2014). Many researchers advocate for incorporating Indigenous knowledge into Western curricula, using Indigenous knowledge as a starting point for math and science concepts (Battiste & Henderson, 2009; Munroe et al., 2013; Friesen & Ezeife, 2009), and programs in Saskatchewan and British Columbia indicate that incorporating Indigenous knowledge in science curricula may be beneficial for all students (Kim, 2017).

Papps and Ramsden (1996) proposed the concept of cultural safety to promote equitable healthcare for Māori patients in New Zealand. It requires an awareness of the existence of repression, social domination, class, and power differentials (among other variables), and their sources. This awareness can be developed in part by a self-reflection on cultural identities and how it may impact the way services are designed and implemented. While cultural safety may have originated in a healthcare setting, its premises are equally important in other settings. Educators' failure to consider how culture affects learning and class dynamics leads to inequality, negative stereotyping, poor academic performance, and high rates of attrition (De & Richardson, 2015; Macfarlane et al., 2007). Stoffer (2017) noted that in Inuit communities, the clash between a non-Indigenous educator's sense of educational culture and the Inuit's sense of educational culture was a large concern; educators need resources to understand the culture

and worldviews of their students, recognize their position of power, and work to change the unequal relationship.

Educators can sometimes view the problem as being students rather than looking at the system and how it creates barriers to learning (Macfarlane et al., 2007). Learning cultures often have implicit rules, which can be seen as a “hidden curriculum” (see, for example, Harrison, Lautensach, & McDonald, 2012). This can include the marginalization of Indigenous perspectives, such as teaching the “discovery” of North America (Harrison et al., 2012; Ward et al., 2016).

To help combat these effects, educators can complete annual cultural safety training (Hossain et al., 2008; Hunt, 2013; Testa & Egan, 2014; Vogel, 2018; Ward et al., 2016). Cultural safety training not only aims to increase awareness of cultural differences, power differentials, and the effect of historical, economic, and political contexts on outcomes, but also aims to create a safe space for questions, comments, and stories that attendees may otherwise be afraid to voice (Hunt, 2013; Vogel, 2018). Relationship-building is key to creating a culturally safe environment in schools and highlights the need for mutual respect and a holistic, inclusive, non-judgmental, and person-centred consideration of students (Macfarlane et al., 2007).

Post-secondary institutions should also engage in efforts to decolonize education and create an environment where Indigenous students feel valued and respected, which will in turn help them achieve better post-secondary outcomes (Battiste et al., 2002; Pechenkina & Anderson, 2011), including providing more Indigenous support and increasing the number of Indigenous faculty and staff (Battiste et al., 2002; Foxall, 2013; Hunt, 2013; Penn, 2014; and Restoule, 2011). Additionally, they should offer workshops and presentations on cultural safety, communicate and enforce zero tolerance to racism, and include Indigenous content in program curricula (Anuik et al., 2010; Battiste et al., 2002; Foxall, 2013; Hunt, 2013).

3.1.1.4 The Need for a Holistic and Equitable Admissions Process

The reviewed literature provides key takeaways: First, while most Canadian colleges primarily use testing and high school grades to make admission decisions for mature students, admissions processes that take a more holistic approach and consider prior learning and work experience rather than test scores can make post-secondary admissions more equitable. Moreover, research has shown that bridging or access programs can help borderline and under-prepared students succeed in post-secondary but the content and format of the access program matters. Additionally, the literature indicates that unless adequate supports are in place at post-

secondary institutes, increased program access will not necessarily translate to increased success for Indigenous students. As such, if CNA wants to participate more fully in a program of reconciliation through education and provide more equitable access to post-secondary education for Indigenous Peoples, it should consider adopting a more holistic, pathways approach to admissions.

3.1.2 Environmental Scan[37]

The environmental scan found that Colleges across Canada use alternate admission processes for people who do not meet admissions requirements or for those who do not have a high-school diploma. Most of these colleges consider high school non-graduates under a mature student policy (although there is no consistent definition of a mature student). In Canada, mature students often have to meet a certain age requirement but are generally not required to be out of school for a certain amount of time. Many colleges also offer regular programs that do not require high school graduation as a minimum entrance requirement. Instead, applicants are required to have completed certain courses. This allows high school non-graduates who have the appropriate prerequisites to enter programs without going through an alternate admission process.

When making admission decisions for students who are missing program prerequisites, most colleges use testing to determine applicant readiness, and many colleges use more than one assessment method when making admission decisions. Common tests used include ACCUPLACER Next Generation, the CAAT, and in-house tests. Additional assessment methods used include meeting with someone from the college, prior learning assessments, and a review of résumés, portfolios, or other documents.

The scan found a large majority of colleges that offered a high school equivalency program or pre-requisite courses to applicants who were missing required courses for their program of choice. This is significant, as previous environmental scans highlighted flexible academic upgrading as a powerful and transformative tool, opening employment and further education opportunities for high school non-graduates and enabling them to become self-sufficient

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[37] This is a summary of the report, Dowden and Williams (2020): “Alternate Admission Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges”. The full report can be found in Appendix B.

(McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017; Youmans et al. 2017).

The environmental scan did not find any colleges that offered a separate admission process for Indigenous students, some previous scans indicated that using different or additional criteria to make admission decisions for Indigenous students could be beneficial (Karpinsky, 2016). Australian post-secondary institutes do this, and Kwantlen Polytechnic in B.C. has a separate admission policy for Indigenous applicants who do not otherwise meet admission requirements (Kwantlen Polytechnic University, n.d.; R.A. Malatest & Associates Ltd. 2002). Most colleges included in our scan offered application supports for Indigenous applicants, such as help filling out college or funding applications, dedicated seats in certain programs, and dedicated Indigenous recruitment efforts. Almost all colleges have dedicated supports for Indigenous adults who have been accepted into a program.

3.1.2.1 Mature Student Admissions in Canada

In Canada, alternative admission for students who do not meet the requirements for college admissions generally falls under the mature student category. Mature students generally have to meet a minimum age requirement, ranging from 17 years to 23 years with 19 years most commonly used. Most colleges do not require alternate admission applicants to be out of school for some time before they can be considered for admission; but for those schools who do, the requirement for time out of school ranges from 1 year to 3 years.

Across Canada, many colleges do not require a high school diploma or equivalent for some of their programs, instead listing pre-requisite courses as requirements based on the program content. In Quebec, the provincial government has mandated that the minimum requirement for entry to post-secondary institutes is a high school diploma or equivalent (Service Régional d’admission du Montréal Métropolitan, n.d); however, there still appears to be processes in place to admit applicants without a high school diploma or equivalent.

Methods for assessing mature students’ academic readiness vary across Canadian colleges. Generally, colleges use a standardized or an in-house test as part of their assessment. Other methods to assess readiness include meeting with someone from the college, prior learning assessments, résumé or other document review, and challenge exams for specific courses. A small number of schools use other methods to assess readiness, including letters of recommendation and instructor permission.

The most commonly used test for applicants who do not meet entrance requirements is ACCUPLACER. Many colleges that use standardized testing for alternate admissions are still using the *Canadian Adult Achievement Test*, while other colleges have developed their own in-house tests to determine whether applicants meet entrance requirements. The most commonly used in-house tests were math and English.

All colleges reviewed offer upgrading and/or transition programs for applicants who do not meet entrance requirements. Most offer a high school equivalency program (many of which are tuition-free), and almost as many allow high school non-graduates (or high school graduates who are missing a specific pre-requisite) to enroll in specific pre-requisite courses to meet entrance requirements for their program of choice. Access/ bridging programs are also commonly offered, and some colleges offer essential skills programs. Many colleges offer more than one option for applicants to acquire pre-requisite skills.

3.1.2.2 Support for Indigenous Applicants

Canadian colleges generally do not have a separate process for Indigenous applicants. Instead, support is offered during the application and admission phase. The most common supports offered for Indigenous applicants is assistance with school and funding applications. Other supports include Indigenous recruiters, dedicated or priority seats for Indigenous students, and bursaries, scholarships, or awards offered by the college. Two colleges offer community-based assessments for Indigenous applicants, and 2 colleges offer at least one community-based course. Almost all colleges offered supports specifically for registered Indigenous students, commonly in the form of an Indigenous Coordinator, Advisor, or Navigator. Other commonly mentioned supports include a gathering/ cultural space, Elders or other knowledge keepers onsite, and cultural and/ or social events.

3.1.3 Stakeholder Consultation[38]

Between October 2019 and April 2020, consultations were held with 63 people, including 17 Indigenous students and alumni, 13 representatives from Indigenous governments and organizations, and 33 CNA faculty and staff of various backgrounds and experiences.

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[38] This is a summary of the report Dowden (2020): “What we Heard from Indigenous Partners and CNA Stakeholders: Recommendations for CNA’s Mature Student Admission Pathway and Other Supports”. The full report can be found in Appendix C.

Indigenous students and alumni reported that they were interested in CNA mainly to get more education or training so they can increase their employment opportunities. Many recalled the barriers they experienced in accessing post-secondary training, including difficulties when applying to CNA and a lack of knowledge about their program and the possibilities the College could offer them. Many reported that they enjoyed their program and felt that CNA opened doors for them. They suggested that CNA could help more Indigenous adults access post-secondary education by holding more community information sessions and application workshops, increasing awareness of options for high school non-graduates, and increasing program offerings for high school non-graduates. Some Indigenous students felt that CNA could allow anyone who applies to enter a program, while others felt that interviews and tests could help determine whether an Indigenous adult was ready for a CNA program.

Representatives from Indigenous governments and organizations discussed the high priority that they place on education, celebrating those who want to go back to school and want to give community members the resources and tools they need to further their education. They contended that curricula should be reviewed with an Indigenous lens to help ensure Indigenous students' success. For example, since Innu First Nation took control of its schools, cultural elements have been added to the curriculum and more people have graduated high school than ever before.

All groups agreed that CNA offers great supports for Indigenous students at the Happy Valley-Goose Bay campus and that these supports could be extended to more campuses. Expanding existing supports and adding additional supports could encourage student retention and success and could encourage more Indigenous adults to apply to CNA. The representatives also discussed that Indigenous students could benefit from more guidance when considering post-secondary options and help with the application process. This could include having a contact person to speak to about entrance requirements and expected careers, as well as assistance filling out the application form and locating documentation required by CNA for consideration for admission. There is a need to offer more learning resources, such as increased staff and expanded hours in help centres and expanded tutoring services. Additionally, participants reported that there is a need for expanded and additional supports specific to Indigenous students and applicants, such as an Innu language translator, a safe gathering space at more campuses, and transition supports.

When it comes to cultural safety there is room for improvement. Some things CNA can focus on to increase cultural safety include increasing Indigenous representation in the college, enhancing application and transition supports, offering culturally relevant testing for admission, and expanding its cultural awareness workshops for students, faculty, and staff. CNA should also increase its visits to Indigenous schools and communities to build relationships and introduce potential students to CNA faculty and staff. This can help new Indigenous students feel more comfortable and welcome.

Many participants recommended using multiple and flexible methods to assess whether a mature student applicant has a reasonable chance of success in their program of choice. Suggestions included interviews, consideration of prior work and learning experiences, motivation and knowledge of the program, the applicant's career goals, and testing. These suggestions are in line with holistic admission approaches, which use multiple assessment options to consider the whole person, rather than just one aspect of a person. A key takeaway was that although tests can be good tools to determine the literacy and numeracy skills of applicants if the test is culturally appropriate, it should only assess pre-requisite knowledge and skills needed for the applicant's program of choice and must allow for accommodations for those with learning exceptionalities and those whose first language is not English.

Participants underscored the need for CNA to increase program offerings, including a high school equivalency program, more preparatory and access programs for high school non-graduates, and more variety in program offerings at the Happy Valley-Goose Bay campus, perhaps alternating different programs in different years. There is also a need for CNA to collaborate with Indigenous communities and governments at a deeper level. This includes more frequent visits to Indigenous communities and schools as well as more consultation to learn about the employment needs of Indigenous communities.

3.1.4 Conclusions from Phase 1

The preliminary research pointed to the fact that mature student applicants to CNA could benefit from a holistic approach to admissions. Admission decisions that consider the whole person, including their literacy and numeracy skills, previous work and learning experiences, life experiences, and motivation level, will provide a more complete picture than decisions that rely primarily on test scores. Furthermore, many of the challenges faced by Indigenous applicants during the application process could be mitigated by supports, including discussions on program offerings and entrance requirements, expected careers, assistance filling out the application

form, and guidance on how to obtain documents required for admission. A holistic admission approach, combined with application supports, is an appropriate admission pathway to CNA for Indigenous mature student applicants and could assist with improving feelings of cultural safety.

In terms of assessment, standardized tests can be useful but risk marginalization. As such, tests should only be used when it is necessary to determine whether an applicant has the literacy and numeracy skills necessary to be successful in their program of choice. For a test to be appropriate for Indigenous adults, it must be culturally relevant, program-specific, and have a difficulty level appropriate for the program. The mature student admission process should be updated for *all* students, as the CAAT is not appropriate for anyone.

Supports for Indigenous students must also be expanded. Key supports include a safe gathering space for Indigenous students and Indigenous navigators to help with the transition into education and navigating the post-secondary environment more generally. Additionally, mature students at CNA could benefit from more program options, including a high school equivalency program, more preparatory programs that do not require a high school diploma or equivalent as a pre-requisite, and some regular programs that do not require a high school diploma.

Engaging with Indigenous communities is critical to program development. Post-secondary institutes should work with Indigenous communities when developing strategic plans and keeping open lines of communication to build partnerships and trust (Colleges Ontario, 2018; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017). Increasing awareness of Indigenous cultures, values, and issues will help create a safe atmosphere for Indigenous students. Specific activities to achieve this include seminars, workshops, conferences, cultural competency training, presentations for new hires, and developing Indigenous land acknowledgements (Colleges Ontario, 2018; Saskatchewan, 2016; University of Windsor Senate, n.d.; Zarpa & Shea, 2018).

To effectively utilize Indigenous recruitment strategies to reduce barriers, the University of Windsor's (n.d.) Indigenous recruitment efforts include the following (and more, p. 76):

- Profile Indigenous learners
- Promote student success.
- Identify Indigenous learners in transition to post-secondary education.
- Engage with Indigenous learners as role models.

- Work with Indigenous communities to enhance post-secondary education.
- Increase awareness of post-secondary programs and services
- Build and maintain positive relationships with Indigenous communities.
- Develop and maintain web-based information on programs, funding, extracurricular activities, and more.
- Create ease of information and best practices catalogue

Ways that admission policies can be supportive for Indigenous students include offering reserved seats in some programs; waiving application fees; offering flexible deadlines to allow for funding agency requirements; and creating opportunities for Indigenous applicants to upgrade their academic knowledge and skills during the admission process (ACCC, 2010; Karpinsky, 2016). Moreover, deepening available supports for Indigenous and mature students before, during, and after they have been accepted to a program (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013), including upfront career counselling and linkages to support services, can improve experiences during the application phase. This includes ongoing communication with communities and high school counsellors, strengthening communication ties between Indigenous services departments and other departments (such as registrar offices, cash offices, and financial aid offices), and recognition that admission should not be examined in isolation (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013).

Wrap-around supports were also deemed critical. Most colleges reviewed by ACCC (2010), and all colleges reviewed by Colleges Ontario (2018) offered Indigenous-specific wraparound supports (however specific supports offered differed by college). The wraparound concept is founded on the principle of care that emphasizes the need to support individuals in all relevant life domains (e.g., not just focusing on school but on family and everyday life challenges) and use flexible and team-based support models to support individuals (see, for example, Yu, Haddock, and Womack, 2020; VanDenBerg, and Grealish, 1996). Wraparound supports at the post-secondary level can include:

- Academic and learning supports (ACCC, 2010; Colleges Ontario, 2018; R.A. Malatest & Associates Ltd. 2002)
- Personal counselling (ACCC, 2010; Colleges Ontario, 2018; Ontario, 2018; Youmans et al. 2017)
- Support or referrals for housing, daycare, financial counselling, and/ or food banks (ACCC, 2010)

- Transportation (ACCC, 2010; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016)
- Mentorship and/ or peer support programs (ACCC, 2010; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; University of Calgary, 2017)
- Access to Elders (ACCC, 2010; Colleges Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016)
- Information or access to scholarships, bursaries, or awards (Colleges Ontario, 2018; McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; University of Calgary, 2017; University of Windsor Senate, n.d.)

Such supports should be *proactive* and post-secondary institutes must also be careful not to assume the needs of students are being met. Research should be included in admissions to ensure that students are being supported as they make the transition into post-secondary education. Research on Indigenous student success in post-secondary education commonly finds that the transition to post-secondary education starts much younger than many people assume, when students are still in the K-12 school system (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Parent, 2017; Restoule et al., 2013). Findings by Parent (2017) show that for some Indigenous students, the decision to pursue post-secondary education began in elementary school. Others echo these findings, recommending that time should be set aside as early as elementary school, and continuing throughout junior high and high school, to educate students on career options and the training requirements to pursue those careers (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Parent, 2017; Restoule et al., 2013). Post-secondary institutions can aid in these early discussions about careers and training by holding career fairs, workshops, and information sessions in schools and communities (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Indigenous Physicians Association of Canada, 2007; Restoule et al., 2013). Relationship building and face-to-face contact, especially in rural communities, are important to create partnerships and informal channels through which Indigenous youth and adults can contact and ask questions about post-secondary institutes, programs, and admission requirements and processes (Aboriginal Nurses Association of Canada, 2009; Burton et al., 2011; Colleges and Institutes Canada, 2018; Hossain et al., 2008; Indigenous Physicians Association of Canada, 2007; Pechenkina & Anderson, 2011; Restoule, 2011; Restoule et al., 2013).

Pre-admission courses have been identified as a successful means to orient prospective Indigenous students to campus life and the realities of study (Colleges and Institutes Canada, 2018; Indigenous Physicians Association of Canada, 2007) and 'mentor for a day' programs to allow Indigenous youth to spend a day with an Indigenous post-secondary student or Indigenous employee in a field of their interest (Restoule, 2011). A common theme from the consultations was the desire for the creation of adult upgrading and transition/ preparatory programs for Indigenous adults as admission options for post-secondary programs, with some calling for community-based programs (Colleges and Institutes Canada, 2018; Foxall, 2013; Indigenous Physicians Association of Canada, 2007; Restoule, 2011). Research on such programs indicates promising results: Alas, Anshari, Sabtu and Yunus (2016) found that 74 percent of students in an alternate admissions program (due to not meeting entrance requirements) achieved a mid-level GPA (compared to only 50 percent of regular admissions students), and between 4 and 9 percent received a high-level GPA, while Covarrubias et al. (2018) found that support program students performed better than would have been expected for students who do not meet entrance requirements, outperforming similar students who did not take part in a support program.

The Aboriginal Access Programs, created in Manitoba, have shown some promise in closing the education gap (Levin & Alcorn, 1999; The Alberta Counselletter, 2017). These programs are available at universities and colleges in western Canada, and while there are differences in how they are implemented, they are typically full-time, one-year programs where students prepare for full admission to their program of choice (The Alberta Counselletter, 2017). They offer a range of supports including time management, study skills, academic writing workshops, tutoring, personal supports, and more to help students succeed (The Alberta Counselletter, 2017). The programs are based on the principle of "equality of condition," implying that mere access is not sufficient; additional supports for students who are motivated but under-prepared will help them achieve their goals (Levin & Alcorn, 1999). There is a four-day screening process for applicants that involves interviews and a campus orientation; standardized testing is only completed *after* a student gains admission to the program and is used only as a tool to determine the supports a student will need. While different programs use different strategies, all the Aboriginal Access Programs modify their curriculum and supports to fit the needs of the student rather than trying to modify the students to meet the program. A 1994 review by Hikel (as cited in Levin & Alcorn, 1999) found that 40 percent of students admitted to the Access

Programs graduated from their post-secondary programs, which is an unparalleled achievement for students who do not meet entrance requirements.

The preliminary research underscores the need to support mature students in meeting the requirements for admissions and in applying to college. A standardized test that results in a yes-no decision does not align with a supportive approach. Mature student applicants to CNA could benefit from a holistic approach to admissions that considers the whole person, including the competencies they need to complete their program, including literacy and numeracy skills, previous work and learning experiences, life experiences, and motivations and future goals. This needs to be augmented by a supportive college environment. Post-admission supports are necessary to ensure that the challenges Indigenous students face can be proactively mitigated to the degree possible.

3.2 Phase 2: A Concept for Mature Student Admissions

Based on a review of best practices from the literature, other colleges, and the concerns and desires expressed during consultations with stakeholders, the Readiness Project conceptualized a Holistic Mature Student Placement Model for mature student admissions. The literature review and discussions with stakeholder groups made it clear that access to education and employment could be better fostered if applicants were provided more guidance about post-secondary options and the application process, ranging from a discussion about entrance requirements and expected careers, as well as assistance filling out the application form and locating the documentation required to complete the CNA admission procedures. The admissions process should not be based on a simple admitted or not admitted decision made based on applicants' performance on a standardized test but should use multiple and flexible methods to assess whether a mature student applicant has the skills and competencies they need for success in their program of choice.

Throughout the consultation process, representatives from Indigenous governments and organizations, Indigenous CNA students and alumni, and CNA counsellors, faculty, and staff reiterated CNA's role as a gateway into education and employment. They also stressed that access to education and employment can easily be impeded by barriers to post-secondary education, such as not knowing what programs are available, the jobs that training might lead to, and the difficulties applicants experience during the application phase. At the same time, representatives from Indigenous governments and organizations underscored the high priority

they place on education and their desire to ensure that access to education and employment is available to all.

These suggestions are in line with holistic admission approaches, which use multiple assessment options to consider the whole person, rather than just one aspect. That is, assessment *informs* placement but is not the *sole determinant* of admissions.

The model for placement was developed under consideration of:

- Cultural Safety (Ramsden, 1990), which refers to providing an environment where individuals feel welcome, safe, comfortable, and free of discrimination. Importantly, cultural safety can only be determined by the recipient of the service.
- The 5Rs of Indigenous Education (Tessaro et al., 2018 drawing on the 4Rs of Indigenous Education as proposed by Kirkness & Barnhardt, 2001):
    - **Respect** for the cultural integrity of Indigenous students and applicants, the diversity of worldviews, ways of knowing and communicating, and the cultural knowledge, goals, and motivations that each person brings with them.
    - **Responsibility** to provide an environment where Indigenous people can thrive and take responsibility for their own education.
    - **Relevance** to Indigenous communities and cultures and each individual's own goals.
    - **Reciprocity** in relationships to others whereby the institution no longer positions itself as the purveyor of and students as the passive recipient of knowledge and instead adopts a more personalized, dialogic approach.
    - **Relationships** are to be positioned as the focal point of all program development, this can include relationships between teachers and learners, between an institution, its representatives, learners, prospective learners, and the communities it serves.
- Conley's four key facets of readiness (2008):
    - Key Cognitive Strategies to learn different content from a range of subjects.
    - Key content knowledge in fields that are essential for understanding core academic subjects, such as math, reading, and writing.
    - Academic behaviours necessary for completing college courses, including but not limited to self-awareness, thinking about how previous learning can be transferred to new learning contexts, and self-control.

- Contextual Skills that allow for understanding and navigating the college system and its culture and to adapt to the differences between students' new environment and the communities and educational settings they leave behind.

To develop the holistic placement model, an iterative and incremental program development approach was adopted. This approach emphasized continuous improvements to strengthen program development with revisions occurring throughout the process. The model was finalized according to the following steps:

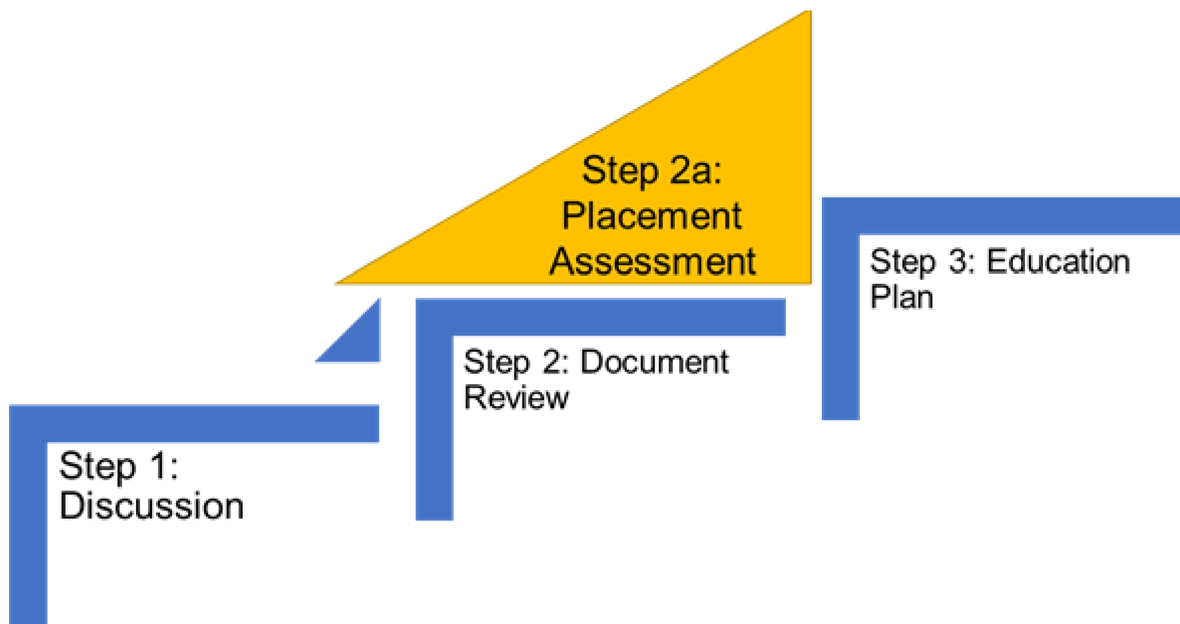
1. The Readiness Team conceptualized the model as well as a template for the placement assessment and study guide.
2. The Advisory Committee reviewed the model, assessment and study guide templates and provided feedback for improvement.
3. The model, assessment, and study guide were revised based on feedback from the Advisory Committee.
4. The Counsellor Assessment Subcommittee reviewed the model, the assessment, and the study guide and provided feedback for improvements.
5. The model, assessment, and study guide were revised based on feedback from the Counsellor Assessment Subcommittee.
6. The Advisory Committee reviewed the model, assessment and study guide and provided feedback for improvement. The Readiness Team made revisions as required and requested final approval to launch the process.
7. The Holistic Mature Student Placement Model was launched.

This process was driven by collective decision-making: the final process, including the model, assessment, study guide, and rubrics will be reviewed, revised, and approved before the pilot is launched.

3.2.1 Holistic Mature Student Placement Model

The Holistic Mature Student Placement Model aims to co-create an education pathway that fits applicants' goals, builds on their skill sets, and leads to admission to their program of choice. The focus is on **placement**: to identify which program fits the applicant's interests and career goals and to establish a pathway that will lead to admission into that program. This can range from direct entry into a program to upgrading to ensure success upon entry into the program.

The process takes place across three steps:



Step 1: Discussion

The process begins with a discussion between the applicant and a CNA counsellor. During this discussion, applicants will be guided to:

- Narrate their successes and challenges, what they like and dislike, and barriers they have faced or need to overcome.
- Describe their role models and why these people have been influential in their lives.
- Explore their motivations for completing post-secondary education and the aspirations they have for their future careers.
- Outline their strengths, including previous training, work, or volunteer experience as well as cultural- and/or land-based skills.
- Identify the support they have access to and how relocating to a new community for school may impact those supports.
- Contextualize the academic support that might be available to them on campus, in the community, and from their funding agency.
- Establish next steps for document review in terms of gathering informal documents and assisting the applicant in gathering formal documents (such as transcripts, certificates, etc.).

Step 2: Document review

To determine whether applicants' education, training, work experience, and community work indicate their readiness for their program of choice, the counsellor will review the applicants' formal and informal documents and recommend program enrollment or further assessment. If the applicant is recommended for program admission, the process moves to Step 3 (Education plan co-creation). If there are questions about applicants' readiness, they will be asked to complete a placement assessment (or parts thereof; Step 2a: Placement Assessment) to identify their strengths and weaknesses and inform the co-creation of an education pathway.

Step 2a: Placement Assessment

If there are questions about an applicant's readiness, the applicant will be asked to complete an assessment, which will take no more than four hours to complete. It assesses four key competencies:

1. ***Numeracy-based skills***
2. ***Reading-based skills***
3. ***Writing-based skills***
4. **Study and applied learning skills**

After the applicant has completed the assessment, the Counsellor will first review the results of the assessment. Based on the applicant's strengths and weaknesses (self-defined and as evidenced by the assessment results), an education pathway and plan will be co-created (Step 3). If the applicant requires an alternative pathway to admissions, the Counsellor will outline possible pathways (e.g., upgrading, the completion of pre-requisite courses, provisional admission, etc.) in advance of meeting with the applicant. The Counsellor should prepare as many possible options as the applicant can avail of and then discuss these with the applicant in Step 3, co-creation of the education pathway.

Step 3: Education pathway and plan co-creation

The counsellor will then meet with the applicant to review the results of the assessment (where applicable), the applicants' strengths as well as any areas where they might need to improve or avail of supports. They will then work with the applicant to co-create an education plan with the applicant.

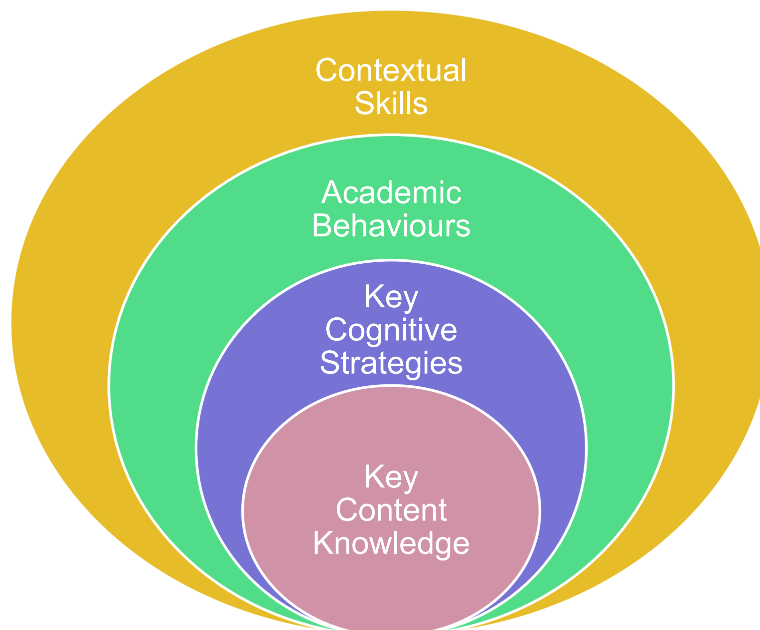
The plan will clearly outline:

1. Pathway to their selected program, ranging from direct entry to the program of choice, completion of a readiness program, or upgrading at CNA.
2. Upgrading requirements where necessary (e.g., the completion of adult basic education from another organization).
3. Specific supports that could help them complete their program of choice.

3.2.1.1 Model rationale

College readiness is defined as the competencies students need to complete credit courses at a post-secondary level, generally in terms of the successful completion of courses in the first semester (Conley, 2008). Readiness is a measure of benchmarks that are meaningful for students and comprises multiple measures of likelihood of success rather than a single assessment of "ready or not" (Maruyama, 2012). As Wiley, Wyatt, Camara, and Proestler (2011) outline, research on readiness underscores how a focus on a single measure to determine whether a student is academically prepared for college overlooks key aspects that contribute to success, such as an applicant's study skills, motivation, and goals, and, often importantly, the availability of support.

Drawing on a more holistic view of readiness, Conley (2008) identifies four "facets of readiness" that contribute significantly to college success:



Key Cognitive Strategies: Competencies required to learn different content from a range of subjects. Assessing key cognitive strategies requires testing a person's abilities to apply learning, engaging, for example, students' critical thinking and problem-solving.

Key content knowledge: Competencies in specific content fields that are essential for understanding core academic subjects, such as math, reading, and writing.

Academic behaviours: A range of behaviours that are necessary for academic success, including but not limited to self-awareness (understanding of strengths and weaknesses), self-monitoring (a form of metacognition that comprises thinking about thinking and how previous learning can be transferred to new learning contexts), and self-control (directing attention to the most important information to be learned or prioritizing competing demands). These skills are essential for developing study skills and include time management, taking notes, and preparing for and writing exams.

Contextual Skills and Awareness refers to the information needed to understand and navigate the college system and its culture and to adapt to the differences between students' new environment and the communities and educational settings they leave behind. A key component of contextual skills and awareness is "college knowledge", which includes understanding admissions processes and requirements, programs, job markets and potentials, funding and financing opportunities, the costs of education, and how to make the transition, for example, from high school to the demands of post-secondary education.

In the following sections, the rationale for each of the steps will be described along with further details on how each of the steps in the model is conducted.

3.2.1.1.1 Step 1: Applicant-Counsellor Discussion

Once an applicant applies under the Mature Student category, counsellors arrange a time with the applicant for the initial discussion with the applicant. During the initial contact, the counsellor will further establish a relationship with the person applying. They will explain to them that they would like to meet with them to discuss their program of choice and to support them in preparing their application. The counsellors clearly explain to the applicant that the discussion is not an interview but an informal chat that will help them prepare the documents they will need for the formal application. It is important to reassure the person applying and create a low-stakes and stress-free environment for the person applying by flexibly adapting to their preferences (online or in-person) for the discussion and their time demands. Mature students may be full-time

employees or have significant family demands; it is important to respect that returning to education may be intimidating and to create as nurturing an environment as possible for the discussion.

The time required to complete the initial discussion with applicants will vary from person to person. As such, counsellors should allow a minimum of 1 hour for the discussion with the possibility to extend beyond the hour by continuing the discussion or by scheduling a second hour for discussion as necessary.

The goal of the applicant's initial discussion with the Counsellor is to prompt the person applying to:

- Narrate their successes and challenges, what they like and dislike, and barriers they have faced or need to overcome.
- Describe their role models and why these people have been influential in their lives.
- Explore their motivations for completing post-secondary education and the aspirations they have for their future careers.
- Outline their strengths, including previous training, work, or volunteer experience as well as cultural- and/or land-based skills.
- Identify the support they have access to and how relocating to a new community for school may impact those supports.
- Contextualize the academic support that might be available to them on campus, in the community, and from a funding agency.

After the discussion, the counsellor walks the person applying through the next steps for document review. The counsellor guides the applicant through how they can gather the formal documents they will need for the admissions process (such as transcripts, certificates, etc.) and helps them with writing their personal statement, experience, and skills form. Applicants are given the choice to complete these steps with the counsellor or to gather their documents on their own time.

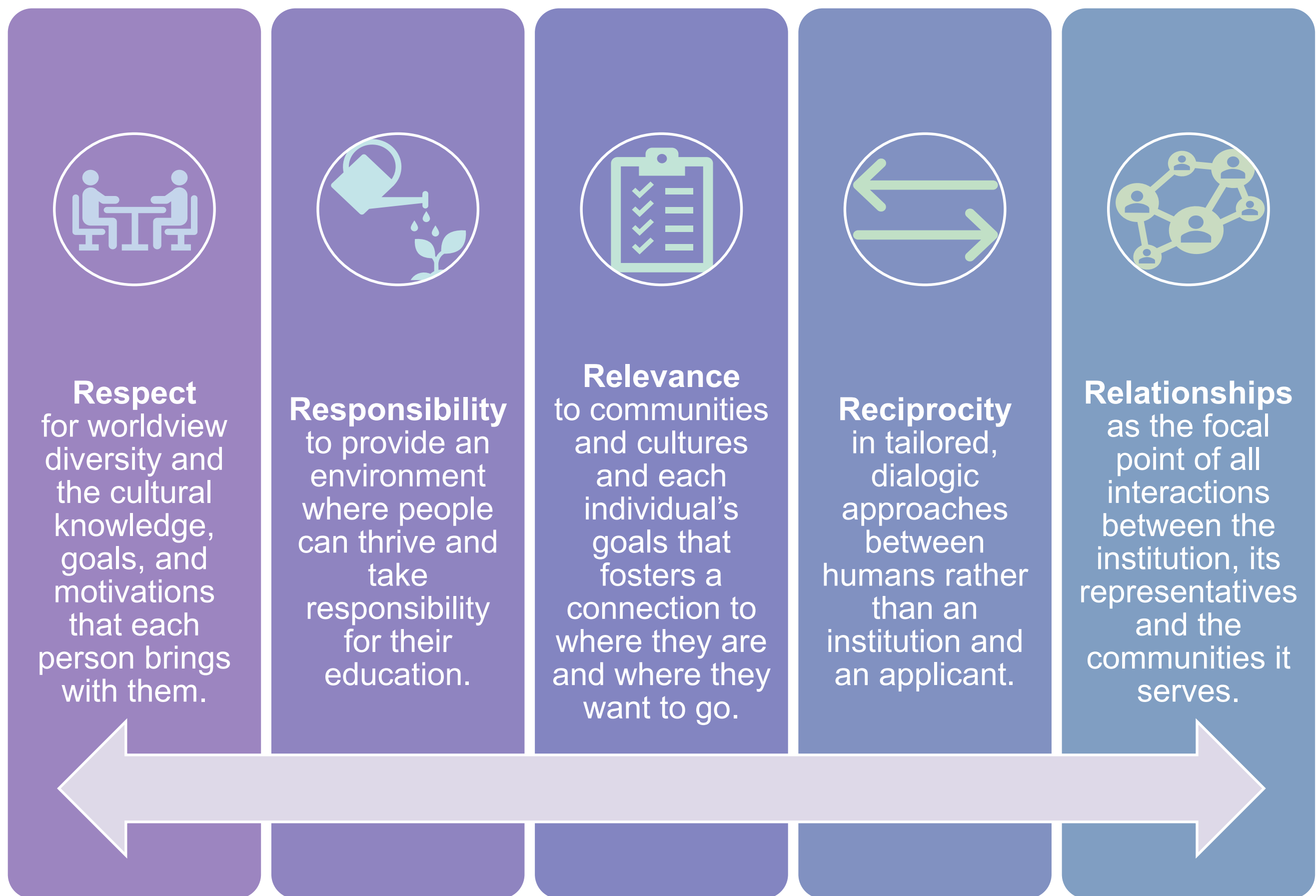
The discussion takes the form of a semi-structured interview. This provides more flexibility for the person applying, as they can take the conversation in other directions if they choose. The formal also ensures that all counsellors are obtaining the same core information from applicants, while also allowing counsellors the flexibility to choose their own wording and order for questions.

The discussion aims to guide applicants in the completion of the informal document, ***Personal Statement, Experiences, and Skills* form**. Throughout the discussion, the person applying will be prompted to write their answers to the questions on the form or to prepare notes that will help them answer the questions on the form. The person applying can also opt to prepare a recording (video or audio), which provides the answers to the questions on the form. The person applying can opt to complete the form digitally (using a fillable form) or to complete a paper form, which they can complete by hand. Applicants can also submit documents that answer the questions on the form, such as a resume, list of work experience, and/or transcripts, school records, list of courses completed, etc. They are not obligated to complete the form, provided they supply information that allows counsellors to decide regarding their application.

The primary goal of the discussion is to guide the person applying to think critically about the strengths they have that indicate their readiness for post-secondary education. To achieve this goal, the following principles should guide the discussion:

3.2.1.1.1.1 The 5Rs of Indigenous Education

Originally proposed by Kirkness & Barnhardt (2001) as the 4Rs of Indigenous Education, Tessaro et al. (2018) expanded the framework to the 5Rs:

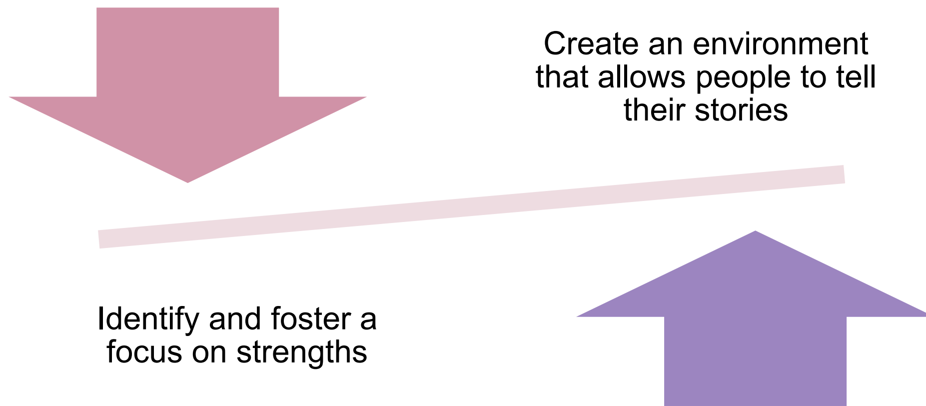


3.2.1.1.1.2 Cultural Humility

The term cultural humility has its origins in medical education. Tervalon and Murrary-Garcia (1998) first proposed cultural humility as a more appropriate alternative to cultural competence as the term, "competence", risked giving the impression that cultural competence was something that could be mastered and then assessed to determine its mastery. By contrast, cultural humility has no endpoint; it is a process of continuous education through a lifelong commitment to:

1. Self-evaluation and self-critique
2. Redressing power imbalances
3. Developing partnerships

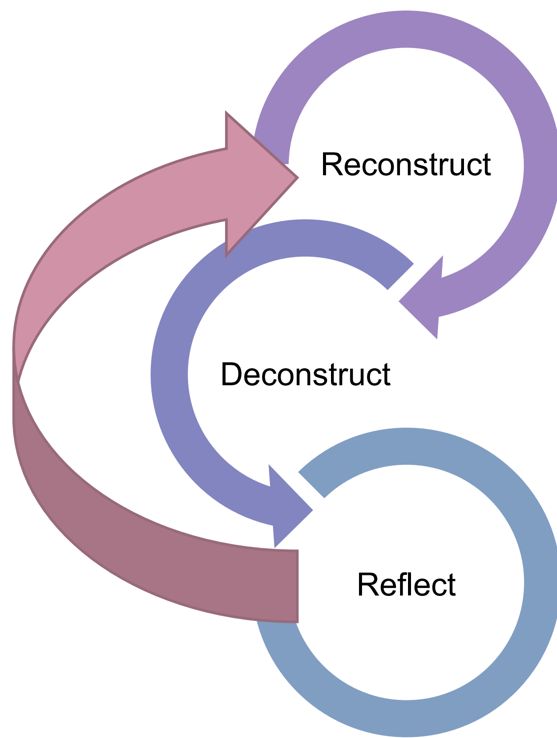
In adopting a lens of cultural humility, individuals should



Isaacson (2014) identifies two barriers to adopting a lens of cultural humility:

1. Seeing With Closed Eyes
    - Privileging your perspective or knowledge rather than seeing and understanding preconceived notions and reflecting on how you developed your worldview.
2. Seeing Through a Fused Horizon
    - Refusing to look beyond preconceived notions rather than challenging the falsehoods of these notions and forming relationships to better understand the individual.

To overcome these barriers, it is important to:



Actions:

- Articulate your worldview
- Question your worldview
- Explore your biases
- Manage your biases

Attributes:

- Openness
- Self-awareness
- Egolessness
- Supportive interactions
- Self-reflection and critique

Consequences:

- Mutual empowerment
- Partnerships
- Respect
- Optimal care
- Lifelong learning

Figure 2: Adopting Cultural Humility

Source: Drawing on Walters and Asbill (2013) and Foronda et al. (2015)

3.2.2 Facets of **Readiness**

The discussion with the person applying should focus on new research on college readiness as captured by Conley's (2008) four facets of readiness. This moves beyond the paradigm of educational attainment (e.g., GPA/test scores) as the sole determinant of whether a person is "ready" for post-secondary education. In the discussion, counsellors should focus on gaining an understanding of the diverse experience and knowledge that the person applying has through an exploration of evidence of:

1. Key Cognitive Strategies to learn different content from a range of subjects.

2. Academic behaviours necessary for completing college courses, including but not limited to self-awareness, thinking about how previous learning can be transferred to new learning contexts, and self-control.
3. Contextual Skills that allow for understanding and navigating the college system and its culture and to adapt to the differences between students' new environment and the communities and educational settings they leave behind.
4. Key content knowledge in fields that are essential for understanding core academic subjects, such as math, reading, and writing.

Step 1 in the Holistic Mature Student Admissions process was designed to guide applicants in reconstructing their key *academic behaviours* and *contextual skills and awareness.*

Facet	Component
Academic Behaviours	Narrate successes and challenges, likes, and dislikes, strengths and weaknesses
	Describe barriers (past and present) and future aspirations
	Explore motivations for completing post-secondary education
Contextual Skills	Identify role models and supports
	Establish next steps for document review and application processes

In exploring Academic Behaviours and Contextual Skills during the initial discussion, Step 1 in the process has two key benefits:

1. It motivates applicants to think about their strengths and weaknesses.
2. It establishes a process of "placement" on a pathway rather than "application" with strict acceptance or rejection outcomes.

As contextual skills and awareness in the form of college knowledge often privilege people from higher-income families or those whose relatives, friends or larger support community have already completed post-secondary education (Conley, 2008), the process encourages applicants to think about supports, identifies potential supports that would be available to them, and guides them through the application process so that they are not left to navigate the college system alone.

3.2.2.1.1.1 Cultural Safety

The final and overarching principle for the discussion is the creation of a culturally safe environment. Urihapeti Merenia Ramsden, a New Zealand Māori nurse and anthropologist, first

coined the term in 1990, in reference to providing an environment where individuals feel welcome, safe, comfortable, and free of discrimination. Importantly, cultural safety can only be determined by the recipient of the service. Through the adoption of the 5Rs of Indigenous Education, cultural humility, and a more holistic understanding of readiness, the aim is to create an environment where Indigenous mature applicants feel culturally safe in their journey back into education.

Once the applicant has submitted the form along with their supporting documents including their transcript where available, the counsellor will review the documents to determine whether an applicant should complete the Holistic Mature Student Placement Assessment. Importantly, the assessment focuses on the information provided on the form rather than the information the counsellor heard during the discussion. This maintains the premise that the discussion is an informal low-stakes chat rather than a formal high-stakes interview. If counsellors notice that information is missing from the form, they can follow up with the applicant and guide them through providing the information needed to decide about the applicant's readiness for their program of choice.

3.2.2.1.2 Step 2: Document review

The document review is a holistic analysis of the application. This assessment is meant to assess the applicant's readiness, using Conley's (2008) four facets of readiness as a baseline as defined in Step 1 above.

The goal of the document review is to consider the applicant's readiness, in terms of the alignment between their career and education goals and their program of choice (fit), their employment, volunteer, and community work experience, and their education and training

background. Each element of this holistic review provides information on one of the facets of readiness.

Section	Facet of Readiness	Measures
Career and education goals and program fit	Primary: Contextual Skills and Awareness Secondary: Academic behaviours	Specific goals, future orientation A view beyond college (e.g., to finish the program and to achieve a job in a specific field) Alignment between program choice and career goals, interests, strengths
Employment, volunteer, and community work experience	Primary: Key Cognitive Strategies Secondary: Academic behaviours	Relevant experience for program (4+ years); work experience (8+ years); Significant non-employment-related hands-on experience (4+ years), community organizational or leadership experience (4+ years, e.g., committee, council, or community governance work, sports leagues, arts, or recreation programs)
Educational and training background	Primary: Key content knowledge, Secondary: Key Cognitive Strategies	Courses completed before leaving school, especially math and English courses (e.g., English 1201/02, 2201/02, 3201/02/05, ESL 2205; Math 1201/02, 2200/01/02, 3200/01/02/08), training completed since leaving school (e.g., certificates, professional designation).

3.2.2.1.2.1 Determining Direct Admission

To determine direct admissions, Counsellors consider the applicant's program choice, their previous work experience, and what they completed at the high school level. This is not prescriptive; Counsellors may choose to exempt applicants from completing the placement

assessment at their discretion. However, applicants who meet such parameters should not be asked to complete the assessment unless concerns about readiness can be documented and validated with specific evidence.

<table>
<tr><td>Direct Admission</td><td>Understanding their program of choice and how it will help achieve future career goals
with
More than 4 years of relevant work experience in a field related to their planned program of study
or
More than 8 years’ work experience that demonstrates academic readiness and use of key content knowledge
or
Completed high-school courses at the 2000 level or higher</td></tr>
</table>

3.2.2.1.2.2 Making a Recommendation

To make their recommendation, counsellors review the applicant’s Personal Statement, Experiences and Skills document, transcripts, certificates, and other formal and informal documents to make the following determinations:

a) Recommend for admission
b) Recommend completion of the Holistic Mature Student Placement Assessment

In reviewing these documents, counsellors should answer these guiding questions:

- Does the applicant’s employment history, community, and volunteer work demonstrate their academic readiness for their program of choice?
- Does the applicant’s educational background and additional training demonstrate their academic readiness for their program of choice?
- Has the applicant demonstrated academic readiness in any other way? (e.g., through other skills, during the discussion, in preparing the documents, etc.)

Upon completing the document review, counsellors will fill out the Exploration of Academic Readiness Form, which captures the reasons for the recommendation the counsellor will make. Importantly, if a recommendation for further assessment is chosen, counsellors must give clear reasons for why the assessment was recommended. They will then contact the applicant and

inform them that they would like them to complete the assessment or parts thereof as they have some questions about their academic readiness (or particular competencies).

In making a recommendation, counsellors give full consideration of the experience that the mature student applicant brings with them, including:

Prior Employment, Volunteer, and Community Work

Applicants with more than 4 years of relevant work experience should be directly admitted to their program without completing the Holistic Mature Student Placement Assessment.

"Relevant experience" means that the **substituted work experience** must be **related** to the applicant's chosen field of study but **does not have to be in the exact field**.

For example:

Auto Body and Collision Technician	Cook
14 years experience working in a garage **OR** 4 years experience (work, volunteer, or community) in a role that included: • using tools and equipment • Reading manuals to understand tools and equipment operation • Working with paint or coatings • Safely using chemicals in the workplace • Calculating cost and time estimates and preparing invoices for clients	4 years of experience working in a kitchen **OR** 4 years experience (work, volunteer, or community) in a role that included: • Developing programs for events or fundraisers • Reviewing and upholding sanitary standards • Significant volunteer work for school breakfast/lunch programs • Reading and following directions, instructions, and procedures • Estimating supplies needed, time, and costs

In determining relevant work experience, counsellors should consult the program outcomes developed for each program available online in the Program Guide.

In determining work experience that demonstrates academic readiness and use of key content knowledge, counsellors should look for the following indicators:

Applied and Continuous Learning

On-the-job learning, training, workshops, identifying and managing learning needs, license qualifications and renewal

Communication

Giving presentations, exchanging ideas, project coordination, giving instructions, writing meeting minutes, creating how-tos, writing incident notes, communicating with clients

Critical Thinking Skills

Evaluating the quality of work (e.g., as a supervisor, foreperson, manager), consulting with others on work, using information to make decisions, judging the effectiveness of communicated information (e.g, pamphlets/posters).

After reviewing the applicants' readiness for their program of choice, the counsellor recommends either direct enrolment or the completion of the Holistic Mature Student Placement Assessment. If an applicant is recommended for direct enrolment, the indicators of readiness are clearly defined on a Counsellor Recommendation form:

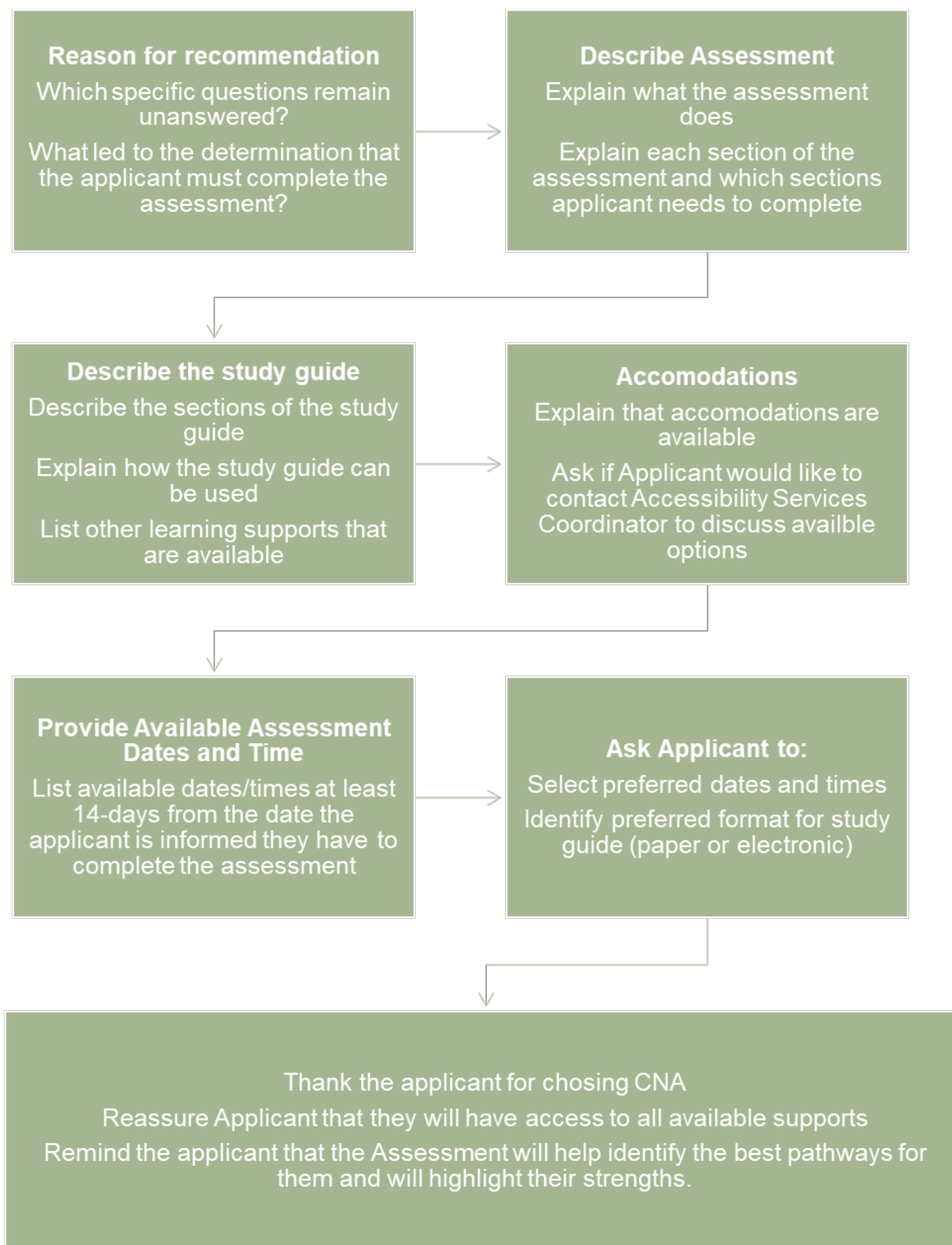
Recommended for enrolment	Yes	☐
	No	☐
Reason(s) for Recommendation Select all that apply		
Has more than 4 years of relevant work experience (formal employment or volunteer and community work)	☐	
Demonstrated required skills and competencies through paid or unpaid work experience	☐	
Has community work, volunteer, or leadership experience that demonstrates skills and competencies necessary for program completion	☐	
Completed high-school courses that would prepare the applicant for the academic skills needed for the program	☐	
Completed additional training, such as certificates from other post-secondary institutes, professional designation, or other formal training that demonstrates academic skills required for program choice	☐	
Other: Click or tap here to enter text. Describe: Click or tap here to enter text.	☐	

If a Counsellor is unable to recommend direct enrolment, the Counsellor must also define the reason why the applicant is being recommended for assessment:

Recommended for enrolment pending outcome of Holistic Mature Student Placement Assessment	Yes	☐
	No	☐
Select all sections that must be completed.		
Essential Skills and document use	☐	
Reading	☐	
Numeracy	☐	
Writing	☐	
Reason for recommendation		

In the field below, describe how the person applying does not demonstrate readiness through relevant work experience (formal employment or volunteer and community work). Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through general work experience (formal employment or volunteer and community work). Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through course completion at the high school level. Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through additional training. Description: Click or tap here to enter text.
In the field below, describe other factors that influenced the determination that the person applying should complete the placement assessment. Description: Click or tap here to enter text.

When the Counsellor completes the document review, they notify the applicant about their recommendation using the following flowchart:



3.2.2.1.3 Step 2a: Holistic Mature Student Placement Assessment

As the literature review and the environmental scan identified, the most common tools Canadian colleges use to make admission decisions for mature student applicants is a standardized test that requires all test takers to answer the same questions so that performance can be compared across applicants. The literature review also showed that the effectiveness of standardized tests in predicting college success is debated and showed that the complexity of measuring success makes it difficult to align it with quantitative data. If anything, Fowler's (1997) work on the CAAT in the Newfoundland and Labrador context is

concerning: while there was no significant positive correlation between overall scores on the CAAT and college GPA. This, in consideration of Campbell's (2006) finding that the test is "intimidating," "scary, "or "overwhelming," underscores the need to move away from the previous process.

Research has also questioned the usefulness of the other most commonly used standardized tests. James (2006) found that ACCUPLACER Online tended to be predictive of student performance for developmental math courses but not for developmental English courses. James explained that ACCUPLACER did not measure writing skills, which was the focus of the English courses. Mathew and Kashyap (2019) found a weak correlation between students' ACCUPLACER Algebra scores and performance in a first-year quantitative reasoning course, results which factored into their recommendation to develop an in-house placement test. In terms of other alternatives, James and Francis-Pelton (2005) conducted a study to determine whether the Canadian Achievement Test 2nd Edition (CAT/2) could predict student success in an ABE mathematics course. Although the authors concluded that CAT/2 test scores were a 'credible predictor' of student performance, they noted that relying solely on test scores for admission decisions would have resulted in 15 (of 82) successful students not being admitted to the program. As such, ACCUPLACER was also not considered a viable alternative to the CAAT.

There is no debate as to whether standardized tests favour students of a majority culture over students who identify as being members of a minority community. The reason for this discrepancy is difficult to ascertain, scholars have identified the following reasons:

- Students with opportunities for better quality education (such as attending a school with more resources, being able to afford a tutor, having highly educated parents, etc.) do better on standardized tests, leading to further inequities when these tests are used for admission or other high-stakes decisions (Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Koljatic et al., 2013; Sternberg, 2012).
- Standardized tests are culturally biased and test-makers do not include sufficient numbers of people from minority groups when developing and norming the tests (Fowler, 1997; Helms, 2006; Johnston & Claypool, 2010; Nunavut Department of Education, 2008; Philpott et al., 2004; Poortinga, 1995; Schmelkes, 2018; Solano-Flores & Nelson-Barber, 2001; Stoffer, 2017; Trumbull & Nelson-Barber, 2019).

Because of such concerns, a decision was made to develop an in-house, program-relevant assessment that could inform mature student placement. This test would not be the sole determinant of admissions decisions but would be used in cases where questions existed about applicants' academic readiness. The development process followed Niessen and Meijer's (2017) guidance that admission criteria should focus on what students *should* be able to do in their program of choice.

Drawing on both the research and consultations with key stakeholders, the following guiding principles were developed:

1. The assessment must be relevant to the program of choice.
2. The assessment should be culturally relevant for use with Indigenous mature student applicants and should include questions that are familiar to people living in rural communities in Newfoundland and Labrador.
3. Indigenous organizations should be consulted on the development of any revisions that will be made to the test; and
4. Since the CAAT is not appropriate for *any* mature student, a new admission test must work for every applicant.

3.2.2.1.3.1Assessment Design

To ensure program relevance, the Readiness Project adopted a curriculum sampling approach to assessment design. Based on the idea that standardized tests assume that all students have the same competencies that can be easily measured while student success has been shown to be a factor of different strengths and weaknesses and is achieved in different ways (Niessen and Meijer, 2017), the Readiness Project approached the assessment design from the perspective that representative performance is the best predictor of future performance. If an applicant is able to successfully study for and complete program-relevant assessments, they will likely be successful in their program of choice. According to research on curriculum sampling, miniature replicas are more predictive than skills assessments and can also help to measure applicants' ability to transfer skills. Moreover, the more similar the predictor and the criterion, the higher the validity (Asher and Sciarrino, 1974; Niessen, Meijer, Tendeiro, 2016; Niessen, Meijer and Tendeiro, 2018).

Curriculum samples can take on two key designs: 1. Mimic first learning outcomes; mimic competencies that are important for successful student performance (foundational knowledge needed for program success). This can include, for example, requiring applicants to study

sections of the textbook and attend lectures about the material and then complete a multiple-choice assessment constructed by a faculty member who teaches the first-year courses (Niessen, Meijer, Tendeiro, 2016), a virtual semester in medical school, followed by an exam (Visser, 2018). In developing a curriculum sample, tests should be representative of the whole programme and include a selection of critical and early competencies (Callinan and Robertson, 2000).

Bandwidth
- Relevant and representative

Fidelity
- Similarity between measure and outcome

Specificity
- Contextualised and applied knowledge

Experience
- Comprehensive preparation

Appropriateness
- Transparent and multifaceted mode of presentation and response

Figure 3: Guiding Principles for Curriculum Samples

Additionally, research has shown that curriculum samples have the potential to:

- Provide clear and early feedback and can help institutions in adopting a practice of feedforward (Tett, et al., 2012)
- Understand the assessment process as an initial encounter with post-secondary education (James & Busher, 2019)
- Mitigate selection bias, risks, and stereotype threats (Logel et al., 2012)
- Create an open and transparent system (Schmitt, 2012)
- Allow applicants moments to overcome imposter syndrome and build and understand how post-secondary institutions work (Chapan, 2015)
- Provide opportunities for mentorships (Buschor and Braunschweig, 2018)

In designing the assessment, a curriculum sample was chosen that would allow for an assessment of applicants' key competencies in numeracy, reading, and writing as well as study skills, the strategies used to learn and remember new information, including memorization, listening, reading, note taking, time and stress management, concentration, and motivation

strategies, and their ability to apply their learning in real-world settings where those skills are necessary to complete a task.

The placement assessment in Step 2(a) is meant to assess two key facets of Conley's (2008) college readiness definition: key content knowledge and key cognitive strategies.

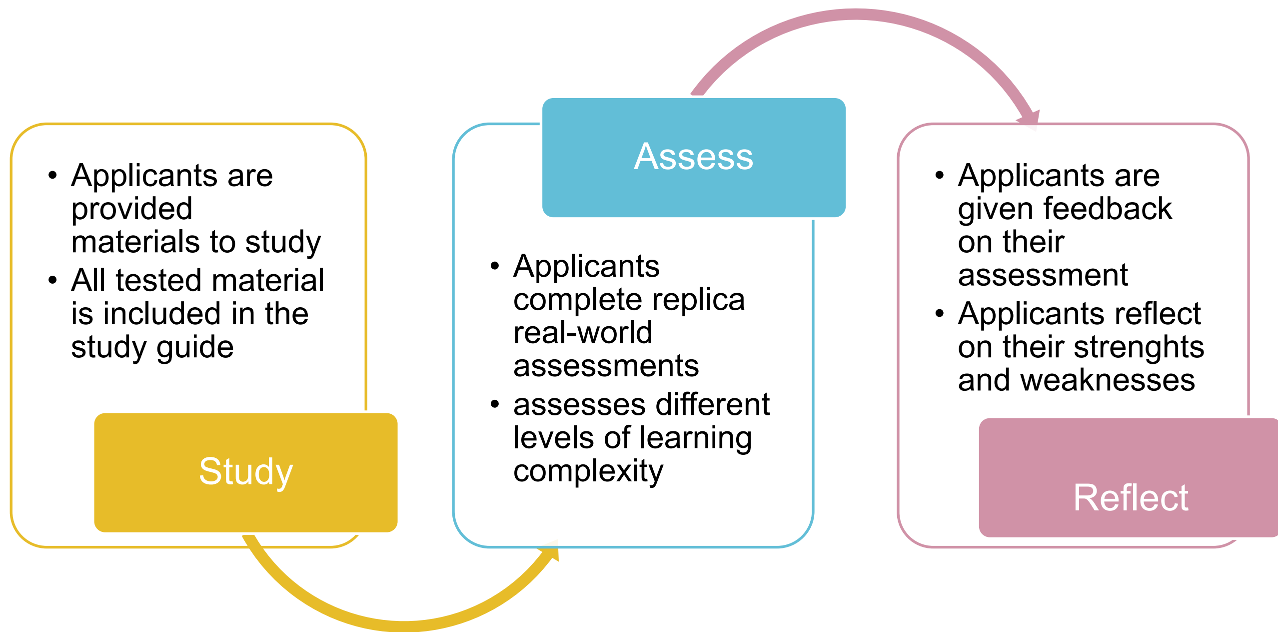
By focusing on the facets of college readiness, the placement assessment was designed to help inform each applicant's pathway to program completion. It includes the following sections:

Facet of College Readiness	Relevant Section
Key cognitive strategies	Curriculum sample
Content knowledge	Numeracy skills
	Reading skills
	Writing skills

Assessing content knowledge and key cognitive strategies as part of the same placement assessment provides mature applicants an opportunity to demonstrate their prior learning and their ability to acquire new knowledge and the skills, they must overcome any gaps in content knowledge in the fields of numeracy, reading, or writing.

3.2.2.1.3.2 Curriculum Sample

The curriculum sample is used to measure applicants' ability to apply knowledge acquired by studying materials based on an actual course from a CNA program. It assesses how applicants acquire new knowledge and draws on material that applicants would encounter early in a program. To complete the curriculum sample assessment, an applicant must prepare to a similar level as they would to complete their first assessment in a course.



To identify common courses across the Industrial Trades curriculum, first-semester courses were compared across all programs. Consideration was also given to courses that are common across schools to allow for scaling to meet these parameters.

Course	Early Learning Objectives	Advantages	Limitations
OHS	• Interpret the Occupational Health and Safety Act • Explain responsibilities under the Act	• Relevant for all fields of work • Can draw on OHS 3203	• Not included in Academics Applied Arts & Tourism or Health Sciences • May appear irrelevant for some applicants
WHMIS	• Define WHMIS safety • Examine hazard identification and ingredient disclosure	• Can draw on OHS 3203 • Allows for scaffolded assessment of one key learning outcome	• Limited to Industrial Trades • May appear irrelevant for some applicants (e.g., Academics/ Business)

Communications	• The Communication Process* • Effective writing*	• Relevant for all schools • Writing tests can be curriculum sample • Area of concern for mature students	• Unequal previous knowledge • Different courses across schools • Later in trades curriculum
Essential Skills	• Identify and describe the essential skills • Describe essential skills' levels of complexity	• Relevant for career planning • Can draw on material available from GC • Synergy with CNA's role in Skills Compass	• Limited to Industrial Trades • May appear irrelevant for some applicants (e.g., CAS transfer or applicants with significant work experience)

Based on this review, the Essential Skills course from Industrial Trades was selected for the curriculum sample. This course draws on the Essential Skills Work Ready Youth Program, which was designed by Skills/Compétence Canada to guide young people in their exploration of their current skill levels and the skills they will need to succeed in the workforce. The program focuses on 9 essential skills:

Reading Text	Ability to understand information written in sentences or paragraphs (for example, emails, manuals, instructions)
Document Use	Ability to find and understand information that is displayed visually (for example, lists, tables, pictures, blueprints, infographics) and enter information into documents (such as filling out forms).
Numeracy	Ability to use numbers and think in quantitative (numbers or amounts) to do a task.
Writing	Ability to write text and complete documents (on paper and electronically).

Oral Communication	Ability to speak and exchange thoughts and information.
Thinking Skills	Ability to find and evaluate information to make decisions or plan how to complete a task.
Digital Technology	Ability to use technology, for example, computers, phones, tablets.
Working with Others	Ability to do a task as part of a team or group.
Continuous Learning	Ability to participate in an ongoing process of improving skills and knowledge.

Although it is only taught in the Industrial Trades, Essential Skills are important for all fields of study and work, no matter a person's age, where they live, or where they work. The skills are used, to different degrees, in every job with different levels of complexity. For example, while some jobs require a lot of reading and others require very little, all jobs require some reading at some point, even if it is just to fill out a form upon hiring.

As a curriculum sample, essential skills offer three key benefits:

1. Fosters critical thinking about strengths and weaknesses.
   - Provides applicants with an opportunity to think about their essential skills and any gaps they might have, a key component of academic behaviours associated with college success.
   - Additional resources offer applicants an opportunity to learn more about particular skills and to strengthen what they self-identify as being their weaker skills.
2. Serves as an icebreaker on the assessment.
   - Essential skills have been adopted as a curriculum sample that is a graspable concept based predominantly on new knowledge acquired through studying before moving into the "content knowledge" section of the assessment.
   - As applicants are likely to have experienced assessment of their content skills, especially math, reading, and writing, the essential skills curriculum sample should carry less risk of triggering test anxiety or of being associated with experiences that trigger applicants' lower confidence and self-efficacy.
3. Establishes a core theme for the assessment.

- All subsequent sections assess applicants' essential skills in core content areas of numeracy, reading, and writing, which are also essential skills.

Questions in this section assess:

- Applicants' ability to **define** Essential Skills
- Applicants' ability to **classify** Essential Skills
- Applicants' ability to **distinguish** which essential skills help complete common job tasks for various professions.

In addition to numeracy, reading and writing essential skills, the Placement Assessment includes the Document Use essential skill, which pertains to how people use different information displays of words, numbers, icons, and other visual information to understand communicated messages. Document use skills include an individual's ability to read, interpret, complete, and create print (e.g., manuals, plans, maps, photos, signs) and non-print documents (e.g., computer, tablet or phone screens, instruments, clocks).

The document use essential skill sample was chosen for two reasons:

1. A recent research survey (Program for the International Assessment of Adult Competencies, PIAAC) found that 49% of working-age Canadians have reading and document use skills that need work. Including document use provides an opportunity for applicants to assess their competencies in this skill and address any weaknesses they might identify.
2. Document use allows for assessing applicants' key cognitive strategies in terms of their ability to apply content knowledge to new learning situations. As a curriculum sample, the study guide as a whole will help applicants acquire the competencies needed to complete the questions in this section. Assessment questions incorporate reading, writing, and numeracy skills as well as real-life information/situations drawn from CNA programs as well as everyday life skills relevant for applicants.
3. Document use allows for the inclusion of material that is relevant for mature student applicants, such as forms needed to complete applications for post-secondary funding. The material is place-based, sampled from local sources, with particular attention to sampling material from Indigenous communities to provide familiarity for Indigenous applicants and an opportunity for non-Indigenous applicants to learn about the Indigenous communities across the province.

Questions in this section will assess:

- Applicants' ability to **identify** the information necessary to complete a form.
- Applicants' ability to **analyze** information needed to complete a form.
- Applicants' ability to **apply** information (e.g., on a poster, graph, or table) to answer specific questions or to input information into a document.
- Applicants' ability to **interpret** information provided in an infographic.

3.2.2.1.3.3 Content Knowledge

Strong competencies in the content fields of math, reading, and writing are essential for both understanding core academic subjects and post-secondary success more generally. The placement assessment includes sections that assess each of these core content knowledge areas to allow for the identification of strengths and weaknesses and to inform the co-creation of a pathway into education.

1. Numeracy skills

Numeracy skills refers to an individual's competencies to use numbers and to think in quantitative terms, such as when completing mathematical operations, estimating amounts, budgeting money, scheduling time, and measuring quantities and sizes.

To assess applicants' numeracy skills, the math section focuses on arithmetic math skills, and the foundational competencies needed to complete the first industrial trades math course, AM1101.

Questions in this section assess applicants' competencies in:

- Whole Numbers
- Problem Solving
- Fractions
- Decimals
- Ratio, Proportion and Percent
- Measurement

2. Reading skills

Reading skills comprises reading material in the form of sentences or paragraphs in a variety of forms: from notes, letters, memos, and emails to manuals, books, reports, contracts, etc.

This section includes two key texts:

1. Job advertisement
    - Applying the techniques of close reading, applicants are required to answer detailed questions on a real-world job advertisement.
    - In reading the job advertisement, applicants are assessed on their ability to closely read a text and their mastery of reading the job advertisement genre, which is an essential career skill.
    - Becoming familiar with how to read job advertisements also contributes to applicants' contextual skills and awareness by providing them with a skill they will need for entry into the workforce after education while also building their confidence in reading this text genre.

2. Occupational Health and Safety related legislation and policy
    - Occupation Health and Safety (OHS) policies are sampled from the CNA OHS curriculum as a common component of technical and trades programs but also as a common policy that applicants will encounter in their work lives, regardless of the field of work.
    - Including a reading sampled from the curriculum provides applicants with the opportunity to assess their ability to transfer their reading skills to reading discipline-specific texts. While preparing for the assessment, they will be provided with study materials that will help them build and transfer such skills.

Questions in this section assess:

- Applicants' ability to **identify** important information in a text.
- Applicants' ability to **analyze** a text for key points.
- Applicants' ability to **interpret the** information provided in a text.

3. Writing skills

Writing skills are required to compose a variety of texts, ranging from filling in forms to writing notes, reminders, texts, emails, to-do lists, instructions, etc. In the literature on college readiness, foundational writing skills are continuously identified as a central competence for success at the post-secondary level (Coney, 2008). The ability to write is not only an important competence in certain fields (e.g., communications or journalism); as communication moves from oral to written digital communication (e.g., emails, texts), writing is an essential skill in nearly every field of work. Writing is also used predominantly in assessments in other content

areas (e.g., short answer, fill-in-the-blanks, long-answer tests) over the course of post-secondary studies and is therefore necessary for college success.

Communications courses are an essential component of most CNA programs, ranging from instruction on grammar, mechanics, sentence, and paragraph structure, to writing emails, policies, and manuals, and writing theories such as the communication process and effective communication. The writing assessment requires applicants to write a descriptive paragraph that explains a process.

This section assesses:

- Applicants' ability to **identify** key components of a paragraph.
- Applicants' ability to **outline** a paragraph.
- Applicants' ability to **structure** a paragraph.
- Applicants' ability to **construct** complete sentences.
- Applicants' ability to **determine** key information for a how-to text.

3.2.2.1.3.4 Study Guide

To help applicants prepare for the assessment, a study guide was also prepared. The study guide contains study materials on all the information and skills needed to complete the assessment along with "Tips for Effective Studying" and how to answer specific question types. The study guide was designed to help increase mature students' readiness, their confidence in their readiness, and so that they could acquire study skills, which scholars have shown can help student success and help them transfer these strategies across their post-secondary education (see, e.g., Howard et al., 2018).

3.2.2.1.3.5 Relevance and Reliability

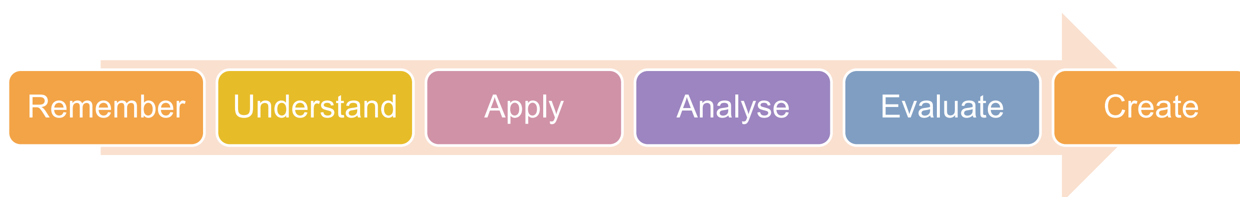
The Holistic Mature Student Placement Assessment was finalized using a four-step process. First, the Readiness Team designed a template for the assessment, rubric, and study guide, drawing on the literature review, stakeholder consultation, and environmental scan. It then consulted with the Counselling Team's assessment subcommittee to make adjustments to the assessment as necessary. The assessment was then tested with high school graduates and near-graduates to ensure test fairness and question clarity. Finally, the Advisory Committee reviewed the assessment and provided final approval for the model and the assessment template.

The process was designed to ensure collective decision-making about the final assessment, study guide, and the rubrics that will be used to supplement the initial discussion where there are questions about applicants' academic readiness.

3.2.2.1.3.5.1 Reliability

In designing the Holistic Mature Student Placement Assessment, consideration was given to ensuring assessment reliability. First, drawing on the principle that the longer the assessment the greater the reliability, the assessment is divided into four different skills. On shorter assessments, each question is heavily weighted, and a wrong answer can impact the reliable placement of test takers. As longer assessments can produce more reliable results but also demand test-takers' attention, the assessment has been divided into sections with different tasks. Second, each section and each question are proceeded with clear and concise instructions. Each question is directly related to the material included in the study guide so that all applicants can successfully prepare for the assessment. Third, multiple measures are used throughout the assessment, including multiple choice and short- and long-answer questions. For the writing section, a long-answer format was adopted. Including multiple question types ensures that test-takers who struggle with specific assessment formats are not disadvantaged (Clay, 2001). The study guide also includes an overview of how to complete each question type, guidance on best practices for answering specific question types, and successful test-taking skills.

In the description of each section above, each outcome is specifically defined. These outcomes cover the spectrum of Bloom's Taxonomy of the Cognitive Domain as adapted by Anderson and Krathwol (2001), which moves learning away from memorization to complex and applied knowledge.



3.2.2.1.3.5.2 Testing the Assessment

In June-July 2022, the Holistic Mature Student Placement Assessment was tested to ensure its alignment with the knowledge and competencies that high-school graduates in Newfoundland and Labrador possess. Specifically, the assessment was tested to ensure that students

graduating or nearing graduation from a high school in Newfoundland and Labrador could complete the assessment.

All students were able to complete the assessment, with an overall average of 101/115 correct answers or an average of 88%. It was anticipated that all students would have been able to get 90% or higher on the assessment. While 88% was close to the anticipated average score, the assessment was reviewed and questions that none or very few of the volunteer test takers answered incorrectly were removed from the assessment.

In general, the test-takers performed weakest on the numeracy and reading skills sections, with two test-takers not meeting the benchmarks for “meeting” numeracy and reading skills. These sections were analyzed and revised, and the test was retested by a different sample of volunteer test takers. These test takers met the anticipated benchmarks for high-performing grade 11 and grade 12 students. No further adjustments were made to the assessment.

3.2.2.1.3.5.3 Transparency

To ensure assessment transparency, a rubric was designed for each section of the assessment. The rubrics are based on specific criteria and standards that define successful task completion and are measured using a rating scale or scoring rubric that transparently captures the successful task completion. These rubrics are also included in the study guide.

Sample Rubric Score and Skill Level

Essential Skills

By the end of this section, learners will be able to:

<table>
<tr><td colspan="3">Comprehension
Emerging
1 MC</td><td colspan="3">Application
Approaching
4 MC</td><td colspan="3">Analysis
Meeting
5 MC</td></tr>
<tr><td colspan="3">• Define the concept of essential skills</td><td colspan="3">• Explain the differences between different essential skills</td><td colspan="3">• Analyze which essential skill will best help complete a task</td></tr>
<tr><td>MC1</td><td colspan="2">☐</td><td>MC 2</td><td colspan="2">☐</td><td>MC 6</td><td colspan="2">☐</td></tr>
<tr><td rowspan="6">Benchmark met? (1/1)</td><td rowspan="3">Yes</td><td rowspan="3">☐</td><td>MC 3</td><td colspan="2">☐</td><td>MC 7</td><td colspan="2">☐</td></tr>
<tr><td>MC 4</td><td colspan="2">☐</td><td>MC 8</td><td colspan="2">☐</td></tr>
<tr><td>MC 5</td><td colspan="2">☐</td><td>MC 9</td><td colspan="2">☐</td></tr>
<tr><td rowspan="3">No</td><td rowspan="3">☐</td><td rowspan="3">Benchmark met? (3/4)</td><td>Yes</td><td>☐</td><td>MC 10</td><td colspan="2">☐</td></tr>
<tr><td rowspan="2">No</td><td rowspan="2">☐</td><td rowspan="2">Benchmark met? (3/5)</td><td>Yes</td><td>☐</td></tr>
<tr><td>No</td><td>☐</td></tr>
</table>

3.2.2.1.3.5.4 Assessment Security

The use of the template will help to ensure test security. Each iteration of the assessment will use similar material for assessment, but the questions will change as will the material. Drawing on Wollack and Fremer's (2013, pp. 15-124) guidelines for test security, the assessment can be secured by:

- In the essential skills section of the assessment, questions could still focus on the applicant's ability to understand the curriculum sample, such as defining essential skills and understanding how they are used in various scenarios. The Essential Skills that applicants are required to define will be swapped in and out: if the previous year's assessment asked applicants to define numeracy, writing, and reading skills, the next year will ask applicants to define continuous learning skills, document use skills, and working with other skills. The subsequent year will ask applicants to define oral communication skills, thinking skills, digital technology skills, etc.
- In the document use curriculum sample, the assessment will focus on how applicants understand infographics and forms, but different infographics and forms can be used.
- In the reading section, texts can be changed, such as using a different job ad and different sections of the *Occupational Health and Safety Act* and a different OHS policy.
- For the math section, questions will still focus on the same outcomes, but the question order and questions could be changed.

As applicants will be provided with a study guide that includes sample questions, what they are asked to complete on the assessment should not be surprising for them. Moreover, each applicant will be informed of the learning objectives for the material they are studying. If assessments are appropriately designed, questions are designed based on learning objectives, which means most people should be able to anticipate the questions that will be asked to assess their knowledge. Using an assessment design that is aligned with learning outcomes allows for each iteration to be modified while ensuring consistency across each iteration.

To develop the holistic placement assessment, an iterative and incremental program development approach was adopted. It involves six key components:

1. Research
2. Preliminary design (template)
3. Consultation

4. Revision
5. Testing
6. Final design

Such an approach to program development emphasizes continuous improvements that result in incremental change and strengthen program development. Generally used in manufacturing and software development, an iterative design involves designing, implementing, testing, and refining a program in multiple cycles, building up Shewhart's concept of Plan-Do-Study-Act (see, e.g., Deming, 1986; for agile design see Dingsøyret al., 2012). Each component fosters testing and retesting to refine the assessment process before the program pilot phase. Most importantly, an iterative approach is rooted in research as each testing phase allows for data collection which then informs and evolves the next iteration of the program.

Iterative program design provides several key benefits:

- Allows for the correction of misunderstandings early in the process development.
- Identifies issues before pilot implementation.
- Provides multiple opportunities for feedback to ensure the program is designed as intended.
- Fosters an objective assessment of potential program strengths and weaknesses.
- Leverages lessons learned to improve the process before piloting.
- Includes user testing in the process.

3.2.2.1.4 Step 3: Education pathway and plan co-creation

Once the document review is complete, the counsellor will then meet with the applicant to review their recommendation. If the counsellor is recommending admissions, the counsellor will provide information about available supports and essential information for becoming a student (housing, funding, course registration, etc.). If the applicant has completed the assessment, the counsellor will review the assessment results, the applicant's strengths, and areas to improve. If the applicant requires upgrading before entry, the counsellor will create an education plan with the applicant.

The guiding principle of the third step is **placement**. Applicants will not receive a yes/no in terms of their application but are given direct information as to how they can achieve their goal of returning to education.

The co-development of the education pathway focuses on three key outcomes:

1. Review documents together
2. Co-develop a pathway based on document review and counsellor recommendation.
3. Discuss available supports.

After co-developing the education pathway and discussing supports, the counsellor walks the person applying through the next steps on their pathway.

1. Direct admissions, including, for example, and where necessary:
    - Registration process
    - Funding options
    - Buying books
    - Finding housing
    - Securing supports before the program begins
2. Admission after upgrading, for example, and where necessary:
    - Available programs and institutions where these programs are offered (when not CNA)
    - Funding options
    - Available supports

The person applying will be given the choice to make initial contacts with funding agencies/bodies and support services with the counsellor or to make such contact on their own time. If an applicant chooses to reach out on their own time, the counsellor should follow up with the person applying to provide them with the support to start their pathway.

As each individual will have different needs, the process of co-developing the pathway should be as flexible as possible. The counsellor acts as a facilitator, prompting the person applying to think critically about their documents and their various pathways into education. This provides more flexibility for the person applying, as they can take the conversation in other directions if they choose.

At the beginning of the discussion, counsellors welcome the person applying to the discussion and express gratitude for their participation in the pilot and for choosing CNA as their choice for post-secondary education. The counsellor should ask the person applying about their experience with the process, and assessment where applicable, and if there is anything that they feel might have been overlooked or if there is anything they would like to add before beginning the discussion.

The counsellor should then explain that the goal of the discussion is to co-develop a pathway

into education for the person applying. Here, defining what co-development means could help to set the expectations for the discussion:

Co-Development
Working together to develop a pathway by exploring potential options and reviewing these options to select a mutually agreed upon way into education
Pathway
A tailored plan that outlines steps that need to be completed before entry into program of choice including a detailed support plan, which will help applicants achieve their goals.

Counsellors will then explain that the pathway co-development will begin with a review of the documents the person applying submitted, an explanation of the counsellor's recommendation, and a discussion about the recommendation. The counsellor will outline the guiding questions used for the document review together, providing concrete examples from the submitted documents to show how the person applying met (or did not meet) the related criteria:

1. Does the applicant's employment history, community, and volunteer work demonstrate their academic readiness for their program of choice?
2. Does the applicant's educational background and additional training demonstrate their academic readiness for their program of choice?
3. Has the applicant demonstrated academic readiness in any other way? (e.g., through other skills, during the discussion, in preparing the documents, etc.)

Counsellors should ask the person applying how they feel they demonstrate readiness, with a focus on employment, volunteer, and community work experience (where relevant) and educational and training background (where applicable). If there is a discrepancy between the applicant's and the counsellor's assessment (e.g., where the person applying under- or over-estimates information), they should discuss this discrepancy.

Importantly, if the person applying had been recommended to complete the Holistic Mature Student Placement Assessment, counsellors must give clear reasons for why the assessment was recommended, drawing on the documents the person applying had submitted.

For applicants who complete the Holistic Mature Student Assessment, counsellors will then review the results of the assessment, using the rubrics for each section of the assessment, where applicable.

3.2.2.1.4.1 Direct Admissions

For applicants who are recommended for direct admissions, counsellors should discuss:

- Registration process
- Funding options
- Buying books
- Finding housing
- Securing supports before program start
- Obtaining access to technological infrastructure (e.g., printing services available on campus, how to connect to Wi-Fi on campus, service providers for Internet in the region)
- Access to healthcare facilities (both on campus and in the community)

In discussing supports, the counsellors should explore the following topics to help in the completion of the Supports Form.

3.2.2.1.4.1.1 Discussing personal supports

Counsellors will guide the person applying to think about the support they have access to at home. The aim is for them to think about support people in their lives that they can draw on during their studies. This can include family, friends, or other community supports).

The following questions will guide the discussion:

When we are students, we all need support of some kind. What supports do you have at home?

- [If applicable] How do you think moving for school will affect those supports?
- Do you have an idea of how you can still get access to those supports while you're in school (such as regular phone calls or video chat, if available)?
- What kind of things do you think you might need help with while you are studying at CNA?
- Do you know of any places in [campus community] that can help you while you are here studying? (Discuss any applicable campus and community resources that can support them, such as Friendship Centres, social groups, childcare, housing, funding agencies, transportation, counsellors, etc.)
- What family or community responsibilities do you have? How do you plan to manage these responsibilities while in your program?

Applicants will also be reassured that there are supports available to them in the campus community to help them with any additional responsibilities that they might have (e.g., childcare offers).

3.2.2.1.4.1.2 Discussing Learning Supports

The counsellor will then guide the person applying to think about the learning supports that can help them complete their program, starting with the question: Do you think you might need any help or supports with your schoolwork? If so, what kind of supports or help? To help the applicant think about what kind of support they might need, the counsellor will follow up with the following questions:

- Did you get extra help in school? Did you get any testing accommodations (e.g., did you have tests read for you or were you given extra time to complete tests?)? Do you know the reason why you had access to such supports? (e.g., does the applicant have a diagnosed reading / writing / math / vision / hearing / physical / neurological exceptionality?)
- Where applicable: Does your funding agency offer any supports?

The counsellor then outlines the supports available at that campus, including help centers, peer tutors, etc., in the community, and from their funding agency, if applicable (funding for tutors, etc.) and encourages the person applying to start using these supports right away. In terms of learning supports, the counsellor will ask if the person applying would like to contact any of the available supports and offer help in preparing these emails (e.g., they can write them together). This will provide the person applying with direct contact with supports that will help them as they make the transition from “applicant” to “student”.

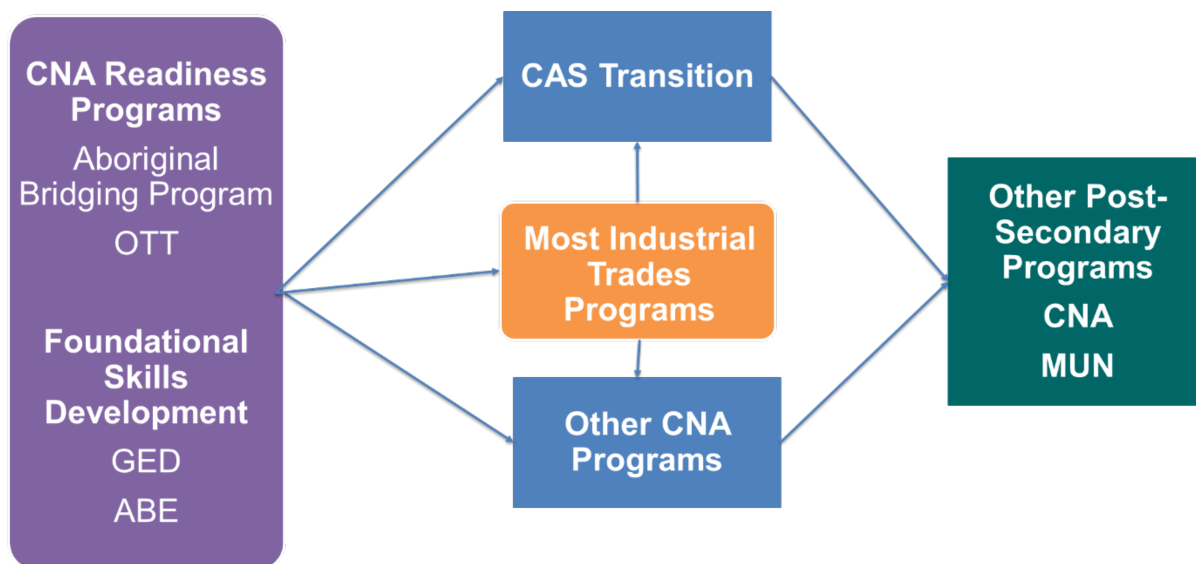
Many mature students who return to education do so against the background of a negative previous educational experience, which can limit their sense of self and their belief in what they can achieve (Hammersley and Treseder, 2007; Youdell 2012). This can make them reluctant to return to formal education. They perceive returning to education as a risk, not only in terms of not being accepted but also in terms of the potential that it might trigger previous traumas and expose them to the embarrassment of not being academically successful (Gonsalves et al. 2011). This is further compounded for Indigenous students who are often coping with the generational trauma of institutionalized residential schools and cultural stereotypes about their abilities to learn. This coincides with facing a decision to leave the safety of their communities behind in order to re-enter education as most Indigenous communities are rural and access. Having to leave their communities behind to re-enter education. By providing support throughout

the document review process, the Holistic Mature Student Placement approach seeks to bridge the gap between previous negative experiences with education into what should be a positive and life-altering return to education. Moreover, it offers an opportunity for mature students to acquire college knowledge that they might not be able to gain from their network. This will help them navigate the college system and level the playing field between people who know people who have attended post-secondary institutes and those who might lack such a contact. Levelling the playing field in terms of college knowledge is essential as access to such knowledge and networks were significant predictors of college performance such as overall GPA and course grades (Almeida et al., 2019; Noonan, Sedlacek, and Veerasamy, 2005).

As such, the provision of support is also envisioned as a first step towards college success. It also should mark the first of many positive experiences, where mature students' decisions to return to education are celebrated and doors are opened rather than closed. As Farini and Scollan (2019) found, interactions during the application process can help to build trust in the system and positively impact applicants' as well as the system's well-being. As Bell (2017) shows, the first engagement that a person has with a post-secondary institution affects how learners see themselves as being either capable or in need of remediation, especially in cases where a person may lack understanding of the institutional environment itself and find it difficult to navigate the post-secondary landscape.

3.2.2.1.4.2 Alternate Pathway into Admissions

In cases where applicants require upgrading before admission to their program of choice, counsellors should explain the options available to the person applying. Applicants should be reassured that this does not mean that they will not be admitted to their program of choice but that there are areas of improvement that they need to focus on before they start their program. Upgrading should be presented as a step that will lead them into CNA:



The person applying will discuss each of these options with the counsellor and explore their advantages and disadvantages. After this discussion, the person applying will be asked to select which pathway they would like to begin on. Counsellors reassure the person applying that the pathway can change at any point and if they decide they want to change their first step from a Readiness Program to develop their foundational skills, they can do so and that the counsellor would always be there to discuss options with them. Additionally, they should identify available funding options, especially for ABE programs.

In developing a pathway with applicants, the aim is to provide feedback that feeds forward. As James and Busher (2019) explain, future-oriented feedback can be especially important in the early transition stage into college where negative interactions can derail students' confidence in their choice to attend post-secondary education. Therefore, once the person applying has completed their Education Pathway Form and the Supports Form, counsellors will thank them for participating in the process and encourage them to follow the co-developed pathway. Counsellors will also explain to the person applying that they will contact them twice to follow up in early fall (September/October) and in early Winter (January/February). The purpose of the check-in is to facilitate a process of feed-forward and to see how things are going and if they are satisfied with their pathway and ensure that they have been able to access and avail of any supports they have identified on their supports form.

3.3 Phase 3: Evaluating Mature Student Needs

In Phase Three (2022-2023), the Readiness Project focused on evaluating the new model by piloting it for Indigenous mature students applying to Industrial Trades programs that would start in Fall Semester 2022. After the pilot, the aim was to evaluate the model in terms of how it was experienced by students, whether it effectively assessed applicants' academic readiness and the model's feasibility for long-term adoption.

During the period the pilot was in place, only one applicant who met the requirements for the pilot applied to a program in the Industrial Trades. Although the applicant expressed interest in participating in the pilot and began the initial process of applying to CNA, the student ultimately discontinued their application for unknown reasons. As such, the new model was not subjected to a pilot evaluation. Despite such limitations, the Readiness Project was able to evaluate trends in mature student enrolments, mature student retention, the DISK method implemented by CNA in 2022, the barriers that mature students face in returning to school, alignment between the high school program and industrial trades programs, and the importance of connecting to community, as the following sections describe.

3.3.1 Mature Student Profile at CNA

Despite such limitations, the data allow for a reconstruction of key data points, including new admissions per term, Indigenous student representation (based on available data), gender, average age, and mature student performance as the following analysis shows.

3.3.1.1 New Admissions per term

Between 2019-2022, CNA averaged 2,369 new admissions per fall semester intake (including general, special, and mature student admissions) in the School of Academics, Applied Arts and Tourism, the School of Business and Information Technology, and the School of Industrial Trades and Natural Resources.[39] In the same period, mature student admissions accounted for an average of 104 students, less than 5% of new student admissions in these three schools.

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[39] The data analysis of CNA admissions was limited to three schools: The School of Academics, Applied Arts, and Tourism, the School of Business and Information Technology, and the School of Industrial Trades and Natural Resources. Data were also collected for the Fall semester in-take. All data cited in this section refer to these three schools unless otherwise identified. Data collection was limited to these schools as Mature Student Admissions 'does not apply to

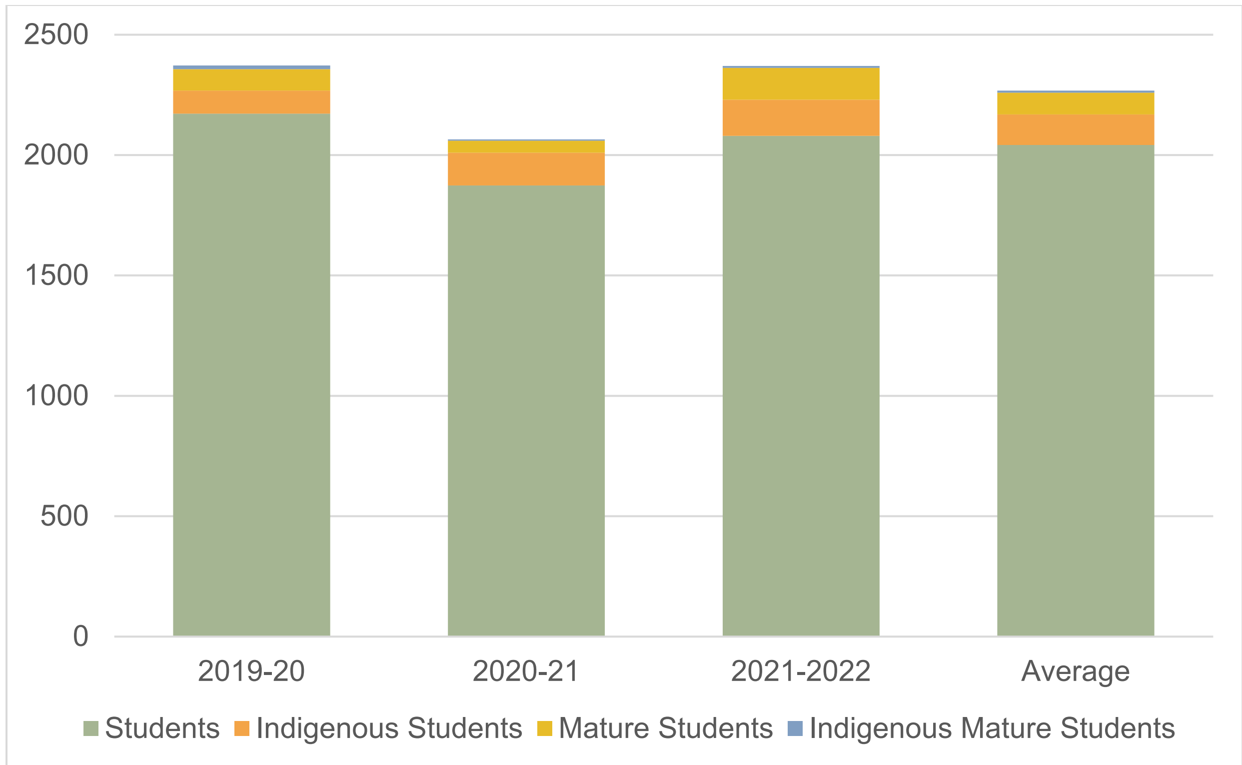

Figure 4: New Student Admissions in the School of Academics, Applied Arts and Tourism, the School of Business and Information Technology, and the School of Natural Resources and Industrial Trades, 2019-2022

The low number of mature student applicants would be unsurprising if analyzed against the background of the recent increases in on-time graduation rates across Canada, from 81 percent in 2018/2019 to 84 percent in 2019/2020. [40] Increases in Newfoundland and Labrador have been more substantial, reaching 94% from 89% in 2016. Based on these numbers, a Mature Student population of 5% would be expected. However, this would only be an accurate reflection if CNA's target population was only recent graduates and not the typical workforce

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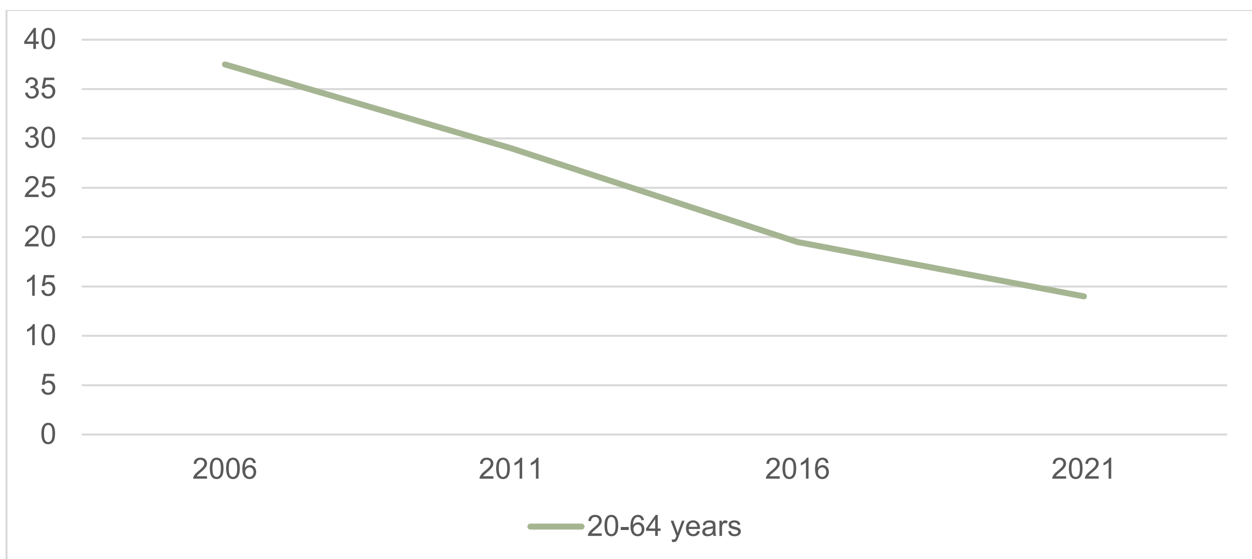
programs with competitive entry admissions processes' or those with higher requirements than a high school diploma, which would include the majority of programs in the School of Health Sciences and the School of Engineering Technology. As such, mature students in these schools account for less than 15% of all mature student admissions combined. For more information on the limitations placed on mature students admissions, see CNA's Admissions Policy.

[40] High school graduation rates in Canada, 2016/2017 to 2019/2020 (Portable Document Format (PDF), 280.82kB)

age between 15 and 64 years old[41]. This means that Mature Students can have school-leaving dates dating back to the 1970s when drop-out rates were higher. Taking a more recent lens, data from the Department of Education indicates that graduation rates in 2000 were 74.8% for all students, 83.1% for women-identified students and 67.1% for men-identified students[42], which indicates a larger target population than today's numbers.

According to data from the 2020 Census, 12% of people (35,680) between the ages of 20-64 in Newfoundland and Labrador do not have a high school diploma or equivalency certificate. 9% of people between the ages of 20-55 do not have a high school diploma or equivalency certificate (18,305). Among those between the ages of 20-44, 7% do not have a high school diploma or equivalency certificate. Thus, while over time the number of people without a high school diploma or equivalency certificate, more than 10% of Newfoundland and Labrador's workforce lacks a high school diploma or equivalency certificate. While this is decreasing over time (see Figure 5 below), the representation of mature students in new student admissions at CNA should be addressed.



[41] This age range is used by Statistics Canada to measure employment and labor force participation rates. However, it's important to note that this age range can vary slightly depending on the context, as some organizations or programs may have different age eligibility requirements. Additionally, there are ongoing discussions around extending the workforce age range, as people are living longer and working later.

[42] Government of NL, Education Statistics - Elementary - Secondary, 2011-12

Figure 5: Percent of population without high school diploma, 2006-2021.[43]

The Government of Newfoundland and Labrador's Workforce Development Report, "The Way Forward on Workforce Development" (2019).[44], underscores the importance of increasing labour market participation of immigrants, women, persons with disabilities, Indigenous people, youth, and older workers. CNA should create a strategic action plan for reaching individuals in these groups who do not have a high school diploma or equivalent and identify clear pathways to education that lead to employment. CNA should look at the intersectionality of these groups, especially those who are out of the labour force because they lack the credentials needed to access it. The same report identifies that while employment among older workers (55+) has increased by 45% between 2008 and 2018 (34,300 to 49,700), the unemployment rate also increased (from 15% to almost 17%, representing just under 10,000 unemployed older workers available to work in 2018). As older workers are also more likely not to have a high-school diploma or equivalent, CNA should develop a strategic plan to establish pathways from education into employment for older workers. Options could include working with local partners to understand regional characteristics (e.g., local organizations, development associations, social enterprises, those availing of Job Creation Partnerships and those participating in the Skills Development program) and government-developed workforce development action plans.

3.3.1.2 Indigenous Student Representation

As section 3.3.3 describes, CNA's data on the number of Indigenous-identifying students may not provide an accurate reflection of the number of Indigenous-identifying students because it is self-reported and manually keyed. As such, the numbers reported in this section are likely an inaccurate reflection of the number of Indigenous students attending CNA. However, as it is the only data available currently, this section outlines what the data collected tells us about CNA's Indigenous-identifying student population.

[43] Source: Statistics Canada. Table 98-10-0384-01 Highest level of education by census year: Canada, provinces and territories, census metropolitan areas and census agglomerations; https://doi.org/10.25318/9810038401-eng

[44] Government of NL, The Way Forward on Workforce Development.

As Figure 6 depicts, Indigenous students account for 6% of the average intake of new students per admissions cycle (with a total of 2398 new admissions) across the three schools considered for this analysis.

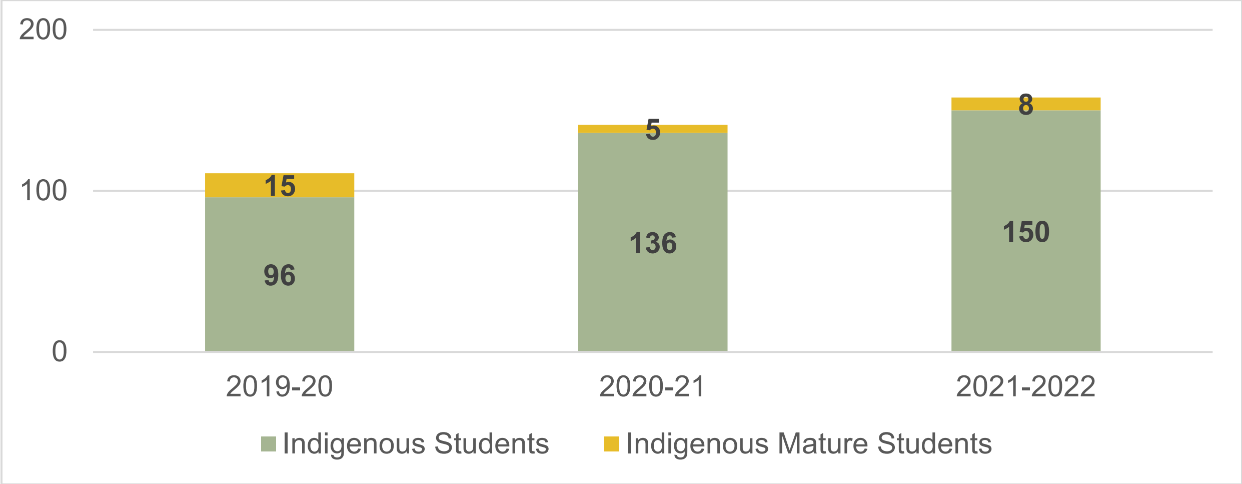


Figure 6: Indigenous student representation, 2019-2021

According to Statistics Canada (2021), 12% of (36,640) people in Newfoundland and Labrador between the ages of 20-64 identify as an Indigenous person. As such, Indigenous students are underrepresented in CNA's student admissions (with only 50% of the population represented). According to the 2011 census, 55% of Indigenous people aged 25 to 64 in Newfoundland and Labrador had a certificate, diploma or degree from a trade school, college, or university. For non-Indigenous people between the ages of 25-64, 59% had a post-secondary credential. In the most recent census (2021), 61% of Indigenous people in Newfoundland and Labrador reported having a post-secondary credential compared to 63% of their non-Indigenous counterparts. Moreover, the percentage of Indigenous people without a "certificate, diploma or degree" has decreased from an average of 28% in 2011 to 23% in 2021. As data from Statistics Canada indicates that Indigenous people in Newfoundland and Labrador are attending and completing post-secondary education at similar rates as those of their non-Indigenous counterparts, CNA Indigenous student representation does not appear to reflect representation in the wider community.[45]

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[45] Statistics Canada. Table 98-10-0415-01 Highest level of education by major field of study (summary) and Indigenous identity: Canada, provinces and territories, census divisions and

On average, Indigenous Mature Students comprise 9% of all mature student admissions (see Figure 7). By contrast, 17% of the population of Newfoundland and Labrador between 20-64 without a high school diploma or equivalent identify as an Indigenous person. Accordingly, Indigenous-identifying students are also underrepresented among mature student admissions as current numbers only represent 52% of the community profile.

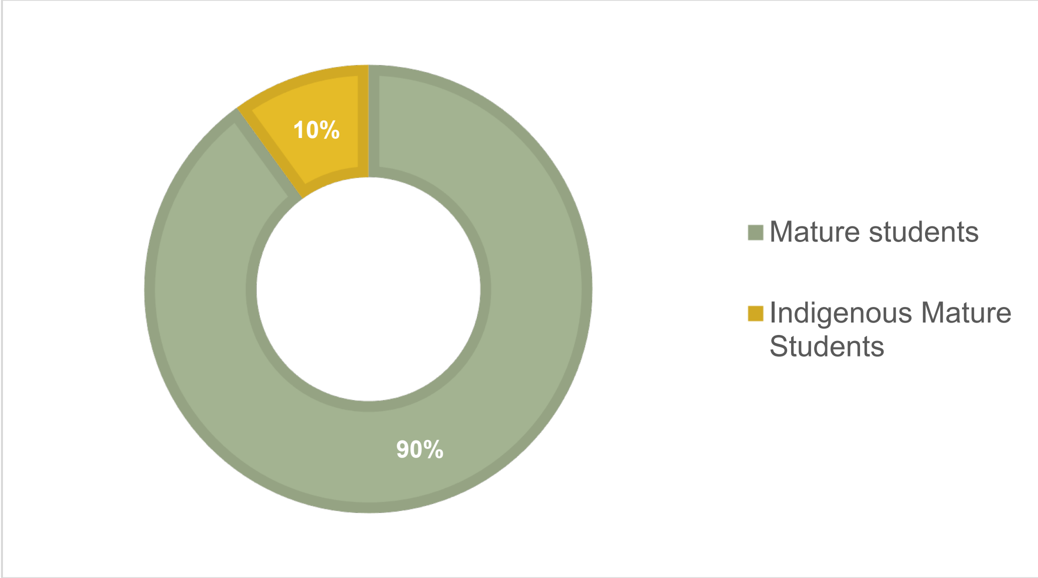

Figure 7: Indigenous-identifying Mature Student Admissions, 2019-2022

Most Indigenous-identifying applicants identified membership in Qalipu First Nation, Nunatsiavut Government, and NunatuKavut Community Council as Figure 8 illustrates.

census subdivisions with a population 5,000 or more. https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=9810041501

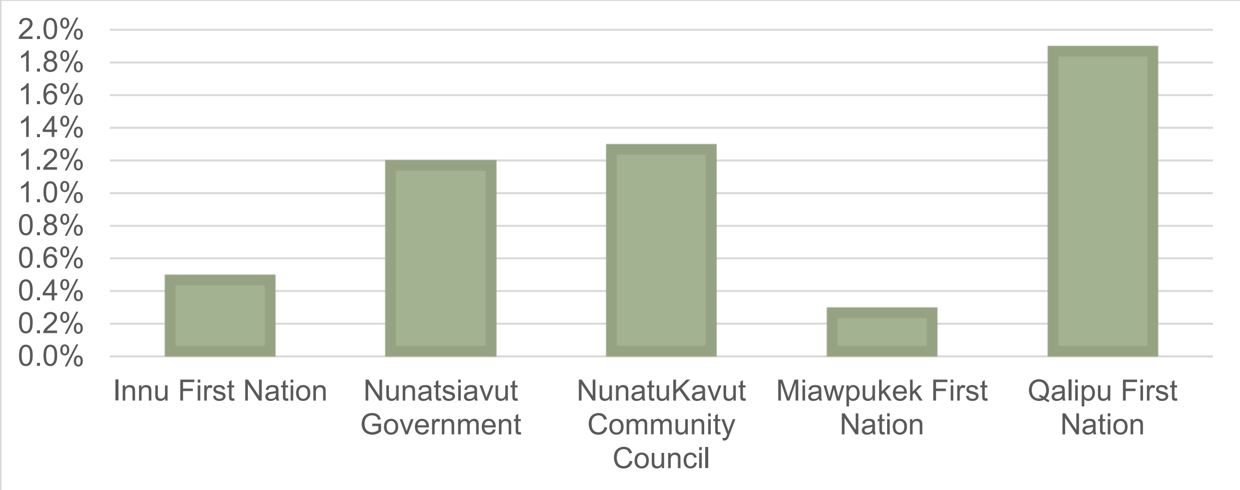

Figure 8: Indigenous-identifying new student admissions, percent total of new admissions, 2019-2022

For mature students, the level of representation is more difficult to calculate given the low average number of Indigenous People admitted to CNA as mature students. Due to low numbers, the data has been aggregated for 2019-21 and averages were calculated for each Indigenous identity as depicted below:

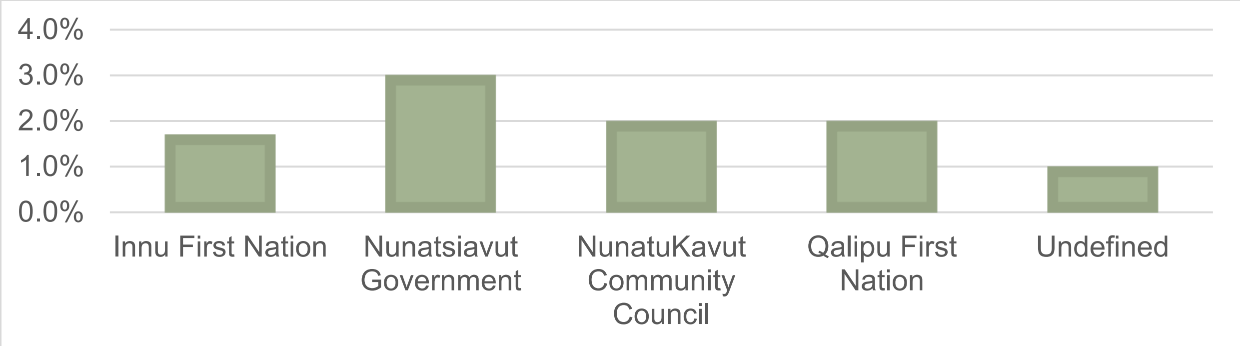

Figure 9: Indigenous-identifying new mature student admissions, average percent total of all new mature student admissions, 2019-2022

3.3.1.3 Gender

As Figure 10 depicts, women comprise 46% of new student admissions, compared to 51% of the population of Newfoundland and Labrador between 15 and 64 years of age. By contrast,

men average 53.5% of new student admissions while 49% of the population of Newfoundland and Labrador is between 15 and 64 years of age.[46]

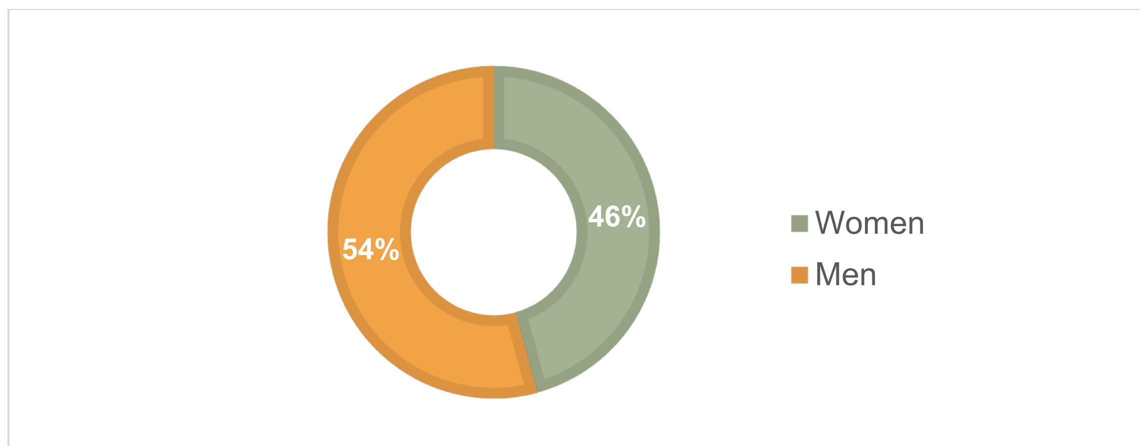

Figure 10: Gender Profile New Admissions, 2019-2021

16 students over the three years identified as X or undefined (less than 0.2%). Given the low numbers, this data cannot be disaggregated. For new admissions who identify as an Indigenous person, the average is similar, 55% men-identifying and 45% woman-identifying, compared to 48% male and 52% female representation in the population more generally. The same distribution is found for non-Indigenous identifying Mature Students. For Indigenous Mature Students, however, women are underrepresented at only 25% of new admissions.

3.3.1.4 Average Age

Figure 11 illustrates the average age for new student admissions is 24 years of age with female-identifying students averaging 25 years of age and male-identifying students averaging 23 years of age. Indigenous-identifying new students have an average age of 25 years of age.

For new mature student admissions, the average age is 30, with female-identifying new students entering a CNA program at 33 and male-identifying students averaging 28 years of age. By contrast, for Indigenous Mature students, female-identifying students have an average age of 29 years and male-identifying have an average age of 33 years.

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[46] Statistics Canada. 2023. (table). *Census Profile*. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed November 28, 2023).

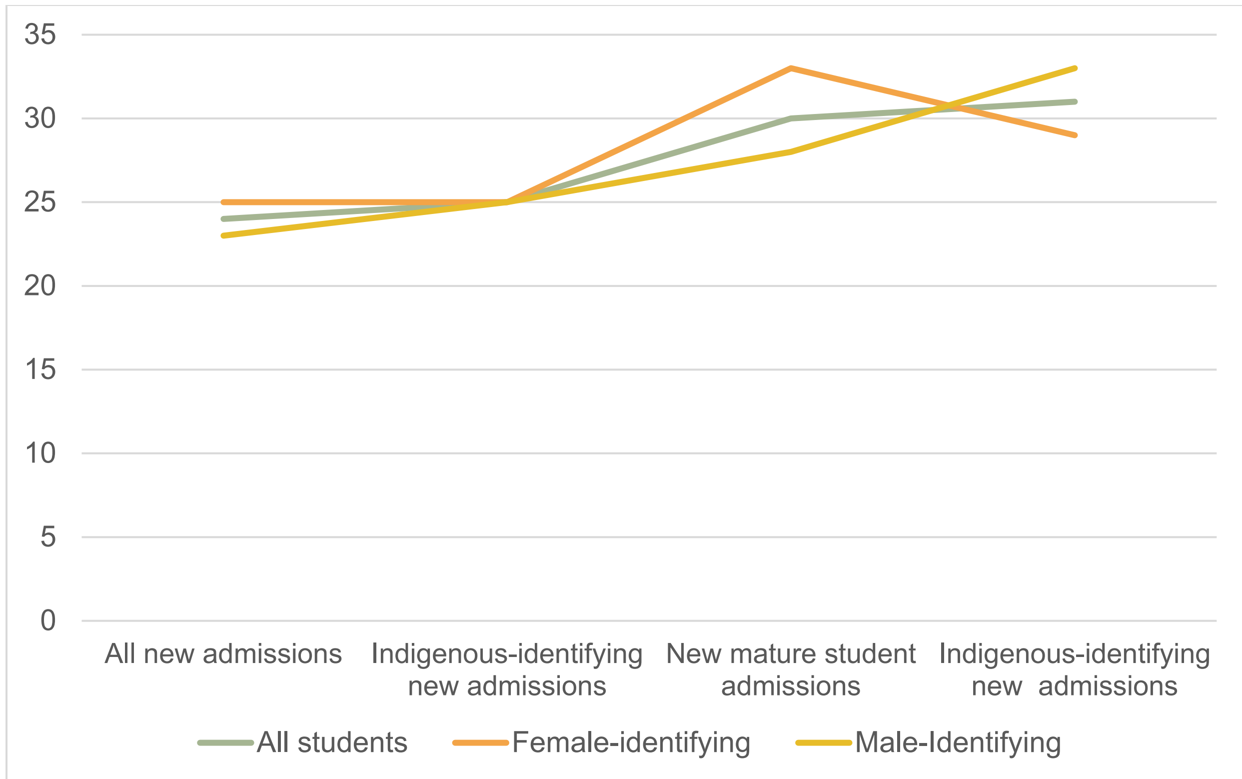

Figure 11: Average age of new student admissions, 2019-2021

Although some students identified their gender as X or undefined, they are represented across all new admissions categories depicted in Figure 11: Average age of new student admissions, 2019-2021. On average, new students who identified a non-binary gender identity were younger, with an average of 22 years of age.

3.3.1.5 New Student Admissions per Campus

As Figure 12 depicts, new student admissions are largely clustered at CNA's larger campuses. While Prince Phillip Drive has the largest new student cohort across all three years, Distributed Learning experienced an increase in student enrolments in 2021-22, with only 30 fewer new students than PPD in 2021-22.

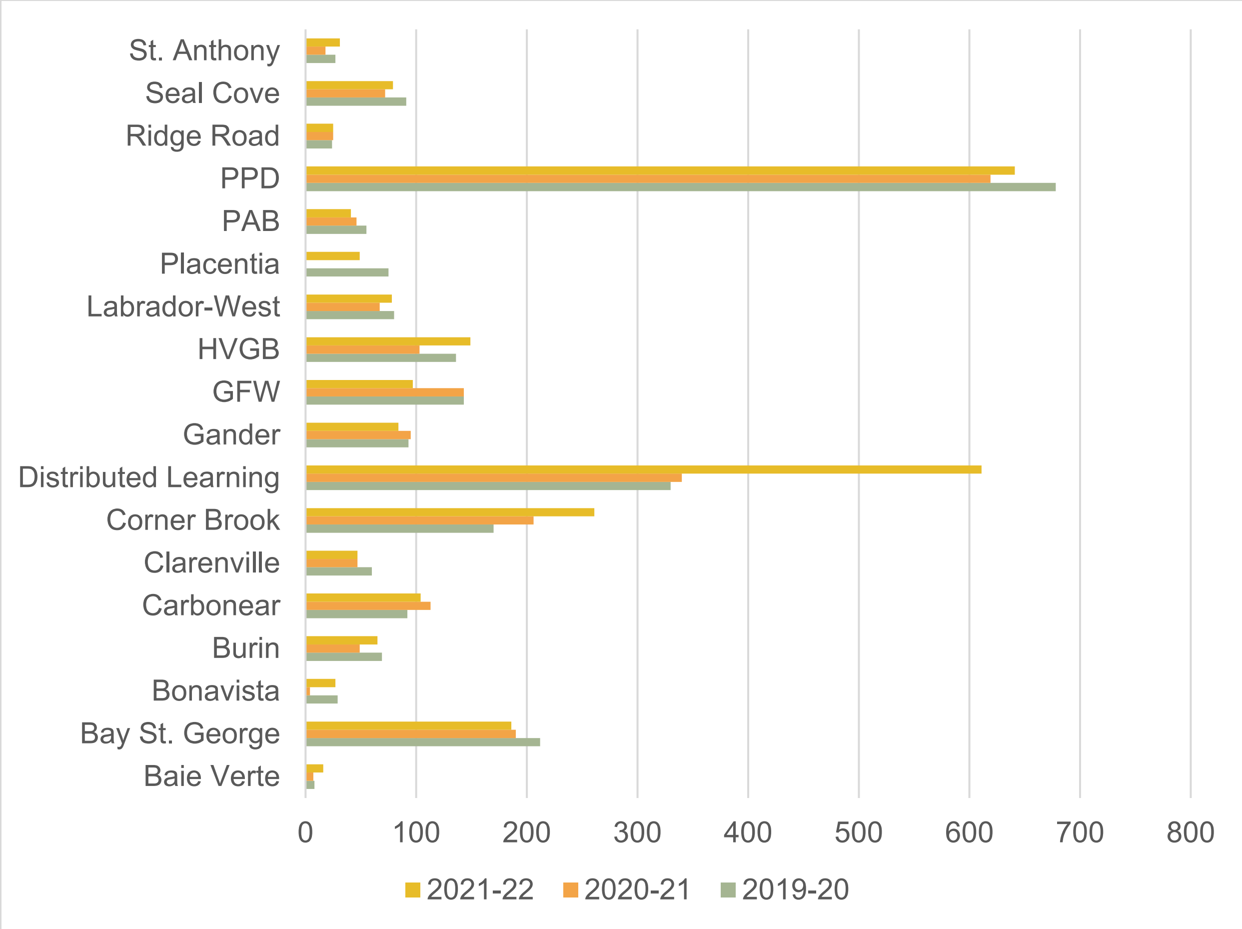

Figure 12: New Admissions per Campus, 2019-2021

As **Error! Reference source not found.** depicts, the majority of new student admissions are registered in programs at the Prince Phillip Drive (PPD; 27%) campus and in programs provided online via Distributed Learning (DL; 18%). Corner Brook and Bay St. George campuses accounted for 8 and 9 percent of new student enrolments, respectively. Such distributions can also be seen for mature student admissions, with the majority registering at PPD or DL campuses.

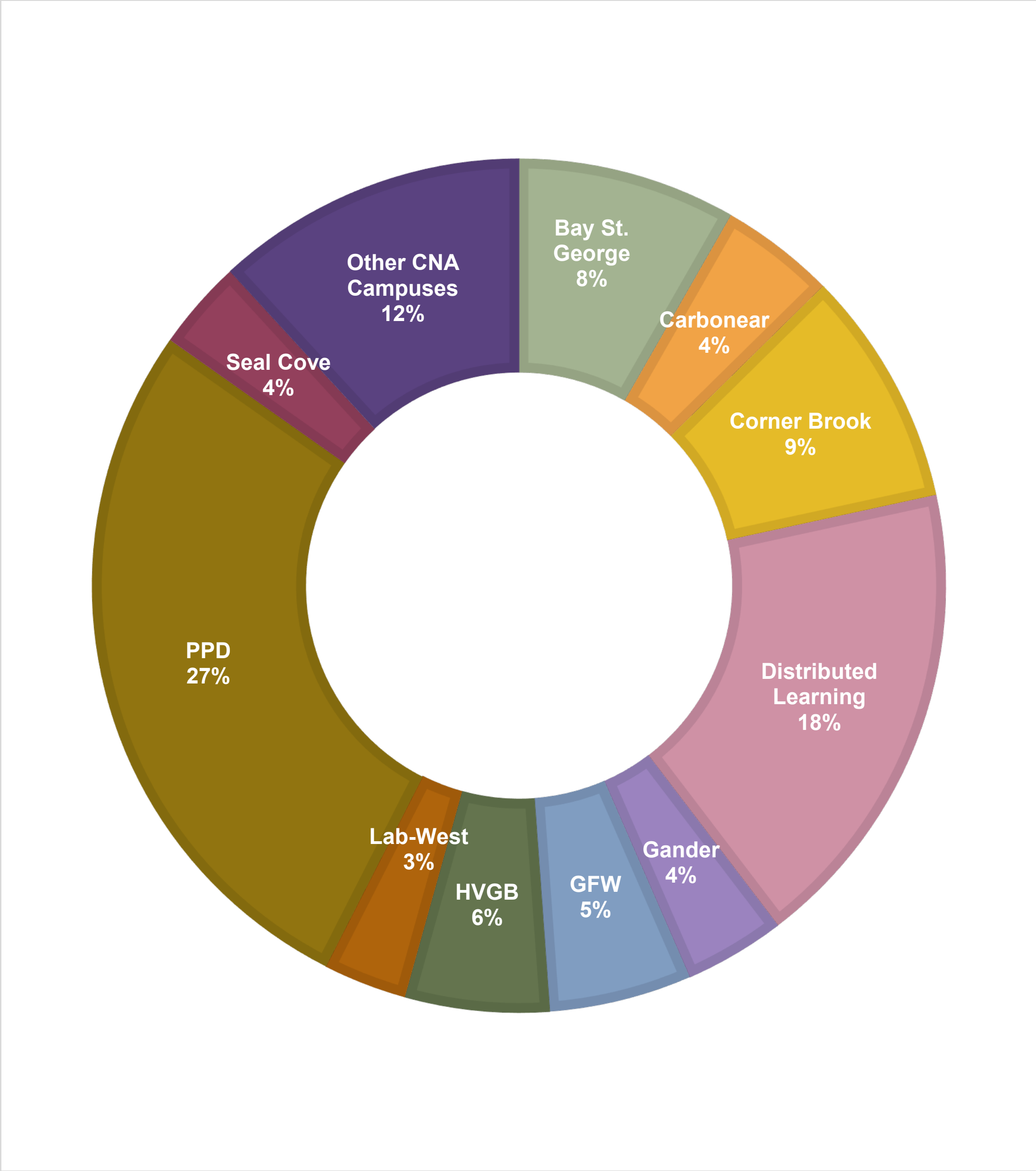

Figure 13: New Admissions per Campus (Average Percent Total).[47]

[47] The label, "Other CNA Campuses" includes the following campuses: Bonavista, Gander, Labrador West, PAB, Ridge Road, Seal Cove, and St. Anthony. These campuses each accounted for less than 5% of the total new student population and were aggregated. No new students admitted to programs at Baie Verte, Burin, Carbonear, Clarenville, and Port aux Basques campuses identified as Indigenous.

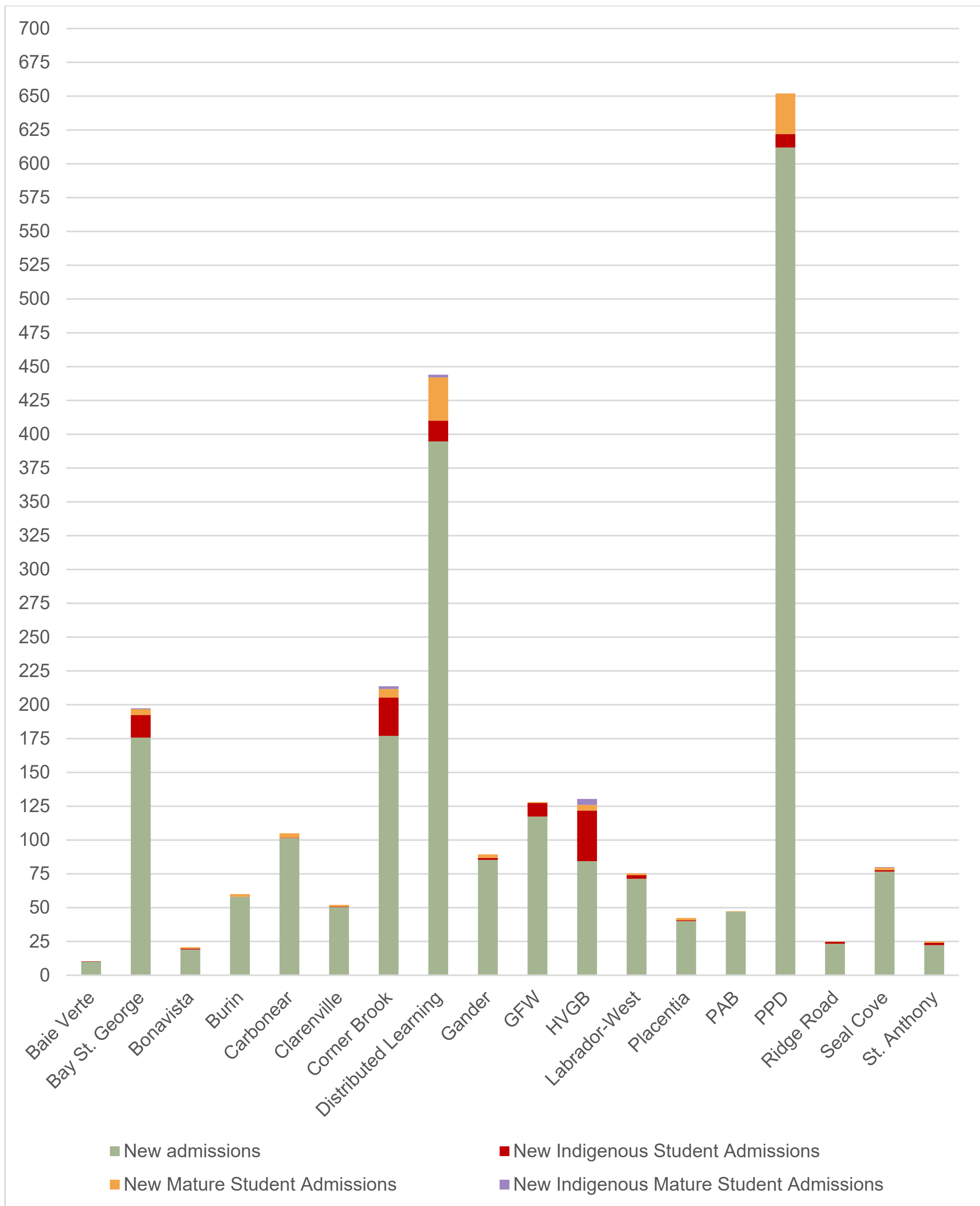

Figure 14: Average New Student Admissions per Campus, 2019-2021

As Figure 15 shows, the majority of Indigenous-identifying new students are registered in programs at the Happy Valley-Goose Bay campus. In the same period, an average of 22% of Indigenous-identifying new students had registered in programs at the Corner Brook campus, comprising 14% of all new student admissions at that campus. Combined, St. George Campus and Distributed Learning accounted for 25% of Indigenous-identifying new student admissions at 13% and 12%, respectively. At Bay St. George, Indigenous-identifying new student admissions account for 8% of all new student admissions, and 4% of new admissions to programs in Distributed learning. Accordingly, 76% of all Indigenous-identifying new student admissions are enrolled at four campuses.

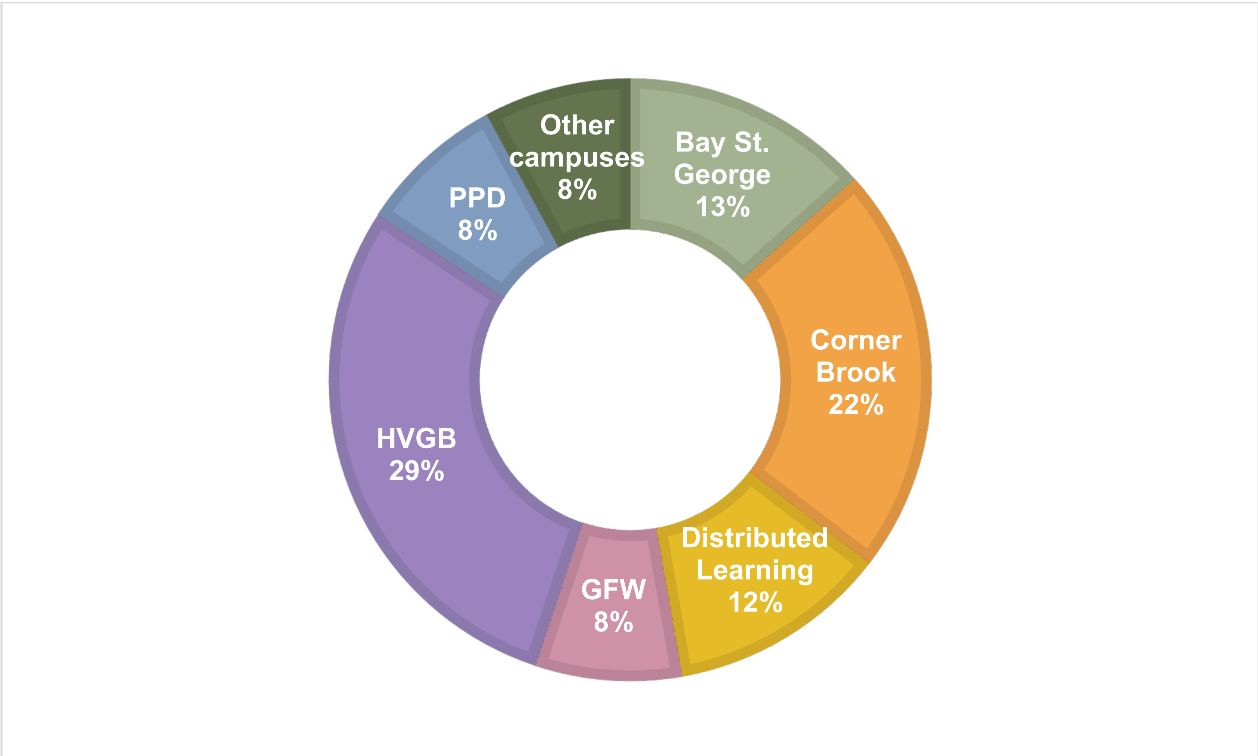

Figure 15: Indigenous-identifying new admissions per campus, average percent total, 2019-2022

Indigenous-identifying new admissions at Prince Phillip Drive account for less than 8% of all new Indigenous-identifying new admissions and only 1.6% of all new student admissions. However, according to the Canadian census, Indigenous peoples comprised 3.3% of the total population in St. John's in 2021. Moreover, the Indigenous population of St. John's is generally younger than the non-Indigenous population with an average age of 33.8 years compared to 42.4 years for the non-Indigenous population. Nearly 65% of St. John's Indigenous population is

between 15 and 54 years of age. As such, Indigenous students are likely underrepresented at the Prince Phillip Drive campus. Recently, First Voice (2023) developed a community action plan to ensure the advancement of Truth and Reconciliation in St. John's. Research on why (and if) Indigenous students are underrepresented at the Prince Phillip Drive campus could help to provide insights into the numbers for Prince Phillip Drive.

On average from 2019-2022, as Figure 16 depicts, the majority of new mature students were enrolled in programs in Distributed Learning or at the Prince Phillip Drive campus.

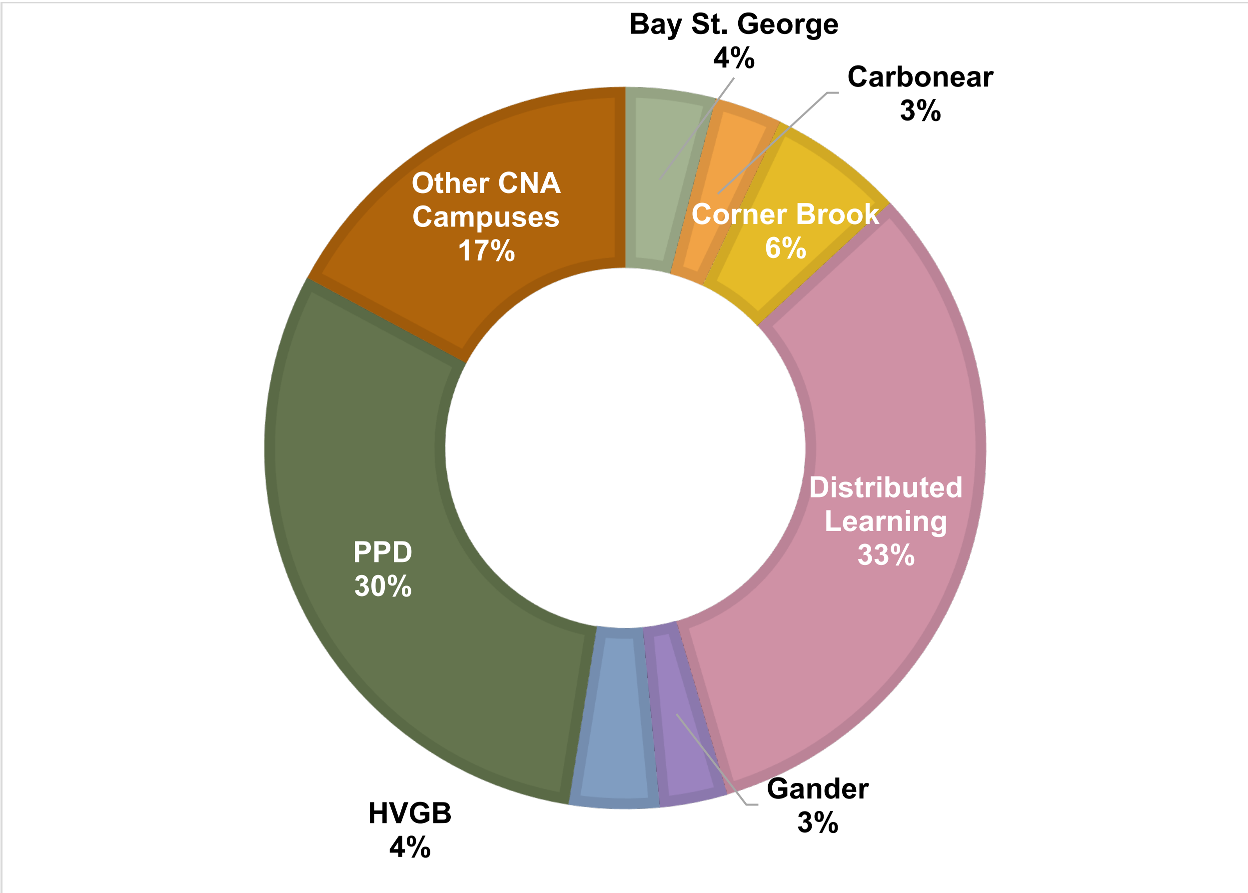

Figure 16: New Mature Student Enrolments per Campus, Average Percent Total, 2019-2021

On average, Indigenous mature students comprise 0.4% of the total new student admissions but 9% of all mature student admissions. As Figure 17 illustrates, the majority of Indigenous-identifying mature students were enrolled in programs at Happy Valley-Goose Bay. Over the

period observed, Indigenous-identifying new students were enrolled in programs at Bay St. George, Corner Brook, and Distributed Learning. While average percentages are identified in Figure 17, because of the small total of new Indigenous-identifying mature student admissions, these percent totals fluctuate from year to year. What remains consistent in the data, however, is that the majority of Indigenous-identifying mature students enrol in programs at the Happy Valley-Goose Bay campus.

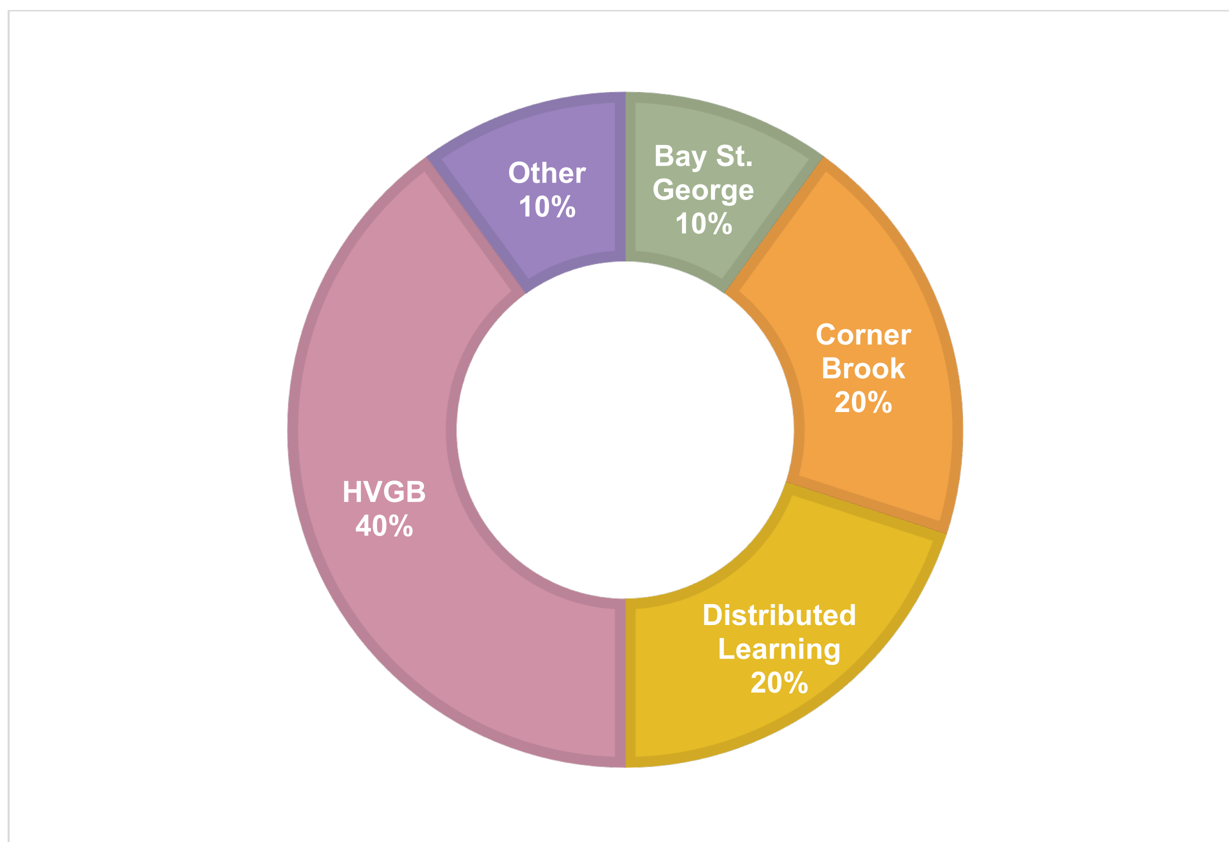

Figure 17: New Indigenous-Identifying Mature Student Enrolments per Campus, Average Percent Total, 2019-2021

3.3.1.6 New Admissions per School

As Figure 18 depicts, from 2019-2022, 37% of new students enrolled in a program in the School of Academic, Applied Arts and Tourism, while 34% enrolled in an Industrial Trades program. Across all three years, new student enrolments in the School of Business and Information Technology were the lowest, averaging 29% of new enrolments.

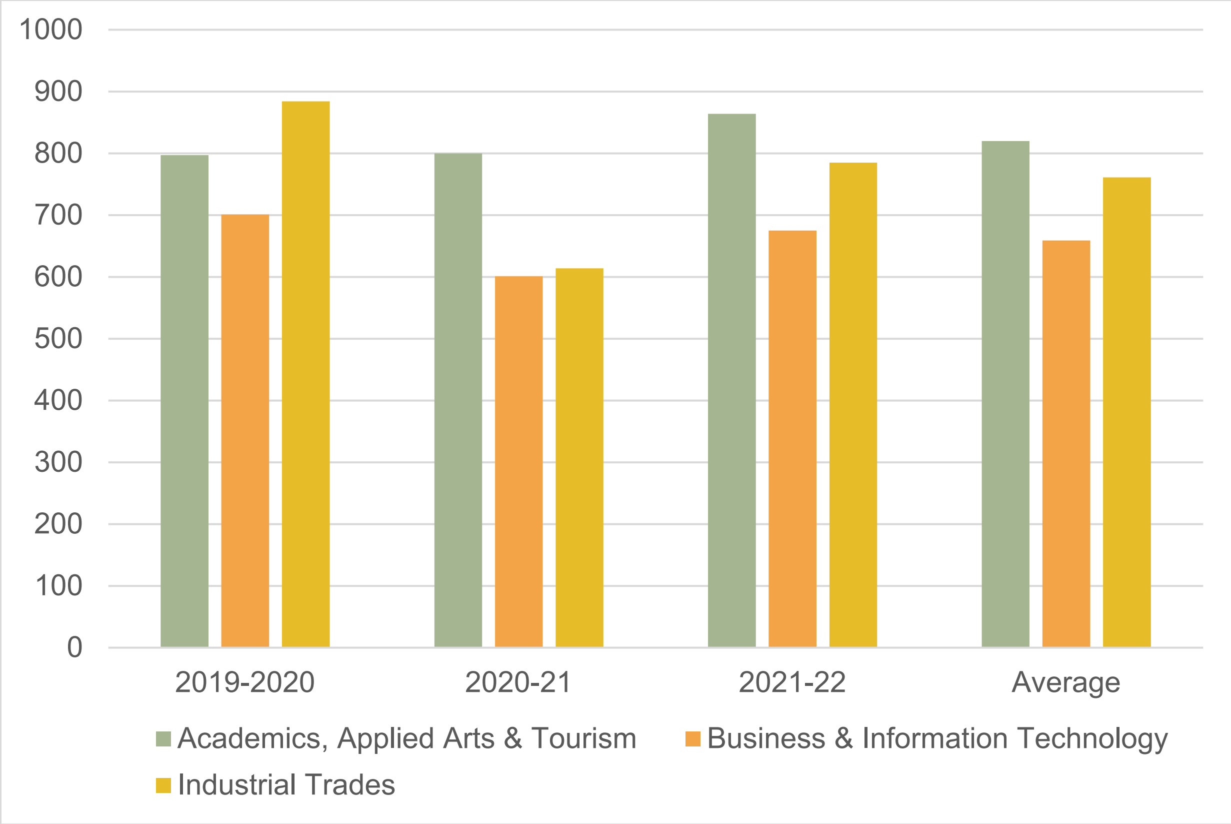

Figure 18: New Student Enrolment per School, 2019-2022[48]

Figure 19 depicts the programs with the highest admissions numbers per category as a percent total of all new admissions. It shows that students enrolling in Academics, Applied Arts & Tourism programs, generally enrolled in bridging programs, including Aboriginal Bridging (17% of Indigenous-identifying new student admissions), CAS Trades (18% of all new mature students), CAS Transition (37% for all students, 44% for Indigenous-identifying new students, and 17% for mature students), and CAS Transfer (17% of new student admissions; 20% of all Indigenous-identifying new student admissions).

[48] Numbers for 2020 for the Industrial Trades are likely impacted by train outs and delayed intakes in 2020-21. Students might have also been less likely to want to return to school and be on campus during the Covid-19 pandemic.

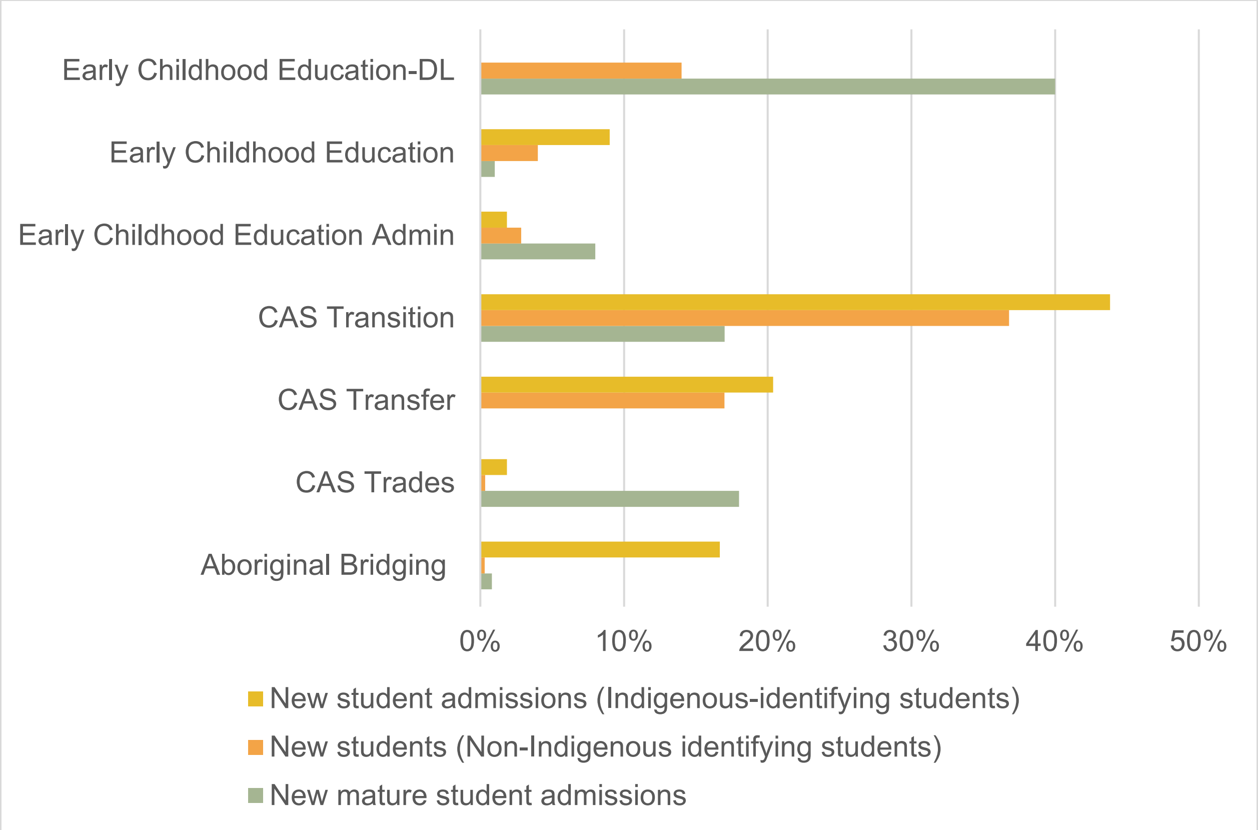

Figure 19: New student admissions in Academics, Applied Arts & Tourism programs, percent total, 2019-2022[49]

The data also indicates discrepancies in the School of Academics, Applied Arts &Tourism:

Aboriginal Bridging[50]: This program was designed for Indigenous mature students returning to school for training. Data for 2019-22, however, indicate that only one student enrolled in Aboriginal bridging during this period. By contrast, 5 mature students who identified as Indigenous enrolled in CAS Trades at Happy Valley-Goose Bay Campus.

CAS Transfer: From 2019-2022, no mature students enrolled in CAS Transfer, which is the College's bridging program with a university focus, while 17% of all mature student admissions were enrolled in CAS Transition, which is a bridging program designed as a pathway into

[49] Note: Figure 19 only shows the average percent total for the programs with the highest number of new student enrolments.

[50] Since redeveloped and offered as College Bridging, which is distinct from but has some overlap with CAS Transition.

college programs. While the entrance requirements for CAS Transfer also provide space for mature student admissions per Procedure AC-102-PR, the data indicates that mature students were not admitted to the program. While it is possible that there were no mature students interested in using CNA to bridge into university, it is also possible that mature students are being streamed into CAS Transition and then later CAS Transfer.

Early Childhood Education-DL: In 2021-22, CNA began offering Early Childhood Education (ECE) online. This offering proved to be very popular for new mature students entering CNA in that academic year, with 40% of all new mature students enrolling in that program. 14% of students who entered the college through regular admissions also enrolled in the online ECE program. By contrast, only 5% of Indigenous-identifying students who entered CNA through regular admissions enrolled in the online offering.

In the School of Business and Information Technology, the majority of students enroll in Business Administration-Accounting (average of 13% across categories), Computer Systems & Networking (average of 13% across categories), and Executive Office Management (average of 18% across categories), as Figure 20 shows. 11% of new mature students enrolled in Business and Information Technology programs enrolled in Business Administration with a focus in Human Resources, 7% higher than students admitted via regular admissions procedures (4% for non-Indigenous identifying students, 1% for Indigenous-identifying students). By contrast, only 9% of new mature students are admitted to Executive and Office Management in contrast to 19% of non-Indigenous-identifying students and 25% of Indigenous-identifying new student admissions through regular admission procedures. Medical office management (office admin-medical) enrolments are lower among new mature and Indigenous-identifying students at 3%, compared to 10% for non-Indigenous identifying students admitted through regular admissions procedures.

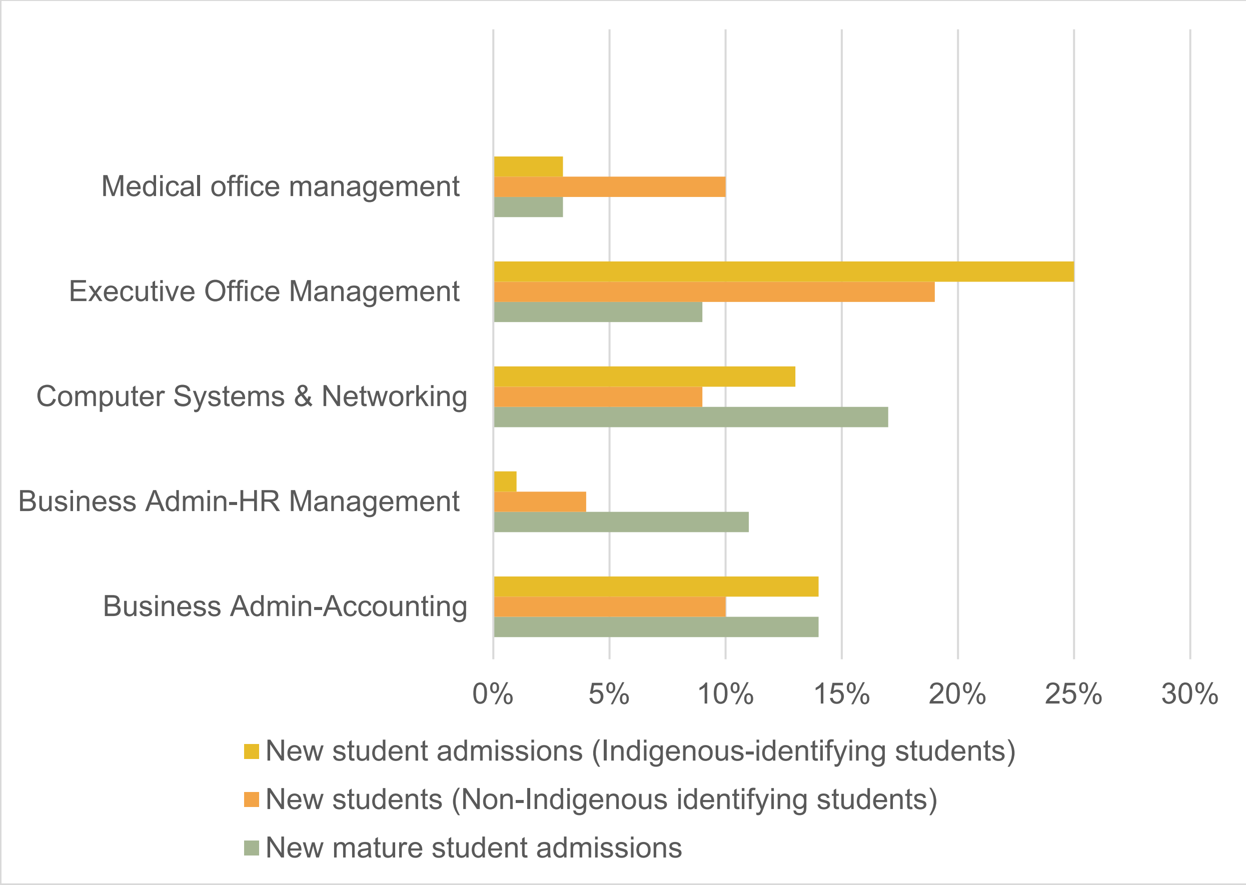

Figure 20: New student admissions in Business and Information Technology, percent total, 2019-2022[51]

As Figure 21 illustrates, the top programs for new CNA students in the School of Industrial Trades and Natural Resources are Construction/Industrial Electrician (13% of all new student admission) and Heavy Duty Equipment Technician/Truck and Transport Mechanic (HDET/TTM; 10% of all new student admissions). For Indigenous-identifying students admitted through regular admissions processes, the HDET/TTM and Construction/Industrial Electrician programs accounted for 16% and 15% of total admissions, respectively. For mature student admissions, Construction/Industrial Electrician accounted for 12% of admissions while more students enrolled in Heavy Equipment Operator Entry (11%) than HDET/TTM (8%). For non-Indigenous identifying students enrolled through the regular admissions process, along with Construction/Industrial Electrician (11%), the majority of students enrolled in the Welder

[51] Note: Figure 20 only shows the average percent total for the programs with the highest number of new student enrolments.

program (8%), closely followed by HDET/TTM and Heavy Equipment Operator Entry at 7% of enrolment.

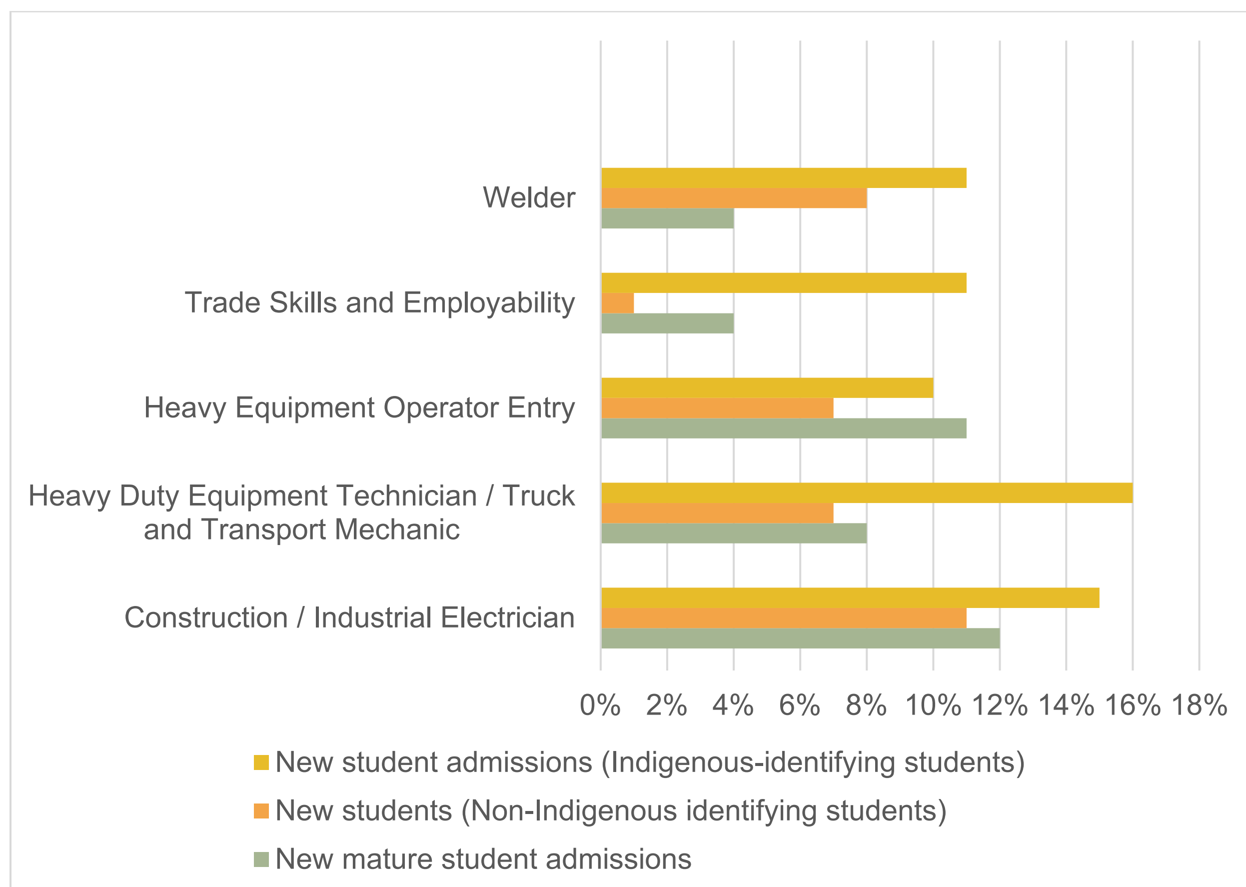

Figure 21: New student admissions in Industrial Trades and Natural Resources, percent total, 2019-2022[52]

Among new student enrolments, the School of Academics, Applied Arts and Tourism comprised 37% and 42% of non-Indigenous and Indigenous general student admissions, respectively (see Figure 22). Mature students, however, tend to enroll in programs in Business and Information Technology, averaging 45% of all new mature student admissions. Contrary to the assumption at the basis of this research project that mature students tend to enrol in Industrial Trades programs, mature student admissions in Industrial Trades programs had the lowest average of new mature student admissions at 19% compared to 36% of mature students enrolling in

[52] Note Figure 21: only shows the average percent total for the programs with the highest number of new student enrolments.

Academic, Applied Arts & Tourism programs. This raises questions about why mature students are less likely to enrol in Industrial Trades programs.

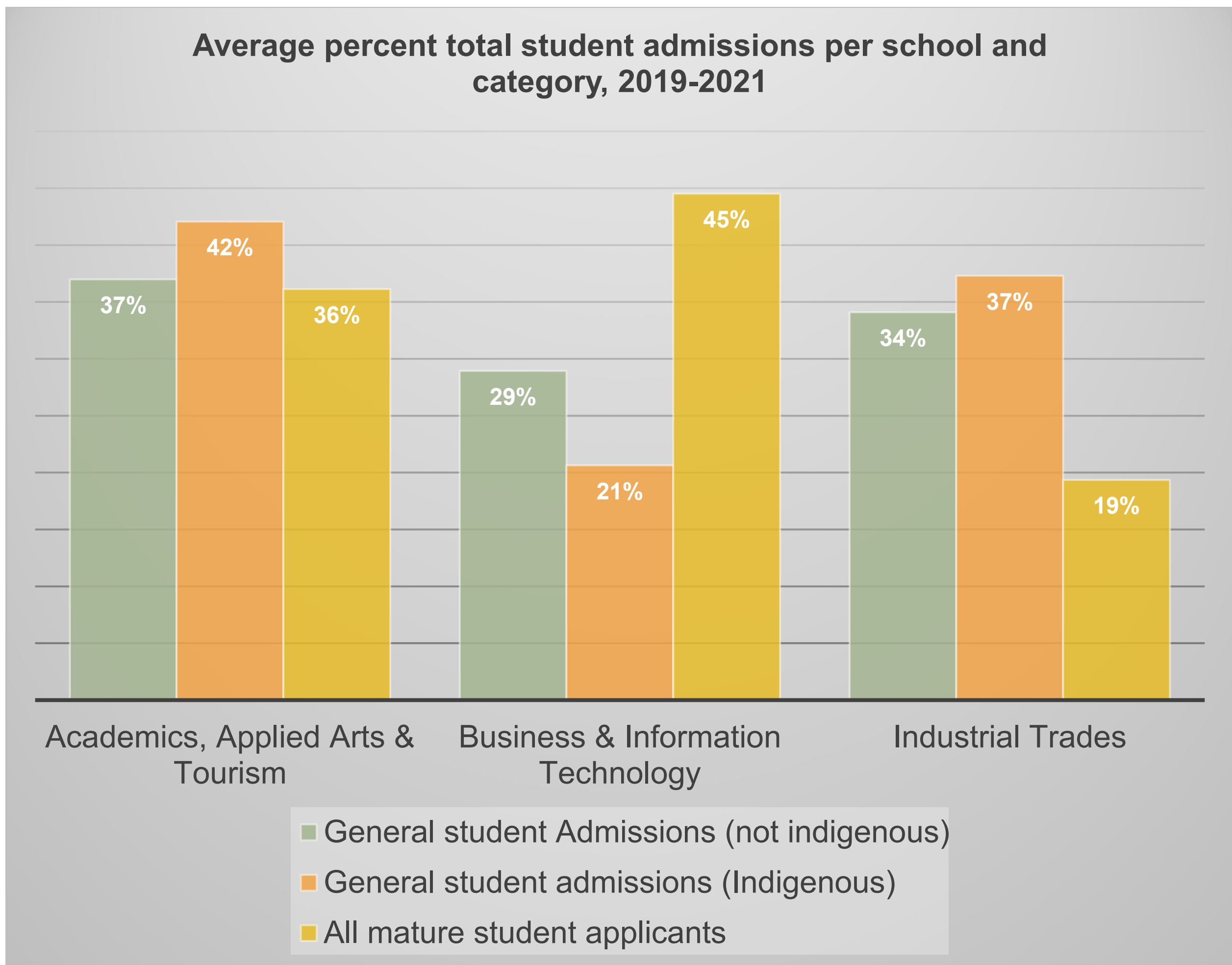

Figure 22: Average percent total student admissions per school and category, 2019-2021

3.3.1.7 Program Discontinuation

Data on program discontinuation is not accurately collected at CNA. Information is only entered when supplied to the Registrar's Office and exit interviews are not completed with students when they leave their programs. Such data collection issues mean that for 29% of students who leave a program, the reason they withdrew is unknown, as Figure 23 shows.

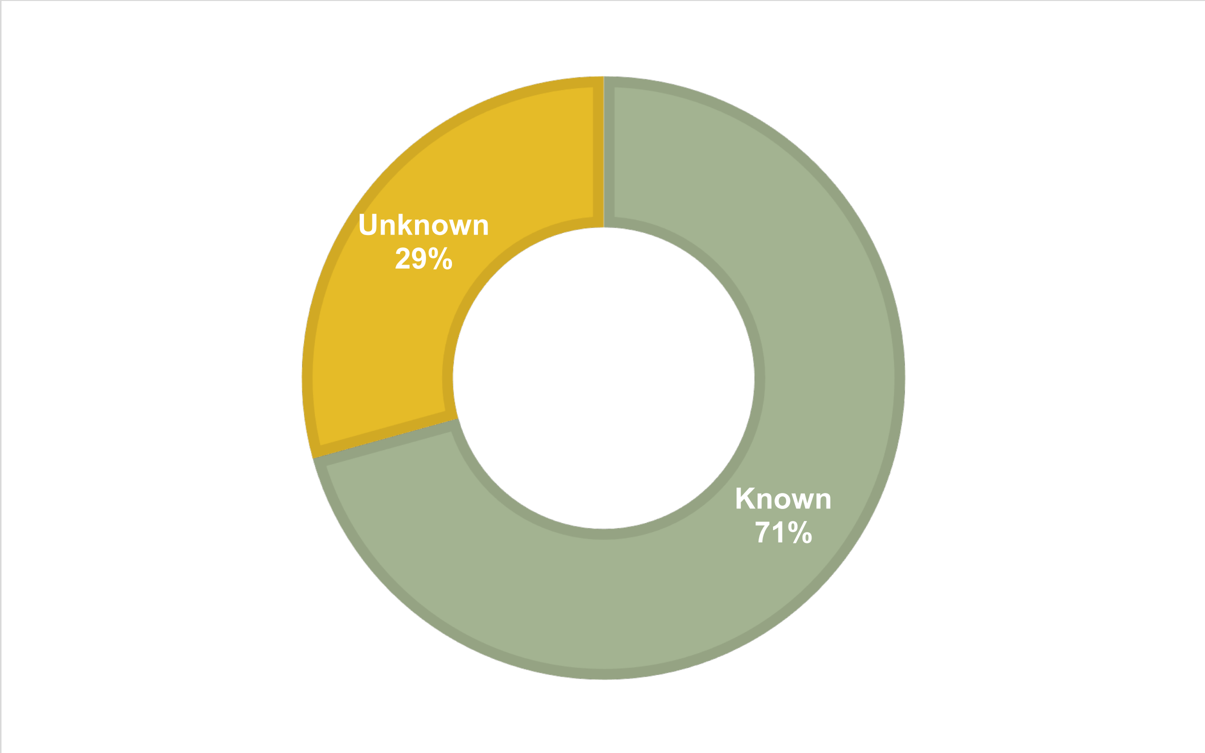

Figure 23: Reason for leaving program, average percent total, 2019-2022

Averages from 2019-2022 indicate that 18% of all students regardless of admission type or Indigenous identity withdraw from CNA programs. As Figure 24 depicts, this number is substantially higher for Indigenous mature students who experience high rates of program discontinuation. This was especially pronounced during the COVID-19 pandemic, when 40% of all Indigenous mature students withdrew from their program. Such findings echo concerns that were raised by Indigenous partners throughout the research about the dual barriers that Indigenous mature students face: a barrier to admission and a barrier to retention.

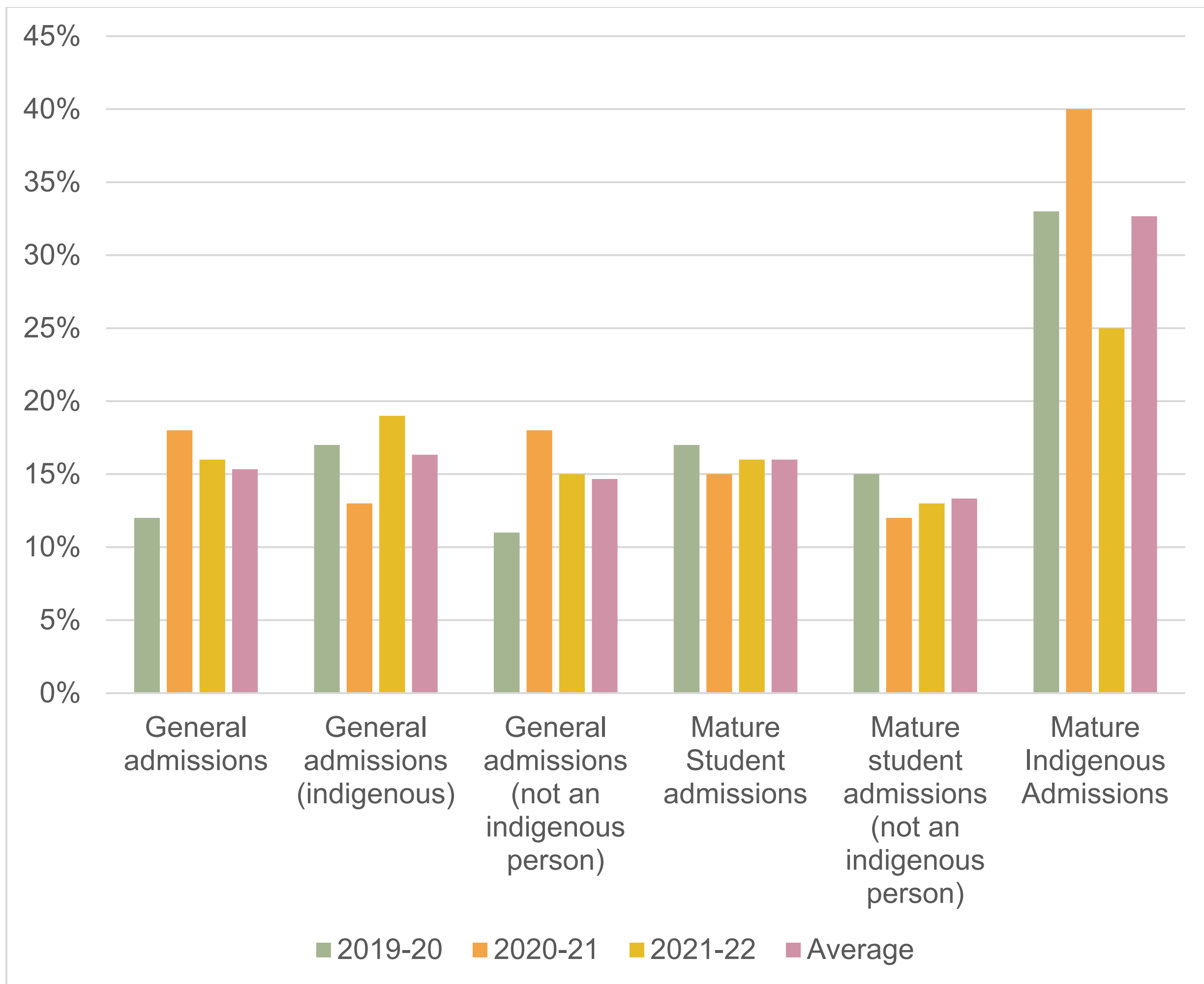

Figure 24: Discontinuation per admission type and Indigenous Identity, 2019-2022

On average, there is only a marginal difference between the rates of program discontinuation for students admitted through regular admission processes and those admitted using the mature student process and between Indigenous-identifying and non-Indigenous-identifying students.

There is, however, a high rate of program discontinuation among Indigenous-identifying mature students. This persisted across the period studied. On average 33% of Indigenous-identifying students did not complete their first semester. Such data might indicate a need for more supports for Indigenous mature students after they are admitted to a CNA program and for research on Indigenous mature student retention rates.

Where reasons are known, personal reasons are the most frequent reason available for why students admitted through the regular admissions process discontinue their programs 35%.

Illness, accounting for 7% of discontinuations, is the second most frequent answer. There is little difference between Indigenous-identifying students and non-Indigenous-identifying students, although personal reasons are more frequently provided as a reason and unknown reasons are less frequent in the dataset. Financial reasons appear at a less frequent rate for Indigenous-identifying students admitted through the regular admissions processes. The reasons for discontinuation are displayed in Figure 25.

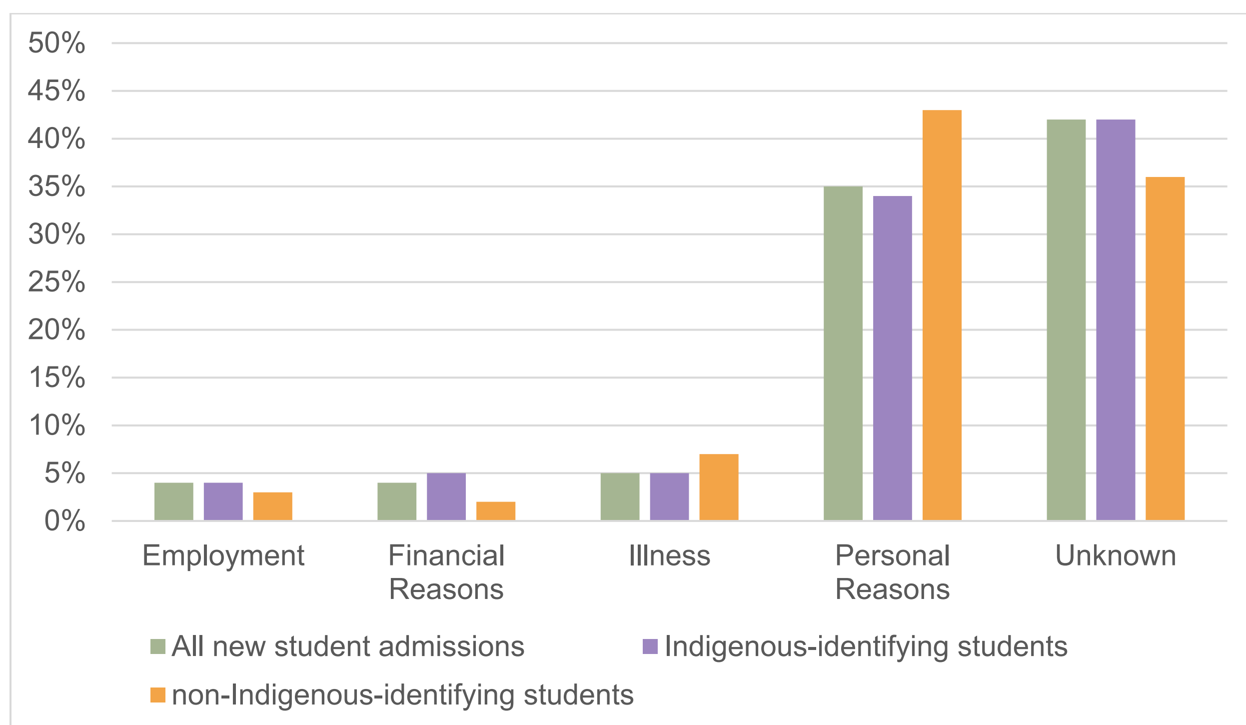

Figure 25: Reason for discontinuation for students admitted to CNA through regular admissions process, average 2019-22[53]

As Figure 26 shows, the reasons for mature students to discontinue their program are divergent. For example, Indigenous-identifying mature students are more likely to discontinue their program for academic or financial reasons, than non-Indigenous-identifying students, who are more likely to identify employment or personal information. It is important to note, however, that due to the small numbers of Indigenous-identifying mature students, these generalizations fluctuate substantially from year to year (as one student makes a significant difference). Moreover, in the case where academic reasons were recorded as the student's reason for

[53] Note: Figure 25 only captures information from the most frequent reasons given for program discontinuation and is not an exhaustive list of all possible reasons.

discontinuing their program, the student had successfully completed more than 60% of their first-year courses. Also because of the low numbers, the rates of unknown reason are higher for Indigenous-identifying mature students than for non-Indigenous mature students.

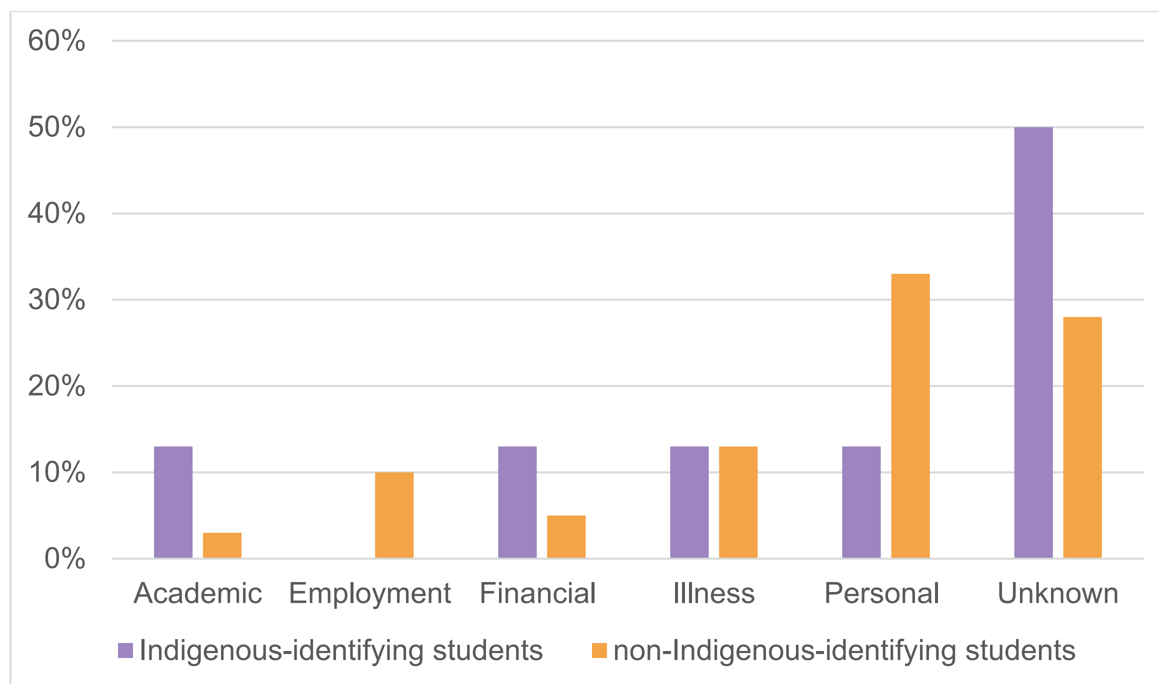

Figure 26: Reason for discontinuation for students admitted to CNA through mature student admissions process, average 2019-22

Interestingly, for mature students regardless of Indigenous identity, illness is provided as the reason for discontinuation at a higher rate than students who enter CNA programs through regular admissions, at an average of 13% and 5%, respectively.

As Figure 27 shows, Indigenous mature students experience high rates of discontinuation in programs in the School of Academics, Applied Arts & Tourism. This is significant as this data reflects high rates of discontinuation in CAS Trades and CAS Transition for Indigenous mature students.

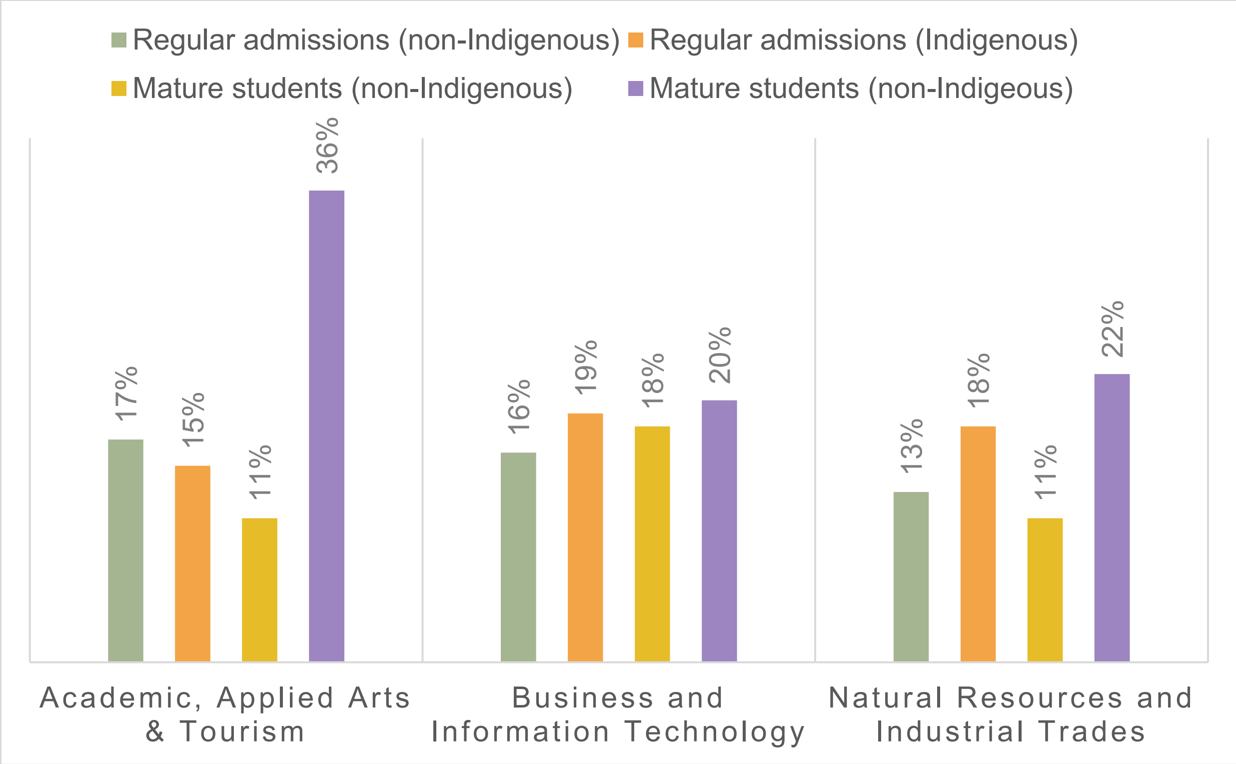

Figure 27: Discontinuation per school, average percent total, 2019-22

As Figure 28 depicts, male Indigenous-identifying students are more likely to discontinue their programs than their female-identifying counterparts, at 32% for Indigenous mature students and 17% for Indigenous students admitted through regular admissions processes compared to 11% for female Indigenous-identifying students. For non-Indigenous mature students, female-identifying students are more likely to discontinue their programs than male-identifying students at 18% and 13%, respectively.

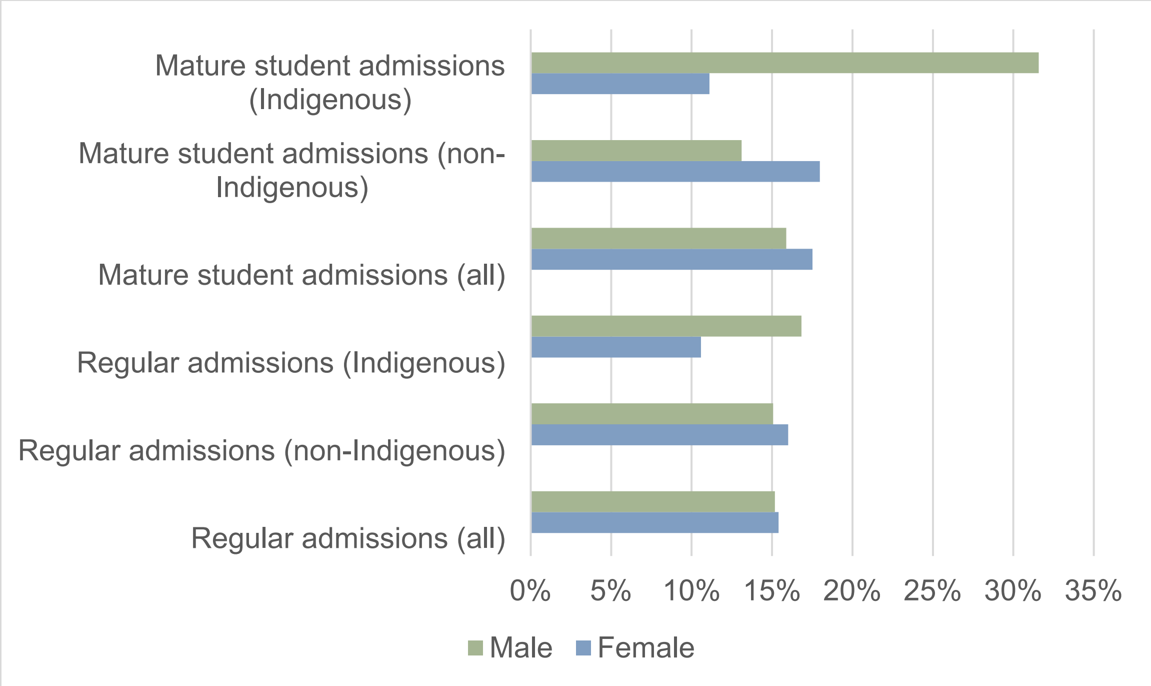

Figure 28: Discontinuation by gender identity, average percent total 2019-2022

As Figure 29 depicts, four campuses have discontinuation rates of more than 20% for students admitted by the regular admissions process, with an average discontinuation rate of 16% for all campuses for the observed schools. Distributed learning has a 25% discontinuation rate for regular admissions and a 17% discontinuation rate for mature student admissions. While Labrador West (50%) has a high discontinuation rate for mature students, this is based on a low average mature student enrolment of less than 5 students. HVGB's discontinuation rate of 40% is based on a much larger average student population.

What these numbers lack, however, is an explanation for why students discontinue their programs, beyond a simple description, and why students are more likely to discontinue at one campus than another. CNA will need to identify such reasons as it seeks to embed equity, diversity, and inclusion in its strategic vision going forward.

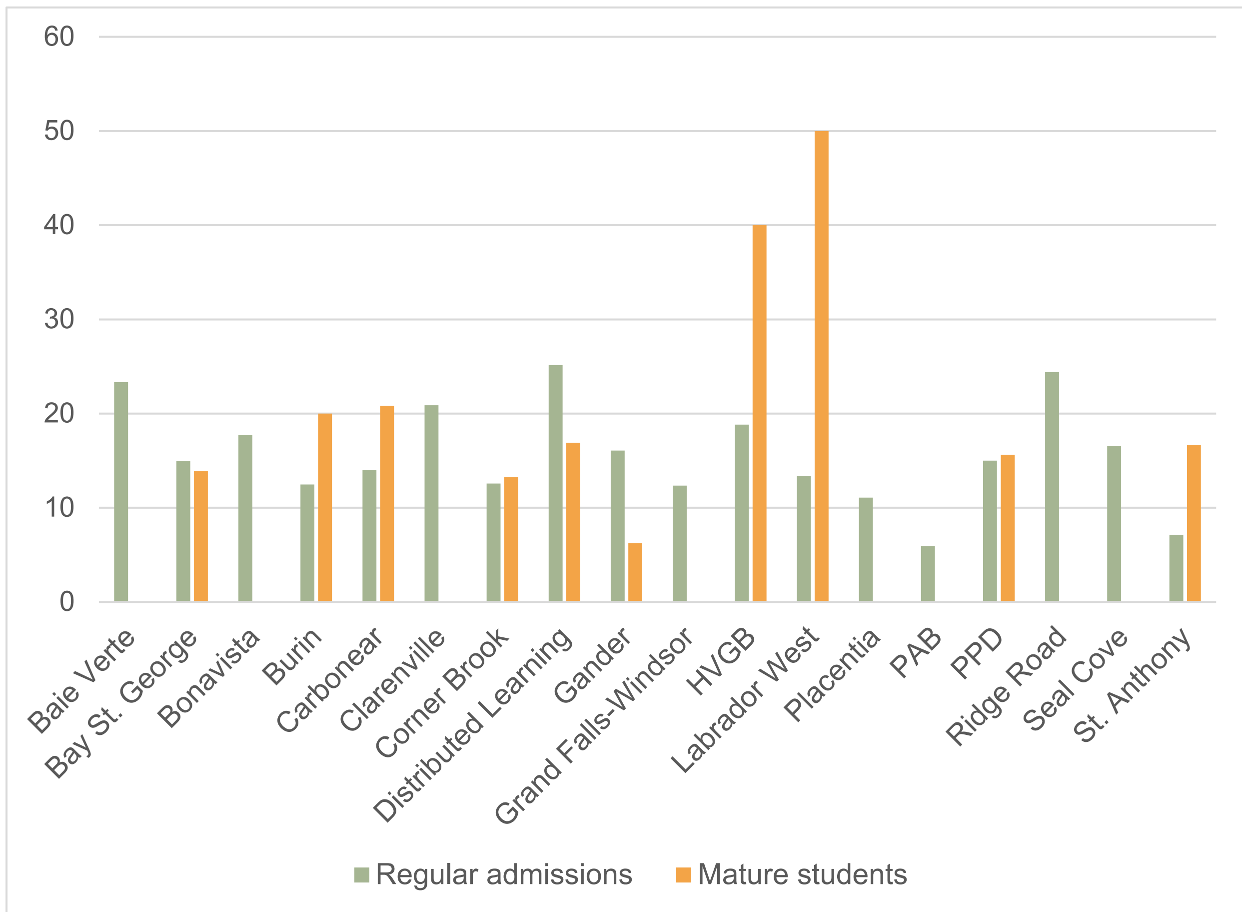

Figure 29: Program discontinuation per campus and admissions category, average percent total 2019-2022

3.3.1.8 First-Semester Course Completion

New research on admissions has focused on definitions of academic success after admissions. Scholars working in the field suggest that the completion of first-semester courses should be used as an indicator of new student success as well as a measure of the predictive value of tools used in admission (see, for example, Sternberg, 2009).

To measure academic success in the first semester, the Readiness Project analyzed rates of course completion across student categories for the observed schools. This data indicates that the majority of students admitted through the regular admissions process complete 92% of their courses in the first semester. Students admitted through the mature student process complete 89% of their first-semester courses (see Figure 30: Average percentage of courses completed in first semester, 2019-2022). If the significance level is set to 0.05 (5%) for total sampling, a

difference of 3% does not provide substantial evidence to support the more rigorous admissions process that mature students undergo.

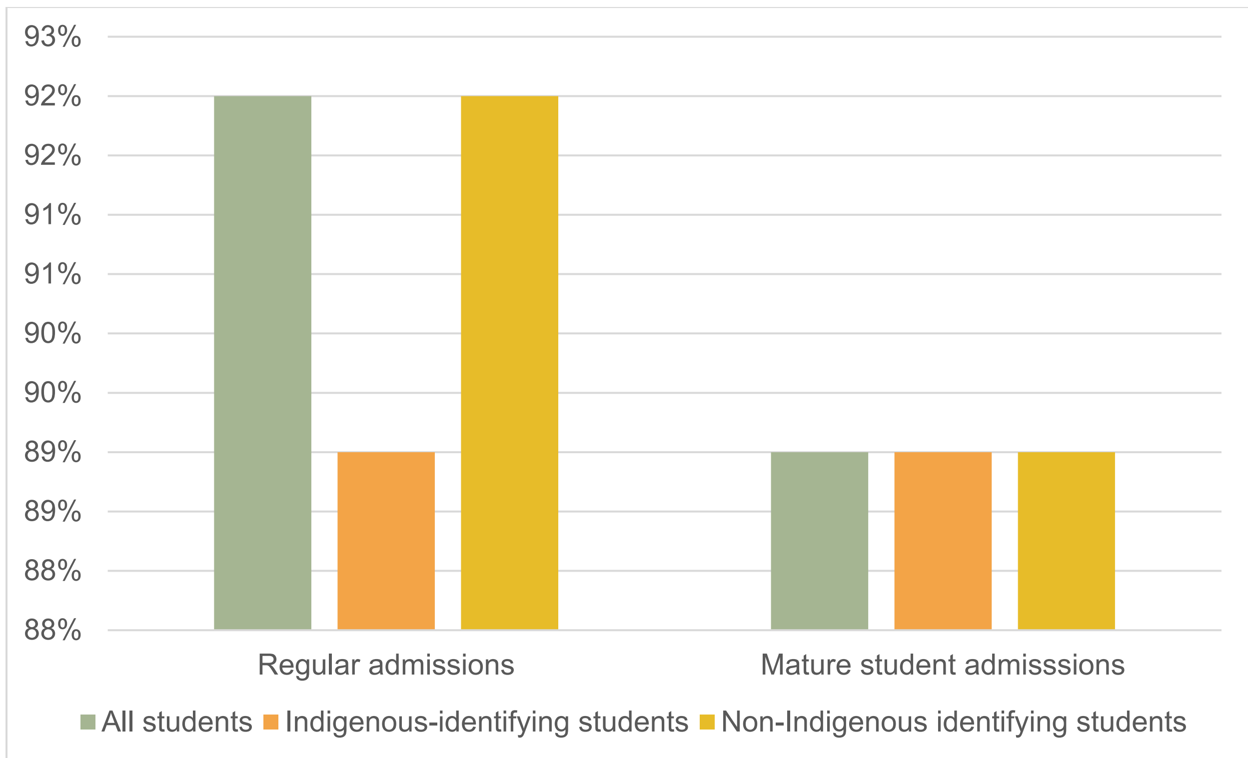

Figure 30: Average percentage of courses completed in first semester, 2019-2022

By contrast, 6% of all students admitted to CNA complete less than 50% of their total courses in the first semester on average. The difference between students admitted through regular and students admitted through mature student admissions is also minimal.

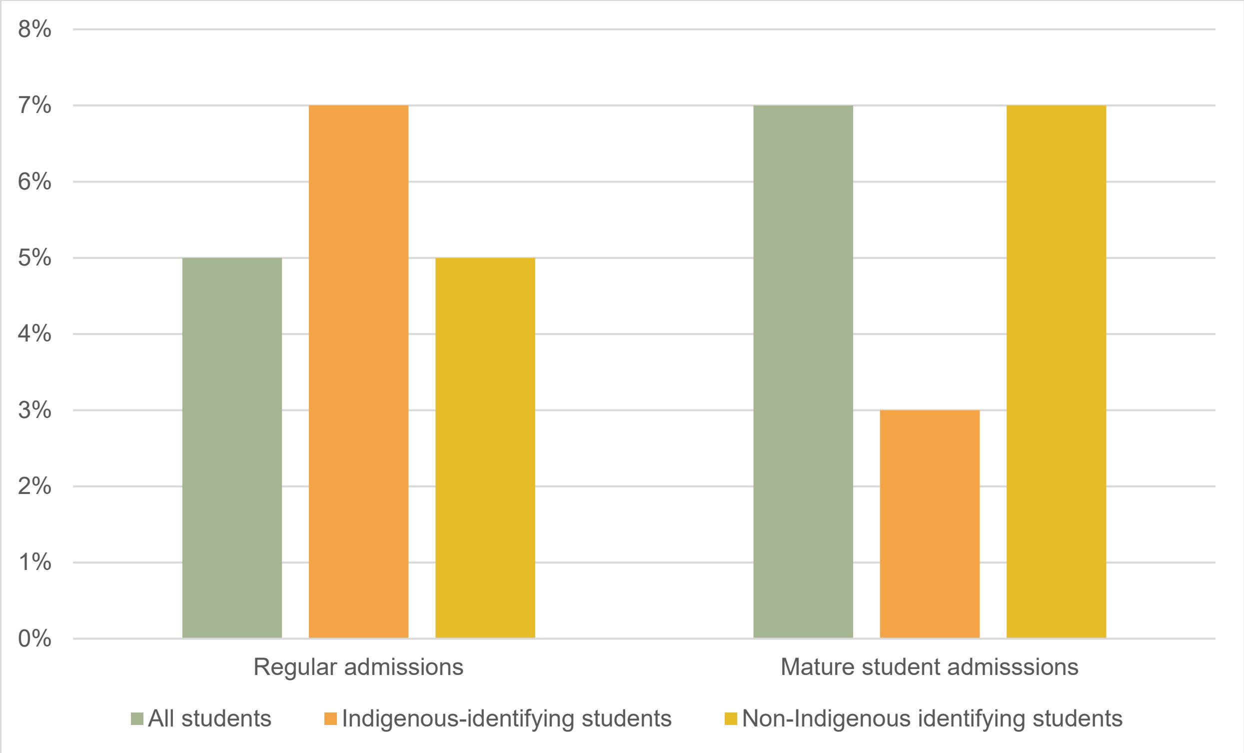

Figure 31: Average percentage of students completing less than 50% of courses completed in first semester, 2019-2022

When the data is disaggregated, however, Figure 32 clearly shows that the number of mature students who completed less than 50% of their courses declined in 2021-22. While it is difficult to identify what resulted in this decrease, this decrease overlaps the Counselling teams' change in process for mature student admissions. For admissions for 2021-22, the Counselling Team began to use a model similar to the model conceptualized by the Readiness Project. It focuses on empowering applicants through a discussion and working on pathway(s) to admission to a CNA program and the further standardization of the interview/discussion process with common forms and checklists.

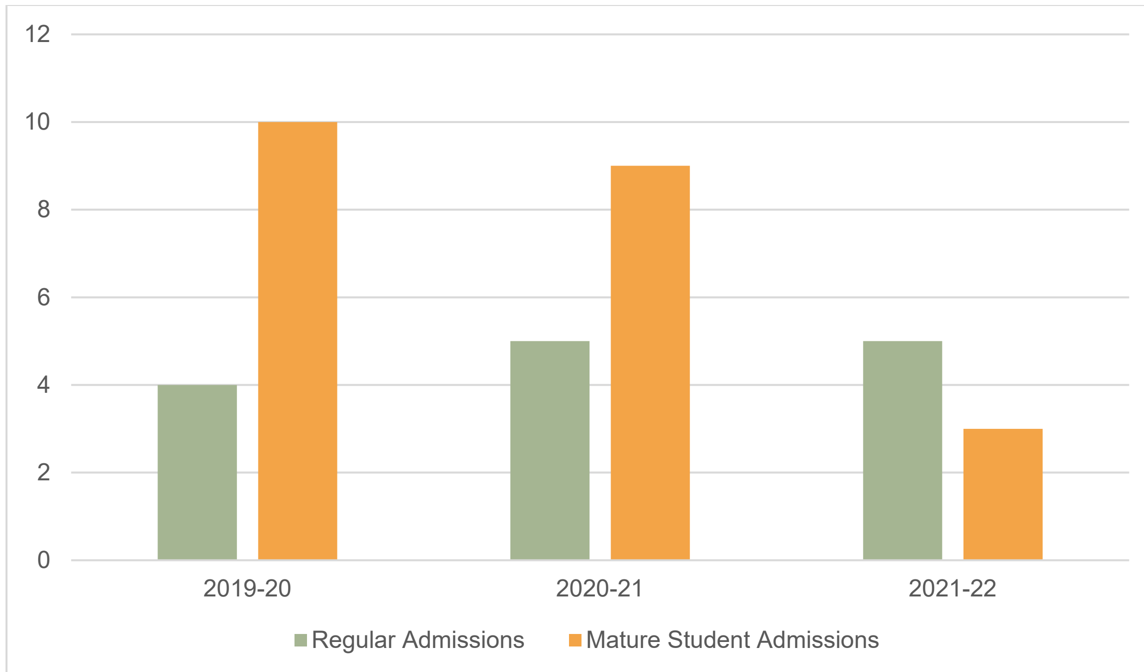

Figure 32: Percentage of students completing less than 50% of courses completed in first semester, 2019-2022

3.3.2 Data Collection

Data collection is important for post-secondary institutes to understand the characteristics, needs, and preferences of new admissions. Data can help institutes improve students' educational outcomes, tailor their programs and services, monitor their progress and performance, and identify and address any gaps or challenges. If the right data is collected, institutes can evaluate whether interventions are having the intended impact and thereby foster a culture of continuous improvement and professional development among faculty and staff (Morest, 2009). If institutions move away from an accountability-led view to an improvement-led view of quality assurance, they can use data to track and report on key indicators of student success, such as enrollment, retention, graduation, satisfaction, engagement, achievement, and employability, which allows for benchmarking, identifying, and celebrating strengths and recognizing and addressing areas for improvement (Chung Sea Law, 2010).

For students who have been historically underserved by postsecondary institutions, data can also help institutes provide personalized and differentiated supports, such as academic advising, mentoring, tutoring, counselling, financial aid, and career services (Gallagher-Mackay, 2017). Institutions that know their students are equity-minded and engage students in

meaningful and relevant learning experiences that reflect their identities, cultures, languages, and backgrounds (Malcom-Piqueux and Bensimon, 2017). Data collection can help to identify and address the barriers that students face in accessing and participating in post-secondary education, while also facilitating the measurement of and reporting on the representation and participation of students from different backgrounds, identities, cultures, languages, and experiences in various aspects of post-secondary education, including governance, curriculum, instruction, assessment, research, campus life, and community engagement. Importantly, data collection can ensure equity in admission (Lockyer, 2020).

Given its importance, especially for students who have been historically underserved and for ensuring equity in access to postsecondary education, this section presents findings about CNA's data collection, with a specific focus on data collection during the admissions process.

3.3.2.1 Admissions Form

At CNA, the application process generally begins at a webpage. The website provides two options: (1) Apply online; (2) Apply via PDF. The online option provides prompts that guides the applicant more fully in completing the various sections of the application. It also automatically adjusts the information depending on the student category (e.g., domestic or international student status) and provides specific choices in the fields of Indigenous identity and gender. By contrast, the PDF option requires that applicants write in information, e.g., without supplying a list of program options, or options for fields like Gender and Indigenous identity.

During the stakeholder consultations, participants raised the importance of using plain language in the application form (Dowden, 2020). Although governments and scholars alike have criticized Readability scores, recent research has shown that AI and more nuanced calculations can provide insights into how readable a text is.[54] Using the MS Word built-in readability statistics, CNA's application form is assessed at a college level, meaning that the text is difficult to read (31.7 on the Fleich Reading Ease scale). Readability calculators such as WebFX[55],

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[54] See, for example, Government of Canada, Readability formulas, programs and tools: Do they work for plain language?; Readability Formulas: 7 Reasons to Avoid Them and What to Do Instead; for recent scholarship on new methods see Crossley, Skalicky, and Dascalu (2019).

[55] https://www.webfx.com/tools/read-able/

Readble[56], and Online Utility[57] rated the application at an average of 34.6, which falls within the college graduate range. While such ratings may be unreliable and not a direct reflection of the use of plain language on the application form, the reviews seem to reflect what participants in the stakeholder consultations told the Readiness Project.

The Online Utility review identifies sentences that should be reviewed and possibly re-written. For example:

- Text from the privacy notice, such as:
    - "Your personal information is being collected for the purpose of assigning or validating your CNA student identification number; processing your application; verifying your qualifications and determining eligibility for admission, administering student records, scholarships and awards; documenting your progress in your academic program; providing student and alumni services; institutional research and planning."
    - "It may be shared with the following: academic and administrative units of the College in accordance with the policies and procedures of CNA; the Government of Newfoundland and Labrador or the Government of Canada as required by law for reporting purposes; donors (or their representatives) of scholarships, awards and bursaries administered by the College; high school and post-secondary institutions as required for new and transfer applications; student health insurance providers as necessary."
- Text from the student declaration:
    - "I understand that any applicant who submits documents or forms that are falsified or fraudulent, and/or who does not fully and accurately disclose the requisite information as set forth herein or in related documents, may be denied admission to College of the North Atlantic (CNA) and if it occurs or is discovered after admission, may be expelled from the College."
    - "I further acknowledge my understanding that applicants are obligated to include attendance, past attendance and enrollment at other post-secondary institutions on the application."

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[56] https://readable.com/

[57] https://www.online-utility.org/english/readability_test_and_improve.jsp

- Special requirements
    - If you have a documented disability, (such as a physical disability, mental health disorder, or learning disability), you could be eligible for services related to your disability.[58]

Additionally, an accessibility report generated by Adobe identifies accessibility issues, including colour contrast, missing field annotations and tags, and alternative texts.

While readability and accessibility assessments cannot be simply accepted as a clear indicator of a problem or a measure of the only problems in a document, scholars (see, e.g., Floreak, 2020) recommend that other methods are used to review information, including having the material tested by the intended audience. This should include student and applicant voices, such as mature students, students who have been historically underserved, students with exceptionalities, and students who are the first in their families to attend college and professionals such as CNA's Accessibility Services.

3.3.2.2 Collecting Data on Indigenous-Identifying Students

CNA's application for admissions allows for a wide range of options in the section that asks applicants to provide their self-identification as an Indigenous person. As Figure 33 shows, the application form asks: "If you are an Indigenous person, please indicate which Indigenous Organization you are a member of."

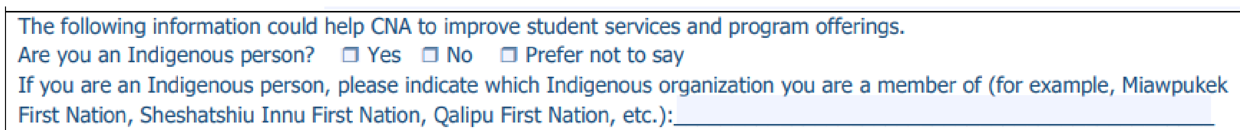
The following information could help CNA to improve student services and program offerings.
Are you an Indigenous person? ❐ Yes ❐ No ❐ Prefer not to say
If you are an Indigenous person, please indicate which Indigenous organization you are a member of (for example, Miawpukek First Nation, Sheshatshiu Innu First Nation, Qalipu First Nation, etc.):____________

Figure 33: CNA application form question on Indigenous identity

On the web application, applicants are asked to select from Miawpukek First Nation, Mushuau First Nation, Nunatsiavut Government, NunatuKavut Community Council, Qalipu First Nation, Sheshatshiu First Nation, other, prefer not to say, or I identify as Indigenous but do not have Indigenous membership. To insert their Indigenous identification on the PDF form, applicants are asked to write their Indigenous organization on a line, which means data is collected based on applicant-supplied organization, government, or community name. This results in

[58] This text may also need to be reviewed by Accessibility Services to determine whether it reflects current K-12 terminology regarding exceptionalities.

heterogeneous identifiers. Accordingly, it is difficult to track the percent representation of the Indigenous communities of Newfoundland and Labrador or to reliably determine what Mi’kmaq resources means (Miawpukek or Qalipu) or if Innu First Nation is in reference to Mushuau or Sheshatshiu Innu First Nation.

Quantitative data has long been a tool of the state, often relied upon for colonial purposes to identify others and to determine what services a citizen (or non-citizen) receives (Quinless, 2022). In Canada, Indigenous encounters with demographic data can be traced back to the census data collection and then residential schools, which were used to track the number of Indigenous people in Canada to ensure state control. Given negative experiences with data collection, research has found that self-identification as an Indigenous person is entangled with negative assimilative historic practices and is negatively impacted by a legacy of distrust in the education system (Oldford and Ungerleider, 2010). First, Indigenous people may not always feel comfortable disclosing personal information to outsiders. This can result in underreporting, which makes administrative decisions difficult and can lead to lower support levels than what is actually needed to support Individuals from diverse Indigenous communities (Oldford and Ungerleider, 2010). Second, self-reported data can be influenced by social desirability bias (Miller, 2011), the tendency for people to report information in a way that they perceive will help them avoid negative judgments. Finally, historical and ongoing systemic issues, such as colonization, discrimination, and marginalization, can create power imbalances between Indigenous people and non-Indigenous researchers, which can impact the accuracy of self-reported data (Andersen, 2013). These three factors are not mutually exclusive and often a combination of all three is at play. For example, a report on the representation of Indigenous students in Ontario's post-secondary data reports that when asked why they did not self-report their Indigenous status, the majority of respondents cited fear, mistrust, perceived bias, and discrimination, feelings that were furthered by a lack of information about why data was being collected (Oldford and Ungerleider, 2010).

Systemic biases might also impact a person’s decision to self-identify as Indigenous during the application process. Thus, while some Indigenous people may see value in being counted, others may be deterred by fears that their identification might negatively impact their application or might single them out as an Indigenous person (Association of Canadian Community Colleges, 2010). Such a dichotomy can lead Indigenous people to choose when they reveal their Indigenous background, which requires navigating processes of self-identifying and refusing to self-identify (Bailey, 2016). Participants in the stakeholder consultations identified the

need to explain on the application form *why* CNA asks applicants to indicate if they are Indigenous and to link self-identification to its role in the provision of supports (Dowden, 2020). This corresponds to the Association of Canadian Community Colleges (2010) guidance that efforts to encourage Indigenous self-identification require assurance that the data provided will be used to help improve services and supports for Indigenous students. Research by Oldford and Ungerleider (2010) has also shown that such measures are effective, with transparent communications about how the data would be used, such as an explanatory brochure, webpage, and/or workshop, increasing the validity of self-reported data and minimize feelings of mistrust and suspicion.

For an Indigenous person to self-identify as Indigenous requires the establishment of trust, a trust that has often been broken by public institutions in Newfoundland and Labrador. As CNA has a duty under the Truth and Reconciliation Commission of Canada (2015) recommendations to improve data collection, monitoring, and evaluation in order to reduce gaps between Indigenous and non-Indigenous peoples in education. Additionally, the United Nations' Agenda for Sustainable Development also requires the collection of data that helps to define and evaluate success and measure progress. A lack of baseline data can impede CNA's ability to work with community partners and to measure progress and specifically target weaknesses in recruitment, retention, and employment after program completion.

3.3.3 Mature Student Admissions Process

Access to education lowers individuals' risk of unemployment and increases their earning potential. As section 1.4.1 outlined, Canadians without a high-school diploma have an 8% higher rate of unemployment than their college-educated peers. Access to education is therefore a social good that has financial benefits for the province as well as individuals (e.g., higher incomes contribute more to the local economy and tax revenues). Education can open doors that can lead to increased feelings of self-worth and self-efficacy.

To this end, the United Nations Sustainable Development Goals indicate the importance of access to education for all individuals under Goal 4, quality education: “Education is one of the most powerful and proven vehicles for sustainable development.” While focusing on primary and secondary education, the SDGs also “aim to provide equal access to affordable vocational training, to eliminate gender and wealth disparities, and achieve universal access to a quality higher education.” As Mature Students often face additional barriers, decoupling post-secondary

from the completion of a high-school diploma can help to ensure equitable access to education. CNA's mature student policy offers a route for non-traditional learners to enter the institution, a first important step to removing the barriers to education, especially for historically underserved populations. With some improvements, this policy could better serve its intended recipients, as this section outlines.

3.3.3.1 Temporal Restrictions

During the Stakeholder Consultation, students commented that temporal restrictions on CNA's timing for releasing course offerings does not coincide with funding agency deadlines, which means that some may miss the deadline to obtain funding, which further complicated an already unfamiliar and difficult process (Dowden, 2020). In response, CNA began opening admissions earlier in the year, with the aim of having course offerings released in November rather than February of the academic year. As such, the Readiness Project was able to make a direct and impactful change in the admissions process.

As section 2.2.2 outlined, CNA has two alternate admission procedures for applicants who do not meet minimum entrance requirements: mature student admission and special admission. Mature student admission is only available for programs following the "First Qualified, First Accepted" admission process, and requires applicants to be at least 19 years old when they apply and out of school for at least one year (CNA, 2019). Waiting for applicants to be 19 years of age is common across Canada. The one-year waiting period is, however, uncommon. If a person leaves school in, for example, their fourth year of high school, under the mature student policy they must wait a year from their school leaving date.

Delaying a person's ability to complete post-secondary studies, keeps them in a position of waithood, a suspended period between youthhood and adulthood (Honwana, 2014). As every year a person is out of education has a direct impact on the person's earning potential and delays their college completion by a further year, making applicants wait a year before applying seems counterintuitive. For example, Brunello and Paola's (2014) study on Europe found that early school leavers aged 18 to 24 with a maximum of lower secondary education and not engaged in education and training experience private, fiscal, and social costs, ranging from lost earnings to lower health outcomes and life expectancy and are more reliant on government support. They propose that from an equity standpoint, policies should be aimed at reducing early school leaving and reducing time out of education; CNA's mature student policy, by contrast, enforces a time out of school and prolongs the status of early leaver. The issue of a

one-year waiting period was also raised as a barrier for students during stakeholder consultations (Dowden, 2020).

Moreover, while waiting until 19 is not uncommon, it still enforces a time out of education, as applicants wait to reach an arbitrary age. If the reason for this policy is to prevent students from leaving school to attend college, the risk of opening up admissions to people without a high-school diploma by 18 would present a very limited risk. In Newfoundland and Labrador, most students graduate by 18, with some doing so before their 18th birthday. As such, the age requirement of 19 years makes mature students wait longer than their peers to attend post-secondary institutions. Statistics Canada Data indicate that most Canadians complete their secondary schooling within 3 years of entering grade ten. In 2020-21, 89% of Newfoundland and Labrador high-school students finished their studies on time; 96% finished within 5 years of starting grade ten.[59] Based on the age group's total population of 13,630 in 2020-21, there could be over 650[60] young people who would need to wait an arbitrary year to be considered by CNA if the 19-year cut-off remains in place. For example, North Island College allows applicants who will be 18 years of age in that calendar year and who have not graduated from secondary school or equivalent to apply through an alternative application process that can also waive the age and program requirements.

From a lens of equity, enforcing an older age for entry for mature students than high-school graduates have to meet disadvantages applicants who are out of education and erects a further systemic access barrier, alongside social barriers that the applicants may already be facing (e.g., parenthood, family demands, lack of self-efficacy).

3.3.3.2 The need to know

Under the current mature student procedure, applicants are only informed of the mature student admissions process when it is determined that their program and their application fit the criteria for a mature student application. Although the policy is outlined on a publicly available website,

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[59] Statistics Canada. Table 37-10-0221-01 True cohort high school graduation rate, on-time and extended-time graduation rates, by gender

[60] This estimate is calculated based on the total population between the ages of 15 to 19. To account for the fact that 19-year-olds are eligible to apply as mature student applicants, the total of 13630 was divided across the 5 years. This number is not an accurate reflection as this cohort is not evenly distributed. The total could therefore be higher or lower depending on the totals if the data was not aggregated. Government of NL, Population by Age Groups and Sex.

applicants need to be informed of the option. There is no standardized procedure for how this happens: sometimes applicants reach out to the counselling team directly, sometimes they are told about the possibility at an information session, sometimes they learn about it through an admissions officer, and sometimes they hear about it from other people. Importantly, hearing about mature student admissions often happens when people have been rejected after applying to a program if they have completed high school but lack the requirements for a specific program.

In an interview, a mature student recalled her experience with the mature student process. The student had been working since finishing high school but had decided to make a career change. She applied, but it was rejected. She received a letter explaining that she could not be admitted to the program, without any information as to why. She then contacted an admissions officer to figure out why she had not been admitted into the program:

> I asked the admissions officer why, like, if you don't mind me asking, I understand that's your decision. But can I ask why? And the officer said, because you don't meet the math requirement. And, so, when I looked through it, and found out why I hadn't met it, as soon as the officer suggested, I contacted a counsellor about the mature student process. So, I went through that process. And it worked out.

If the mature student had not contacted the admissions officer, she would not have known that there was a pathway for her into college. It would not have, as she framed it, "worked out". In the moment of rejection, she recollected how she did not know what she was going to do as she could not bear the idea that she would work as a carer for the rest of her life. The mature student had not applied through the mature student process as she did not know such a process existed and referenced in the interview how there was nothing on the website that explained the mature student option. If the admissions officer had not told her about it, and if she had not inquired about why she had not gotten into the College, she would have been out of education without any idea of how to return.

Another option would be to develop an Appeals Policy, which would provide a medium for applicants to raise questions about determinations and request consideration under other application procedures. While CNA has a student appeals policy, this does not extend to admissions. Other Canadian colleges have specific policies for admissions appeals. For example, Niagara College's policy considers admissions appeals in cases where errors may

have been made in the admissions process or where extenuating circumstances may have impacted an applicant's academic performance.[61] Sheridan College's appeals policy specifically states that all applicants "can obtain a specific reason for the admission refusal and may request a review of the admission decision."[62] Embedding appeals into the admissions process could help to lower the stakes for applicants who are applying to return to education after some years out of education, while also allowing multiple opportunities for applicants to be considered under the correct admissions category.

When applying to CNA, it is likely that applicants might not be aware that they could meet the criteria for mature student admissions. Applicants need to know that such a category exists in order to apply under the procedure. When potential applicants go to CNA's website, the section, "Become a Student" mentions a "mature student clause" and redirects applicants to the formal policy/procedure that is meant to guide the institution's implementation of its policy. To click that link, applicants need to have some belief that mature students might apply to their case. Some may believe that mature relates to age, as the mature student above did, rather than the experience that they have acquired in the time since they left school. Other colleges have a special section on their websites to inform applicants about the mature student application process.[63]

Other Canadian colleges automatically consider applicants who do not meet the requirements under its MS process. For example, the Manitoba Institute of Trades and Technology automatically considers all applicants who do not meet the regular admission requirements under mature student admission provided they are at least 19 years of age and out high school of school for at least a year and are applying to complete a post-secondary certificate or diploma program.[64] For example, Nicola Valley Institute of Technology defines mature students in its admissions information and encourages adults "to apply to specific programs even if they are unable to meet specified educational requirements since other factors such as maturity and work experience may be considered in some programs." Students who do not meet the educational requirements for their program of choice are instructed that they "may demonstrate

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[61] Niagara College, NC800 Appeal of Admissions Decisions

[62] Sheridan College, Admission Appeal Process

[63] For an example see: Lethbridge College, Mature Student information

[64] Manitoba Institute of Trades and Technology, Mature Student Admission Category

these requirements through an assessment and/or upgrade by completing appropriate program admission requirements and course pre-requisites”.[65] Additionally, colleges such as Northwestern Polytechnic require that applicants whose applications are rejected must be told why and supported in finding a program that they can be admitted to.[66] Mohawk College’s website specifically states that Mature Students don't need to have a high-school diploma, as the college “welcomes students from many backgrounds” and “with a variety of work and life experiences, adult learners contribute their valuable perspectives to classroom and training programs, while at the same time obtaining new knowledge and skills.”[67]

To apply as a mature student to CNA, the person applying needs to understand that the process exists and what it requires to be considered under this policy. Applicants generally need to ask the question; if a proactive approach was taken—whereby applicants are automatically considered under mature student admissions—more students could gain access to post-secondary education. Under the current approach, mature students’ journeys back into education face an immediate barrier. Once they know about the category and make that initial contact with a counsellor, applicants generally have positive experiences. More effort is therefore needed to increase awareness about the process.

3.3.3.3 Admissions Information

To apply for admission to CNA, applicants can click the link, “Become a Student”, on CNA’s webpage, where they are asked to select whether they are a Canadian or International applicants. Depending on the category, prospective applicants are provided a variety of information that is robust and covers many of the major questions that applicants might have. Some information is provided only for international applicants, e.g., language and age requirements, immigration-related information (e.g., study permits and visas), estimated program costs, and how to contact a coordinator. Domestic students, however, could also benefit from information on estimated program costs and how to contact a coordinator. In some cases, there may be too much information. For example, the inclusion of topics under “Other Information” such as the information on “Miscellaneous Fees” might be confusing for applicants and may lead them to believe that their program may be more expensive than it actually is.

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[65] Nicola Valley Institute of Technology, Sec. IV Education and Educational Services

[66] Northwestern Polytechnic, Admissions Policy

[67] Mohawk College, Admissions Standards Policy

Category	Topic	Information provided	Canadian Applicants	International Applicants
Getting Started	Language Requirements	• Describes that international students must meet the college's English proficiency requirements defined by standards on internationally recognized tests of English proficiency (e.g., CAEL, TOEFL, IELTS) • Clarifies that English proficiency tests are not required if applicants completed program at a (post)secondary school where the language of instruction was English. • Advises students to ensure that their programs do not require specific English-language competencies.		✓
	Countries Exempt from Language Requirements	• Identifies countries that have English as an official language	**N/A**	✓
	Age Requirements	• Defines the minimum age accepted by CNA to be 17 years of age.		✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Academic Requirements	• Explains that program requirements can be found on the College website (link included to program descriptions; this is the only information provided for international applicants). • Describes that all applicants should submit their latest transcript of high school/equivalent ABE marks. • Mentions mature student clause and that it can be considered on an individual basis as per the college's admissions procedures (link to procedure is included).	✓	✓
	Country-specific Special Requirements	• Lists required documents per country • Specifies that eligibility is based on subjects completed, grades achieved, and language proficiency and that meeting the requirements does not guarantee admission.	**N/A**	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Applying to the College	• Prescribes that applicants must complete the application form and pay for their application online, by mail, or in person. • Explains that applicants will be asked to submit official high school transcripts (if no longer in high school) and program-specific required documents (e.g., previous degree/certificate, driver's license). • Stipulates that official transcripts or degree certificates issued in languages other than English must be translated into English and submitted to College of the North Atlantic along with the original official documents and defines what constitutes an official translation.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Letter of Acceptance	• Describes that if an applicant is accepted, they will receive a letter of acceptance, which will explain fees, and how to enroll in courses and provides information about program of study/length of program. • Cautions applicants that a confirmation fee is due within two weeks of receiving the Letter of Acceptance in order to hold the seat.	✓	
	Study Permit / Student Visa for Studying in Canada	• Notifies international applicants that they are required to get a student study permit / student visa from the Canadian Embassy before travelling to Canada and describes the process to obtain the permit/visa. If a student does not obtain a visa, they can receive a tuition refund.	**N/A**	✓
	Proof of Status	• Explains that international students must provide proof of status in Canada on or before the first day of classes.	**N/A**	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Contacting a Co-Ordinator	• Recommends that international applicants contact an International Student Coordinator for assistance with their application.		✓
	Consent for Release of Information	• Describes the process of providing informed consent to release information to funding agencies. • Form must be completed, signed, and submitted in person or by mail or fax.	✓	✓
Fees & Charges	Base Fees	• Reiterates that the confirmation fee must be paid within two weeks of receipt of the Letter of Acceptance. • Describes program fees, including: ○ Application fee (non-refundable) ○ Confirmation Fee ○ Tuition ○ Technology Fee ○ Work Term Fees ○ Continuing Education Fees • Prescribes that international students use PayMyTuition for payments.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Equipment / Material Fees	• Describes additional fees, organized by areas of study, ranging from 252 per 15-week term to 39.00 for a 7-week term.	✓	✓
	Residence Fees	• Identifies fees for housing including: o Residence Application fee o Residence Registration fee o Damage Deposit (family residence) o Residence room charges o Costs for room and meals (Combined), per campus (Burin, Bay St. George, or Happy Valley-Goose Bay), ranging from $156.00 per week to Three-bedroom family apartment ($425.00)	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Miscellaneous Fees	• Outlines mandatory fees (academic audit fee), fees for certifications within a program (e.g., first aid, mask fit test), fees to provide replacements (e.g., I.D. cards, certificates), and case-dependent fees (supplementary and re-read fees, resource camp fee, NSF Cheques, Child Care Fees, deferred evaluation fee). • Explains that some fees can be opted out of (e.g., Student Health and Dental Fees) and links to instructions on how to opt out.	✓	✓
	Estimated Program Costs	• Provides a link to a document that outlines estimated program costs.		✓
	Making Payments	• Describes the process for paying application fee (via credit card for online applications) and tuition payments (PayMyTuition for international tuition payments once assigned a CNA student number).	✓	✓
Refund Process	Refund for Tuition and Equipment / Material Fees	• Instructs students that they are responsible for initiating their own refunds (via Student Services), including deadlines to request a refund.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
		• Defines that application and confirmation fees are non-refundable for international students but that they can receive a full tuition refund if a visa/study permit is not issued.		
	Refund for Textbooks	• Outlines the conditions for textbook refunds (unmarked, within three weeks of beginning of classes, with original receipts).	✓	✓
	Refund for Contract Training / Continuing Education	• Explains that students must submit a written request for a full refund within a specified period to receive either a full or partial refund, depending on program type. • Contextualizes that special circumstances may apply to any of the above conditions, in which case supporting documentation is required.	✓	
Other Information	Off-Campus Housing	• Directs students to contact campuses about housing possibilities. • Informs students that off-campus housing costs can range from $700 to $1,000+.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Estimated Living Expense	• Provides an average estimate of living expenses (as of 2023, ca. $1,400 per month).	✓	✓
	Student Services and On-Campus Facilities	• Describes student supports available on campus, including personal and academic counseling, student tutoring, student council activities. • Instructs students to contact student services once they are on campus to enquire about accommodations, orientation, funding and financial aid. • Identifies that all CNA students have access to the internet on campus and a variety of software via their student account and campus computers.	✓	✓
	Medical Care Plan	• Explains Newfoundland and Labrador's Medical Care Plan (MCP) and the process to apply for coverage. • Outlines that students can opt out of CNA's Health Insurance Plan and provides a links with instructions on how to complete the opt-out process.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Scholarships	• Describes how students can apply for scholarships or bursaries after enrolling in a CNA program. • Includes a link to the CNA Scholarships and Awards database.	✓	✓
	Regulations Governing Payment	• Specifies that fees must be paid by dates in the Calendar of Events but that students receiving student loans may provide proof of loan and have fees outstanding after registration. • Stipulates that students who do not pay their fees before the deadline may have their registration cancelled and be unable to register for subsequent terms and be unable to access grades/transcripts. • Describes special regulations including the seniors discount and additional fees associated with Distributed Learning programs/courses.	✓	✓

Category	Topic	Information provided	Canadian Applicants	International Applicants
	Financial Credit	• Explains that college can provide credit/lease to students, e.g., for institute equipment lease/purchase programs, and that students receiving student loans can avail of credit while waiting to receive student aid as well as those receiving external funding.	✓	✓
	Financial Appeals	• Outlines process for appeals of financial assessment should be made in writing.	✓	✓

More beneficially, information could also be provided in a separate document that details the costs for each program. Such a document would be useful for all applicants especially those from equity-deserving groups. Research has shown that the complex intersection of economic and non-material barriers can have an especially negative impact on students from marginalized groups by limiting their agency in post-secondary studies (Hyland-Russell and Groen, 2011). Access to information, that is the cultural capital needed to navigate the post-secondary environment is one such non-material barrier. If an applicant is a "first"—or among the firsts—to attend a postsecondary institution, they might not have an understanding of what the completion of a college program might cost or an understanding of how to calculate those costs. Scholars such as Vaccaro (2012) have found that financial costs are less likely to prevent students from accessing post-secondary education in Canada. Instead, potential applicants might be deterred by their assumptions about the perceived costs of post-secondary education and how that relates to applicants' imagination of the benefits of a certificate, diploma, or applied bachelor's degree. If applicants are unable to make such calculations, they might be less likely to take the "risk" of completing post-secondary education. As such, having access to such information could help to eliminate potential economic barriers as it could increase applicants' willingness to pay for post-secondary education by allowing them to envision the positive return of education, especially for historically under-represented groups and adult learners (Vaccaro, 2012).

On the "Become a Student" page, the only information provided about the mature student process is a mention that "Students that are applying under the mature student clause may be considered on an individual basis as per the college's admissions procedures." The section does not define who meets the definition of a mature student but includes a link to CNA's admissions procedures, which is a formal college procedure and not a brochure that explains alternate admissions processes. As Section 2.2.2 explains, Procedure AC-102-PR Admission defines mature student requirements as follows:

Applicants who do not meet the educational prerequisites for programs with "First Qualified, First Accepted" admissions process may be considered for Mature Student admission on an individual basis provided the following conditions are met:

1. Applicants must be at least 19 years of age at the time of application and out of school for at least one (1) year.
2. Applicants present an official transcript of grades for the highest educational level attained.

3. Applicants must engage in CNA's Mature Student Admissions Process.

It further contextualizes that "specific academic course prerequisites, in disciplines such as English, Math, Biology, Chemistry, and Physics, or any others specifically identified for admission cannot be waived via the Mature Student process" and that "Mature student status does not apply to programs with competitive entry admissions processes".

This information can be confusing for applicants, especially the information that applicants who do not meet requirements can apply under the mature student procedure but then that certain requirements cannot be waived. It is unclear what programs or what pre-requisites cannot be waived. From an institutional perspective, this makes sense as some programs require a high-school diploma because of certification standards, especially in the health sciences. Applicants are not, however, aware of these distinctions. As such, the policy should be updated so that it explicitly defines the exceptions. Not transparently explaining or presenting the option to apply as a mature student applicant might deter students who might meet the requirements from applying under the mature student provision.

If an applicant was curious about what the term, "mature student clause" means and completed an internet search for the keywords "Mature student" + "College of the North Atlantic", the first hits that would be returned would be a list of CNA definitions and regulations, Procedure AC-102-PR Admission. The clearest definition of CNA's process is available on a third-party website, "Helen Ziegler and Associates", which focuses on CNA-Q and explains that:

> What are the minimum requirements for admission?
>
> Most programs at CNA-Q prefer one English credit, one Academic or Advanced Mathematics credit, and two Science credits. All these credits must be obtained from a Qatari State Secondary School and must be a passing grade. If these requirements are preventing a Qatari from admittance, Qatari nationals are allowed to take catch-up courses or they can apply as a mature student, where the requirements are flexible.[68]

If an applicant was unsure of what this application process was called and searched "admission" + "without high school" + "College of the North Atlantic", they would only obtain information on research papers but nothing from the College officially.

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[68] FAQ: The College of the North Atlantic - Qatar

By contrast, other colleges in Canada explicitly mention and define their mature student opportunities in their information for potential applicants. Moreover, automatic consideration at some colleges means that applicants do not have to reach out to the college after receiving a rejection or request application per the mature student process but that the mature student lens is applied to all applications. For example, the Manitoba Institute of Trades and Technology informs applicants in their application material that the "admission decision is based on your demonstrated academic potential, successful completion of the required prerequisite subjects and successful completion of any program-specific entry requirements".[69]

For mature student learners, other barriers could deter them from applying. For example, all applicants are required to pay a confirmation fee to ensure that their seat is reserved. For applicants who are dependent upon funding or financial aid, paying this fee along with the application fee before the program begins might serve as a deterrent. It is unclear whether this amount can be refunded if the applicant is unable to register for the program. Moreover, while financial barriers might be alleviated by the availability of refunds, the information about refunds can be confusing as it depends on program length (which new students may not be able to differentiate) and is explained as being prorated while the specific percentage is not provided. Such information could be more clearly defined to help alleviate any potential or perceived barriers.

Additionally, some of the requirements are unnecessarily complicated, asking applicants to submit documents in person or by mail or fax forms and not providing options for digital submission. For example, the Consent for Release of Information, which applicants are required to complete to consent to release their information to funding agencies, can only be submitted "in person or by mail or fax". As providing information to funding agencies can be a process that must be completed in a timely manner, not providing an option for applicants to complete and sign the form digitally can be a barrier for applicants. Similarly, the information about residences could be updated to include pictures of the residences and sample meal plans from previous semesters. Applicants could also be provided an option to calculate the cost of residence over the semester and to apply online for accommodations. This could help facilitate students' access to housing which is emphasized in the literature as a significant barrier for students, especially those from low-income families (Aronson, 2008).

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[69] Manitoba Institute of Trades and Technology, Mature Student Admission Category

Importantly, some information should be updated. The estimated cost of living does not appear to reflect the inflated prices currently being experienced across Newfoundland and Labrador. The information notes that students should expect to spend about $1,400 per month. This number includes an estimated monthly transportation cost of $70-$100. It is unlikely that students would be able to avail of such cheap transportation, given the increased cost of gas and the lack of public transportation across the province. Even in St. John's, where public transportation is more readily available, costs should be anticipated to be much higher as a monthly pass for metro bus in St. John's is 78.00 and 275.00 per semester (70/month). For students who live further away, costs would be higher, as transportation would require access to a vehicle or a self-organized car-pool opportunity. Similarly, the cost of food is also likely underestimated given the impact that inflation has had on food prices. Since 2022, reports have increased about students' increasing need to use food banks.[70] Providing accurate information is an important component of the admissions process. If students enter CNA with a misunderstanding of associated costs, they may not progress beyond their first semester due to financial constraints or a loss of trust in the process, which would directly impact CNA's ability to retain students (Boeck, 2022).

From the perspective of mature Indigenous students, on-campus housing is most expensive at the Happy Valley-Goose Bay campus (compared to Burin and Bay St. George's), which is historically also the campus with the highest number of Indigenous student enrolments. The Economic Research Institute ranks Happy Valley-Goose Bay's cost of living as being 14% higher than the national average, compared to a provincial average of plus 1%.[71] As such, the discrepancy in cost is likely directly related to the higher living costs in Happy Valley-Goose Bay. Given that food costs are also higher, CNA should review its rates to determine if it would be possible to further subsidize housing in Happy Valley-Goose Bay to provide students with safe and affordable accommodations while they study.

When applying to CNA, international students can contact an International Student Coordinator for assistance with their application. Such opportunities are not available for students applying from Canada. A coordinator could help to open up communication with CNA so that they can begin to understand which process would be most suitable for their particular circumstance.

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[70] CBC, MUN food bank temporarily closes as demand overwhelms supply

[71] Economic Research Institute, Cost of Living Data in Happy Valley-Goose Bay, Newfoundland & Labrador, Canada

Other colleges provide such assistance with navigating the admissions process. For example, Algonquin College provides applicants with the opportunity for “Admission Reviews” via the Registrar’s Office. The college states that its aim in providing such assistance is to ensure that the “selection procedures to programs offered by the College shall be equitable, fair and open, and consistently applied”. Applicants can have their transcripts reviewed and are given a recommendation for which category under which they can apply.[72] George Brown College offers applicants a guide for the mature student process,[73] access to entry advisors who can help applicants navigate educational programs and pathways[74], provide information on and/or referrals, as well as an opportunity to develop an action plan for returning to education through its Choices program, a free weeklong career and program exploration class for adult (+19) learners that is offered throughout the year.[75]

In not providing supportive information to applicants about the Mature Student process but expecting that applicants who lack the requirements for program admissions to take the initiative, find out what possibilities exist for them, and discover the mature student admissions process, CNA is erecting barriers to post-secondary education—albeit unintentionally. As one mature student suggested in an interview, if she had been supported in checking her transcript to see if she had the requirements for the program, she would have used every tool available to ensure she could get into the program. Instead, she applied, and her application was denied because she lacked a 3000-level math course as only one was available when she had graduated high school. She had spent the time reviewing the website and never noticed any information on mature student opportunities. As such, she reflected that:

> But if was something on the main page of the website that said, you know, are you 25 and older, or whatever the age recommendations are for it, you could do this way and apply as a mature student, it probably would have been a lot

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[72] Algonquin College, Admissions

[73] George Brown College, Guide for Mature Students

[74] George Brown College, Mature Students

[75] George Brown College, Choices: Explore your Post-Secondary Options Through our Virtual 1 Week Program

> easier for me than just applying, getting the rejection, and then having to go back.[76]

Additionally, she suggested that if there had been an online tool, where she selected the courses she had completed and the system checked to see if the prerequisites had been completed, she would have felt more confident in her application and less “devastated” when she received her rejection. Instead, she had to reach out to admissions to enquire about why she had been rejected. As she summarized: “This would be helpful, especially for somebody for me, like, I've worked my whole adult life, but I've never been to a post-secondary institution.”[77] Instead, as she framed it, she was lucky, she reached out and was put in contact with a Counsellor who supported her through the process. Without that email, however, she would not have known where to turn, even the basic information as to why she had been rejected (missing one math course) and how she could address the missing prerequisites.

3.3.4 The DISK Method

At the beginning of the 2021-22 academic year, CNA’s counselling team implemented and standardized an interview/discussion process for Mature Student admissions. To allow for this change, CNA’s Admissions Procedure was modified, removing the requirement that “applicants must complete the **standardized assessment** instrument at a level approved by the College and attain the required **scores** for the program” (CNA, 2016). This was replaced with the requirement that “applicants must engage in CNA’s Mature Student Admissions Process”[78]. This was in line with the Readiness Project’s recommendations as both the new process. It shifts CNA away from a test-first approach towards a more open admissions process that focuses on what the mature student brings to their application and assessment to fill any gaps. In influencing policy change and how the policy is operationalized by the institution, the Readiness Project has positively impacted the mature student admissions process at CNA and has helped to bring it in line with what stakeholders raised as concerns with the former process and in line with what the academic literature recognizes as best practices for student admissions.

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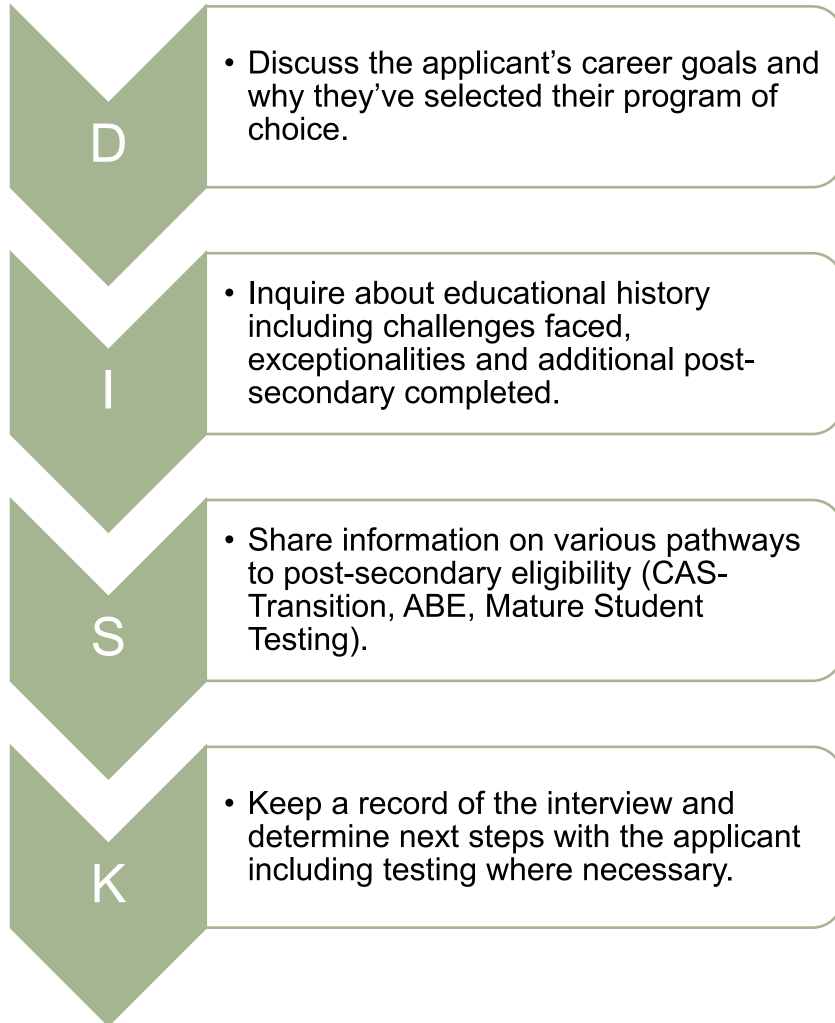
[76] Interview with Mature Student, March 23, 2023.

[77] Interview with Mature Student, March 23, 2023.

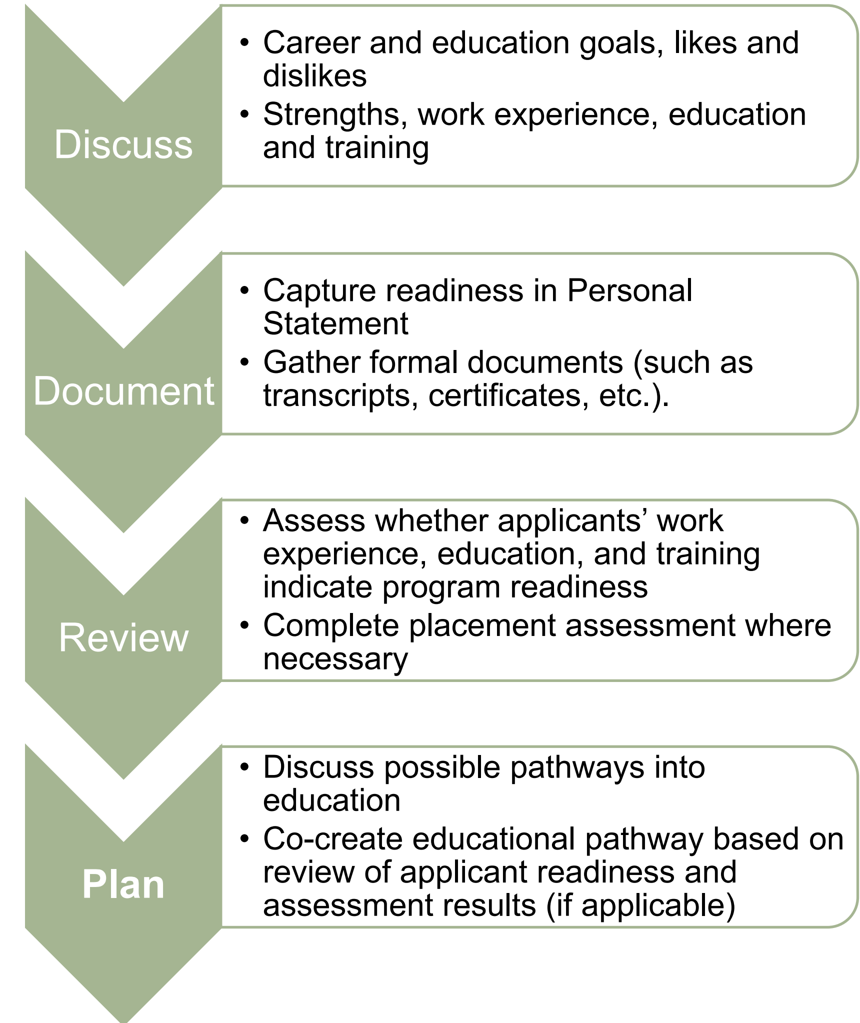
[78] CNA Operational Procedure, Admission

DISK Model

Implemented in 2021



Holistic Mature Student Placement Model



3.3.4.1 A More Flexible Approach to Mature Student Admissions

The DISK method was designed based on the Readiness Project's proposed method, with very little difference. The model is a four-step process that amplifies the applicant's voice in the process. The DISK method moves away from the old process of assessment-recommendation towards an applicant-centred approach that draws on discussion and documents to establish pathways into education for mature student applicants. It thereby provides applicants the space to demonstrate their academic readiness in a supportive environment. Importantly, the DISK method uses assessment (the CTBS-R) only in cases where readiness is not explicitly demonstrated in documentation. This process therefore represents a more nuanced way of considering applications than simply using the CAAT, a key change influenced by the Readiness Project's recommendations.

In 2022-23, this change in process meant that only 27% of applicants were required to complete the CTBS-R assessment, with 33% of all mature student applicants completing the math section of the assessment (computation) and 20% completing the reading section of the test.

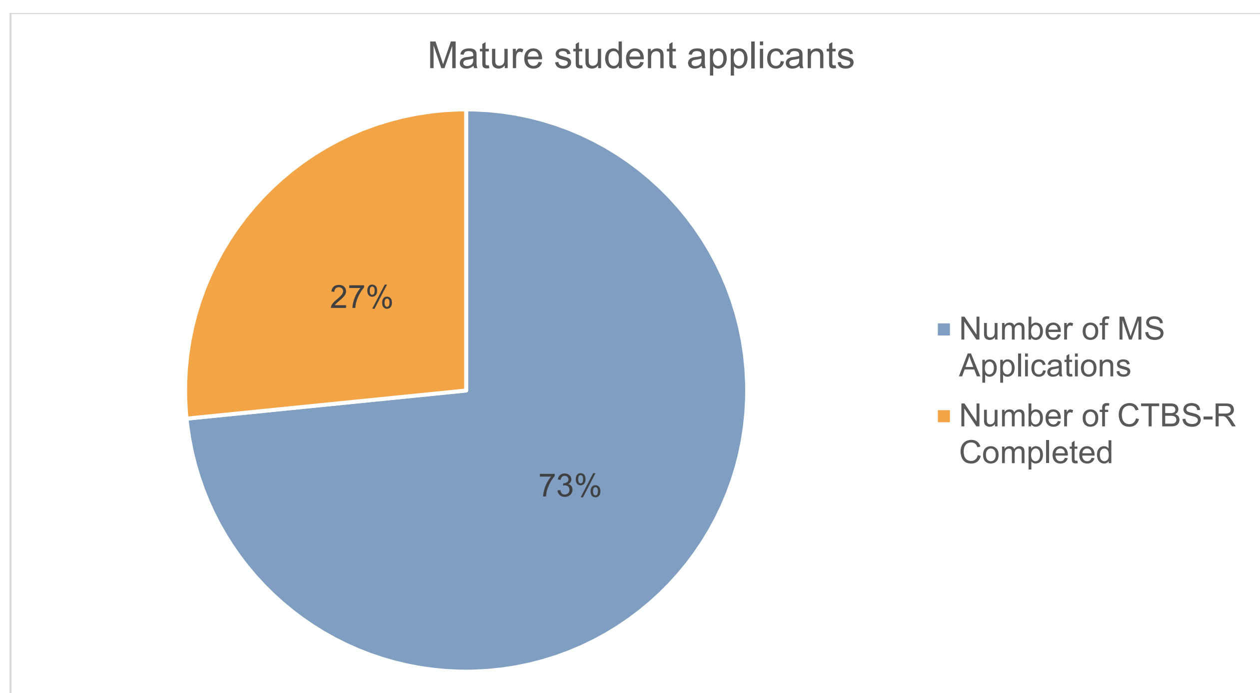


Figure 34: Percentage of Mature Students Completing Standardized Test, 2022-23.[79]

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[79] Note: This number excludes 16 students in the practical nursing program who were required to complete the CTBS-R as part of admissions requirements.

In changing its Admissions policy and procedure and how the procedure is operationalized in practice, CNA has developed an approach that aligns with what the Readiness Project heard from stakeholders who highlighted the need for a flexible policy that moved beyond a “one size fits all” approach (Dowden, 2020). The new process considers applicants’ goals and expected careers, lived experiences and personal strengths, program interests and knowledge, and previous paid and unpaid work experience. Testing is only used as a tool to determine whether an applicant has the literacy and numeracy skills needed to be successful in their program of choice.

3.3.4.2 Changing Admissions Processes

This change in approach also resulted in increased success with 76% of applicants successfully admitted to their program of choice. As Figure 35 depicts, the gap between the number of mature student applications and mature student enrolments has been narrowing, especially since the CAAT was eliminated, with 36% of applicants successful in 2019, moving nearly 60% in 2020 and 2021 to 76% in the most recent intake. Such a change marks a substantial difference for new mature student admissions.

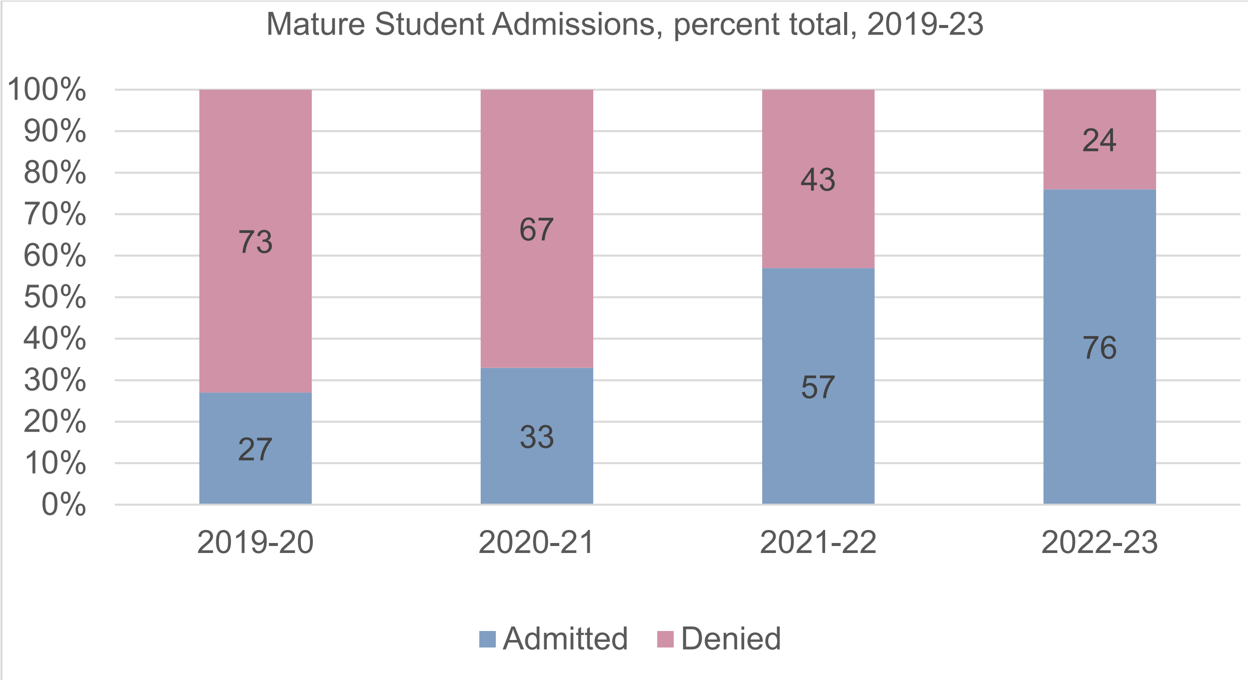

Figure 35: Mature Student Applicants versus Enrolments, 2019-2022

Before the change in the model, only 1 in 3 MS applicants were being admitted to CNA. As the process changed in May 2021 (late in the application period), we could already see an impact—more than 50% of applicants were admitted to a program. By 2022-23, the impact was clear: 3 out of every 4 applicants were successful in their application. Additionally, although more MS are being admitted, there has been no change in the rate by which mature students complete their programs at 89% of the total (for non-mature student admissions the completion rate for the first semester is at 92%).

This also coincided with a decrease in the percentage of mature students who completed less than 50% of their first-semester courses, falling from 10% of students to less than 5% of mature students (see Figure 32: Percentage of students completing less than 50% of courses completed in first semester, 2019-2022 for more information). As such, CNA's adoption of a more flexible admissions approach for mature student admissions has benefitted students in that more mature students are admitted, and the likelihood of success has increased while the risk of impacting college performance has not materialized.

The use of an assessment remains questionable. Importantly, mature students admitted during the period when CNA used letters of recommendation did not experience higher rates of discontinuation than the cohorts admitted based on CAAT results or the subsequent cohort who completed the CTBS-R. Data does not indicate that reference letters were insufficient to determine mature students' academic readiness (see the sections on Program Discontinuation and First-Semester Course Completion in this report). Moreover, CNA's current process is more rigorous than that used by Memorial University of Newfoundland and Labrador, which requires that mature student applicants submit a personal statement, high-school transcripts, and two letters of academic recommendation. While academic readiness is used as a justification for using standardized assessment, especially for programs that require more than just a high-school diploma, all of MUN's programs have higher average requirements for admissions but mature students are not required to complete an assessment in any circumstance to determine their readiness.

While the literature notes significant issues with using letters of recommendation, these issues pertain to the equity of using letters of recommendation and how they might contribute to the systemic and historical gatekeeping mechanisms in place at post-secondary institutes and marginalized underrepresented groups at the admissions stage (on bias see, for example, Dalal et al., 2022; on gatekeeping see, for example, Swank & Smith-Adcock, 2014). In terms of

academic performance, research has found that letters of recommendation can predict student performance (Kuncel, Kochevar, and Ones, 2014). Based on student performance, there are therefore merits to revisiting the use of letters of recommendation with a view of how such a process could be equitably implemented, for example, by offering applicants the option to opt into letters of recommendation or to go through the holistic mature student admissions process.

3.3.4.3 Limitations

While the DISK method is very much aligned with and informed by the early findings from the Readiness Project, it still has some key limitations: (1), lack of standardized process; (2) the use of a standardized assessment that is not aligned with program requirements.

Component	Similarities	Differences
Model	• Four-step model • Amplifies the applicant's voice in the process • Moves away from the old process of document review->assessment->recommendation	• Steps occur in a different order (assessment is part of the holistic model whereas assessment occurs at the end of DISK) • Positions assessment as a pathway into education
Applicant-centred approach	• Uses discussion and documents to establish pathways into education • Provides applicants with the space to demonstrate their academic readiness • Offers a supportive environment both in terms of the application process and the supports needed for academic success	• Does not use a discussion guide that establishes prompts to explore academic readiness, which ensures consistency across campuses and counsellors
Transparency	• Maintains a record of discussion	• Is not formalized in guidelines

Assessment	• Uses assessment only in cases where readiness is not explicitly demonstrated in documentation	• Uses CTBS-R assessment which is not used at other colleges (per environmental scan) and has not been reviewed in academic literature for validity and reliability.

3.3.4.3.1 Lack of Standardized Process

When the Counselling Team shifted the process for Mature Student admissions, it based its model on the Readiness Project, with some modifications. Like the Holistic Mature Student Placement model, the DISK approach begins with a discussion and works with applicants to determine their best pathway into a post-secondary program. In contrast to the Readiness Project, however, the DISK process has not been outlined in a guidance document, and processes and documentation are not explicitly defined.

As part of the Readiness Project conceptualization, an overview and guidelines document was developed for the Holistic Mature Student Placement Model. This document outlines the process in detail to ensure consistency in its application. It includes a discussion guide and checklist, specific forms, including the Personal Statement, Experience, and Skills Form and the Supports form, and the Exploration of Academic Readiness. The overview and guidelines document aims to standardize the process across campuses and counsellors and to ensure transparency about the decisions made about mature student admissions. The DISK method lacks such a guideline and standardized forms, which can impact how consistently the process is applied and the transparency about why certain decisions are made. This could lead applicants to question the fairness of the DISK method and risks giving the appearance of gatekeeping (McDonough and Robertson, 2012).

The use of a discussion guide would be a beneficial admission for the DISK method. It includes a list of potential questions that should be asked during the discussion, structures the welcome and process introduction, and outlines how to explore the person applying's goals, program and labour-market knowledge, personal likes and strengths, dislikes and difficulties, their experience in education, in the workforce, and the unpaid workforce, and provides an overview of all steps. This document is not meant to be prescriptive but to act as a foundation that guides the Counsellor's approach. Importantly, the guide ensures that the discussion does not focus solely

on education as this could lead to a deficit-focused discussion. Instead, it fosters a focus on what the person applying brings with them to the application beyond normative standards such as transcripts and evidence of training, which should foster a strength-focused discussion. This approach was designed to align with the principles of strengths-based education, which includes measuring strengths, achievement, and positive outcomes, individualizing processes to adjust to students needs and interests, networking with professionals who can affirm strengths, deliberating drawing on strengths in and out of classroom settings, and the intentional development of strategies to build upon strengths (Lopez and Louis, 2009). Such an approach has been found as a successful means to support individuals who have been systemically marginalized based on their—even presumed—identity and thereby address inequality by fostering a focus on universal strengths, difference-as-strength, and identity-specific strengths (Silverman et al., 2023). This echoes Mohawk College's use of positive language about Mature Students: often their strengths are found in their difference from so-called traditional students. It also aligns with the resiliency paradigm, which focuses on enhancing strengths rather than focuses on identifying risks and fixing problems (Zimmerman, 2013).

The use of standardized forms also helps to ensure consistency across campuses and counsellors. The Personal Statement, Experiences, and Skills form empowers the applicant to ensure that everything they can think of that shows their readiness for college is captured in their file so that a counsellor can decide about their application. It allows for flexibility, as it can be done with the counsellor or on their own, and in multiple formats (recommended paper, digital, and video formats). This moves the document away from the traditional personal statement, which can itself act as a barrier to admission, and allows for the composition of a strengths-focused, applicant-driven document that addresses the criteria that Counsellors use to make their determinations. Applicants can also submit supporting documents, including letters of recommendation that outline things like their paid and volunteer work experience or roles that the person plays in the community. Moreover, applicants are not obligated to complete the form, provided they supply information that allows counsellors to decide regarding their application.

During the stakeholder consultations, representatives from Indigenous governments and organizations raised the importance of building applicants' confidence through the admissions process (Dowden, 2020). As such, this form was designed as a low-stakes document that empowers applicants to think about their strengths and should therefore help develop their self-efficacy and have impacts beyond allowing for a clear determination to be made. Moreover, it allows counsellors to make a clear determination about whether the application demonstrates

the applicant's readiness for the program or if they would need to complete an assessment. The form focuses on the questions that guide the document review:

- Applicant's employment history, community, and volunteer work
- Educational background and additional training

Additionally, the Holistic Mature Student Placement Model includes an Exploration of Academic Readiness Form, which captures the reasons for the recommendation the counsellor has made regarding an application. The form requires that if a recommendation for further assessment is chosen, counsellors must give clear reasons for why the assessment was recommended, as Figure 36 depicts:

Figure 36: Counsellor Recommendation, Exploration of Readiness Form

Recommended for enrolment	Yes ☐ No ☐
Reason(s) for Recommendation Select all that apply	
Has more than 4 years relevant work experience (formal employment or volunteer and community work)	☐
Demonstrated required skills and competencies through paid or unpaid work experience	☐
Has community work, volunteer, or leadership experience that demonstrates skills and competencies necessary for program completion	☐
Completed high-school courses that would prepare applicants for the academic skills needed for the program	☐
Completed additional training, such as certificates from other post-secondary institutes, professional designation, or other formal training that demonstrates academic skills required for program choice	☐
Other: Click or tap here to enter text. Describe: Click or tap here to enter text.	☐
Recommended for enrolment pending outcome of Holistic Mature Student Placement Assessment	Yes ☐ No ☐
Select all sections that must be completed.	
Essential Skills and document use	☐
Reading	☐
Numeracy	☐
Writing	☐

Reason for recommendation
In the field below, describe how the person applying does not demonstrate readiness through relevant work experience (formal employment or volunteer and community work). Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through general work experience (formal employment or volunteer and community work). Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through course completion at the high school level. Description: Click or tap here to enter text.
In the field below, describe how the person applying does not demonstrate readiness through additional training. Description: Click or tap here to enter text.
In the field below, describe other factors that influenced the determination that the person applying should complete the placement assessment. Description: Click or tap here to enter text.

This form allows for transparency in the process as the applicant will be clearly able to see why they were recommended for admission or why they have to complete the assessment, an important component that stakeholders emphasized during the consultation (Dowden, 2020). This would eliminate the experience of just getting a letter—of acceptance or rejection—in the mail, and would, as stakeholders proposed, create a better experience for Indigenous applicants and decrease the number of applicants who might fall through the cracks (Dowden, 2020). It also provides applicants with the agency to supply further documentation if they do not believe the determination was based on a complete reflection of their readiness.

Two key documents have yet to be embedded in the new process: the supports form and the educational pathway. The supports form, which allows applicants to identify and begin the process of contacting supports that they may need, was developed in response to what the Readiness Project heard during the stakeholder consultation about the need for supports during and after the admissions process, that is, the need for wraparound supports (Dowden, 2020). Moreover, a pathway option is part of the Readiness Project to help keep applicants who are not admitted to the college from falling, as stakeholders framed it, through the cracks (Dowden, 2020). While using such a pathways approach requires changing institutional structures to allow, for example, for provision admissions, which can be challenging, it will benefit applicants who may be otherwise deterred from returning to education. Despite such perceived benefits, the pathways process is not formalized in the DISK process. Instead, applicants must request

that this step is completed.[80] This places the onus on the applicant to both know that this is available and to understand how this will help them in their journey to return to education. This means they must see the value in requesting the pathway and also have a relationship with the Counsellor they have been working with so that they are encouraged to request that such a document be developed.

3.3.4.3.2 Standardized Test Use

A major difference between the Holistic Mature Student Placement Model and the DISK method is the use of assessment. For the Holistic Mature Student Placement method, the Readiness Project designed an assessment that focused on measuring applicants' foundational competencies needed for program success. This test was designed specifically for CNA's Industrial Trades programs and aligned to first-semester courses using a curriculum sample, and sections designed to assess foundational competencies in math and English. By contrast, the DISK method uses the Canadian Test of Basic Skills Revised (CTBS-R) by Nelson, which "measures student achievement and growth across a continuum of rigorous updated learning standards from Kindergarten through Grade 12." Rather than being aligned with CNA's curriculum, the CTBS-R is aligned with three cognitive levels. It was selected because it was the only option that could be used virtually during the Covid-19 pandemic and that also allowed for assessors to review the complete data rather than providing only scores.

The CTBS-R is a Canadian revision of the Iowa Test of Basic Skills, which is commonly used across the United States (ITBS; Duma, 1989). On Google Scholar, the keywords of "Canadian Test of Basic Skills" returns 722 hits, with most written before 2000 (59%), which would largely make the research, especially when it comes to historically underserved groups, outdated. The keywords "Canadian Test of Basic Skills Revised" returned no literature and CTBS-R, refined to limit to the test, returned only 47 results. Most scholarly research that mentions the CTBS (unrevised or revised version) does so in reference to using the test as a measure to determine the impact of a particular intervention (e.g., does providing reading tutoring result in higher reading scores, with the CTBS-R used to determine pre- and post-intervention scores). Research does not focus on its validity, accuracy, cultural appropriateness, or suitability for use at the post-secondary level or among vulnerable student populations.[81] For younger students,

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[80] Personal communications with Director of Student Services and Support, March 23, 2023.

[81] Google Scholar, "Canadian Test of Basic Skills" Hits. Last accessed December 4, 2023.

Duffy, Gunther, and Walters (1997) found that for twelve-year-olds, males outnumbered females on the higher end of the CTBS but that this difference was not evident in a second standardized test (the GAUSS), which the authors summarized suggested that the difference was not because of biological difference between sexes but because of the "aspects of the tests themselves that interact with prior socialization differences to produce gender differences in performance" (p. 488). Research by Duma (1989) cautioned that lower test scores on the CTBS could have been influenced by factors like language and motivation, personal characteristics like test-taking attitudes, competitiveness, "as well as countless other intrinsic and extrinsic factors related to the examinee, examiner, and testing situation variables" (p. 96). Nagy's (1986) study provides evidence that the CTBS has too restrictive time limits for students who may work through items more slowly while also cautioning against interpreting results from the test because of the wide range of factors at play. For Indigenous students, concerns were raised about differences in terms of performance on the CTBS in Morrow's (1979) study, which found that non-Indigenous students obtained significantly higher mean achievement test scores than the Indigenous student group.

Given the paucity and outdatedness of the research available, it is difficult to decide about the value of using the CTBS-R for mature student admissions. Research on the American equivalent, the Iowa Test of Basic Skills (ITBS) is more robust (17,000 hits on Google Scholar[82], nearly half since 2000). As Reis and Gelbar (2018) summarize, research on the ITBS indicates that the test is reliable but that its reliability is dependent upon how the results are used and interpreted, as the test is meant to provide a baseline that can be measured over time rather than indicating a test-takers grade level. The ITBS is meant to help improve learning and to reach students who are not being reached rather than to measure and rank students against each other. Using it to measure readiness can be dependent upon subjective definitions of academic achievement and a determination of how that is assessed with the content included on the ITBS as the test only measures academic achievement globally.

The greatest challenge of using the CTBS-R is that its content is not aligned with CNA's programs. For example, the reading section asks students to read different text genres, including poems, fiction, and nonfiction in the science and social sciences, and answer questions to assess comprehension (Reis and Gelbar, 2018). This would be more aligned with testing a person's readiness for an English course rather than CNA communication courses.

[82] Google Scholar, "Iowa Test of Basic Skills". Last accessed December 4, 2023.

Similarly, the math (computations) section, assesses an applicant's ability to complete numerical operations, answer questions pertaining to geometry, measurement, algebra, probability and statistics, and estimation skills and can also include multistep word problems and reading data. This surpasses the outcomes for many of the first-semester math courses offered at CNA. As such, the use of the CTBS-R is problematic in terms of its suitability. Moreover, it does not meet what stakeholders had hoped would be implemented: it is neither culturally nor program-relevant. Taking a stakeholder perspective, CNA has simply replaced one assessment with another.

The environmental scan did not identify any post-secondary institutes that use the CTBS-R for mature student admissions. As the decision to use the CTBS-R was made in the context of the Covid-19 pandemic, a further scan was completed in 2023 to see if any post-secondary institutions had also adopted the test because of its ability to be offered virtually did not find any evidence that other Canadian institutions had made the same determination. The only colleges that changed their assessment method were Seneca College and St. Lawrence College, which moved from the CAAT to ACCUPLACER. As such, the majority of Colleges in Canada use the ACCUPLACER assessment. These tests can also be completed online.[83] As such, if the decision was made to facilitate virtual assessment, ACCUPLACER would have been more in line with directions in mature student admissions in Canada.

Research shows that ACCUPLACER places students correctly in courses with a margin of success between 58 to 84 percent across all ACCUPLACER tests (Mattern and Packman, 2009). More recent research has questioned its ability to successfully place BIPOC students appropriately (Klausman and Lynch, 2022). This echoes what the Readiness Project's literature review (Dowden and Williams, 2019) found for standardized tests more generally, as research demonstrates that test scores are good predictors of post-secondary performance (Kim, 2015; Masserini et al., 2016; Niessen & Meijer, 2017; Schmitt, 2012; Sternberg, 2012; Westrick et al., 2015) but that these instruments might also disadvantage women, minorities, and those from low socio-economic backgrounds (Austin, 2017; Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Helms, 2006; Johnston & Claypool, 2010; Kim, 2017; Koljatic, Silva, & Cofre, 2013; Niessen & Meijer, 2017; Philpott, Nesbitt, Cahill, & Jeffery, 2004; Poortinga, 1995; Sternberg, 2012).

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[83] ACCUPLACER website

A representative from the publisher Nelson expressed concerns about using the CTBS-R to determine academic readiness at the post-secondary level, suggesting that the Canadian Cognitive Abilities Test (CCAT) would be more suitable. The CCAT was designed to measure cognitive abilities from kindergarten through grade 12. Questions ask students to demonstrate their verbal, quantitative, and nonverbal reasoning. Accordingly, it is meant to measure cognitive development that is not reflected in school grades but is expected for their peer group. It has three sections:

1. Verbal analogies, including:
   - Verbal analogies, comprising word pairs that are read together, with one pair missing a word that needs to be inserted. For example, right->left; over->blank in the grade 9/10 assessment.
   - Sentence completion, where a word must be inserted to construct a complete sentence. For example, the fastest runner [blank space] the race (with loses and wins as two options).
   - Verbal classification, where a student must determine how words are related and identify a word from a list that would make sense to be included. For example, apple orange pear [blank word], with fruit, carrot, pea, lemon, and onion as options, with lemon as the correct answer as it is another fruit.
2. Quantitative reasoning, including:
   - Number analogies, where students determine which rule links the numbers displayed. For example, 2->5, 4->9, 3->answer required, with students expected to determine that the pattern here is that each number is doubled and then 1 is added to it so the answer would be 7. Distractors include 4, 5, 6, and 8.
   - Number puzzles, which requires that student answer math questions that are presented in different formats. For example, what number equals 2 + 3 or more complex problems where students are told that a diamond is worth 4 so what is a diamond plus one, with the expected answer being 5.
   - Number series, which requires students examine a row of numbers and then determine what number should follow the series. For example 2, 4, 2, 3, 6, 3, 4, where the second number is double the first (2 x 2 = 4) and the third number is the middle number divided by 2 (4/2=2) so the following pattern should be 4 x 2 = 8 and 8 / 2 = 4. It only asks for 8 in the answer possibility.
3. Non-verbal reasoning, including:

- Figure matrices, which require that students identify how the figures in matrices go together. For example, a question that shows a series of shapes with something added each time, like,✦✶✷, where the next shape should have 7 points.
- Paper folding, which requires that students look at images of folded paper that has been hole punched and the student must determine what the paper will look like unfolded (e.g., how many holes will be visible when unfolded). For example, a paper folded twice with one hole punched will have four holes when unfolded.
- Figure classification, which requires that applicants review a series of figures to determine how they are alike. For example, a series of squares with a diagonal stripe pattern, and the student must pick the square with the same diagonal stripe pattern. Distractors include a rectangle with the same pattern, a square without a pattern, and a square with a diagonal pattern in a different direction.

If used appropriately, cognitive assessment could be used alongside tests of academic knowledge to determine an applicant's readiness. This would align with psychologist Robert J. Sternberg's integration of the theory of successful intelligence into admissions testing. Under his leadership, the Rainbow Project, which focused on measuring students' analytical, creative, and practical skills, led to improved prediction of first-year university academic performance and decreased gaps between ethnic groups that persist in American SAT scores (Sternberg, 2006). His Kaleidoscope Project expanded to include wisdom skills and increased the number of students admitted from historically underserved groups without impacting student success (Sternberg, et al., 2010).

Sternberg (2017) nonetheless cautions that inequities can only be reduced if broader measures are used that draw on performance- and project-based assessments, direct measurement of the knowledge and skills needed for the program, and the use of dynamic assessment that accounts for cultural and social diversity. When holistic admissions are combined with cognitive and educational tests, equity can increase, but **cognitive testing cannot be used as the sole predictor of student performance**.

Like the CTBS-R, the CCAT presents similar issues, with a lack of up-to-date research, and uncertainty about its appropriateness for post-secondary admissions and for Indigenous applicants. It is also not aligned with CNA program requirements. As such, given that there was no significant difference in how mature students performed if they were admitted to CNA based

on a letter of reference rather than a test score, CNA should critically analyze its use of standardized testing for mature student admissions. Using the CTBS-R likely causes similar harms as the CAAT, especially as it requires that applicants complete questions that they are unlikely to be able to answer and there is no need for them to be able to answer for their program. To reduce the unnecessary arduousness of the test and to align assessment with the programs applicants are applying to, this project recommends that CNA develop an in-house assessment for mature students for all CNA programs where mature student admission can be considered, as the following section outlines.

3.3.5 Relevant Assessment

For the Readiness Project, an assessment was developed based on Industrial Trades outcomes, drawing on first-semester coursework that students would have to complete once enrolled in the program. This drew on the concept of a curriculum sample, which the literature review identified as a promising practice for ensuring equity in academic admissions. The assessment was designed to assess core competencies as well as the applicant's ability to acquire new material.

In Phase 1, the following parameters were identified for the development of a new assessment:

1. The assessment must be relevant to the program of choice;
2. The assessment should be culturally relevant for use with Indigenous mature student applicants and should include questions that are familiar to people living in rural communities in Newfoundland and Labrador;
3. Indigenous organizations should be consulted on the development of an any revisions that will be made to the test; and
4. Since the CAAT is not appropriate for *any* mature student, a new admission test must work for every applicant.

Based on these criteria and the research outlined in the previous section, the CTBS-R is also an inappropriate measure of academic readiness at the post-secondary level and should also be replaced.

Given the benefits of the holistic admissions approach, CNA should adopt the holistic mature student placement approach for all students, regardless of program. While this might seem like a complex undertaking, it can be easily achieved by building upon the College's already well-developed Comprehensive Art and Science (CAS) Transition program, which can be used to

satisfy the entry requirements—to varying specifications—for all CNA certificates and diplomas. Using CAS Transition as the curriculum sample for CNA's admissions exams would therefore not only help to alleviate the issues identified with standardized assessments outlined in Section 3.3.5, CAS Transition already has a pathway approach built-in for Indigenous students, making it an ideal way to assess mature students' academic readiness. As CAS transition can be used to meet the prerequisites for programs, academic readiness can be assessed by focusing on the question—which guided this research project—what competencies does a student need to complete first-semester learning outcomes? To assess an applicant's readiness to complete these outcomes, CNA needs to test *foundational knowledge* and not *high-school equivalencies*. Why should applicants be asked to demonstrate an ability to do, for example, Sine, Cosine, or Tangent, if they do not need that knowledge for their program? Using CAS Transition as the basis for mature student admissions programs for all mature student applicants and for all programs allows for authentic assessment that is aligned with program requirements. This should increase applicants' motivation to complete the assessment by increasing their understanding of what the assessment measures (McConlogue, 2020). Moreover, Indigenous students who do not demonstrate readiness for their program, could complete the College bridging program (or some courses) to bridge them into CAS transition and then a certificate or diploma at CNA.

As Table 1 outlines, this would only require the development of 4 different assessments that would work across all programs. The assessments could be drawn from a sample of exams from the required courses for the Trades Bridging and CAS Transition programs, with a specialized focus on programs with different entry requirements.

Curriculum Sample Trades Bridging	Curriculum Sample CAS Transition (General)	Curriculum Sample CAS Transition (Math focus)	Curriculum Sample CAS Transition (Math and Science Focus)
• All Industrial Trades certificates and diplomas **except** Technician Programs (Aircraft Maintenance Engineering Technician, Power Engineering Technology, Welding Engineering Technician, Wind Turbine Technician)	• All Applied Arts certificates and diplomas **except** Sound Recording & Production • All office-management Business certificates and diplomas (Executive Office Management, Legal, Administration, Medical Office Management, Records and Information Management) • Agriculture Technician Co-op • Tourism Programs	• All Business Administration certificates and diplomas (Accounting, Accounting and Financial Management, Business Administration, Human Resources, Marketing, Marketing Management and Analytics, Strategic Human Resource Management • All Information Technology certificates and diplomas • Aircraft Maintenance Engineering Technician and Wind Turbine Technician	• All Industrial Trades Technician programs • All Engineering Technology certificates and diplomas • All Health Science certificates and diplomas **except** Home Care Assistant, Personal Care Attendant, Practical Nursing • All Natural Resources certificates and diplomas **except** Agriculture Technician Co-op

Table 1: Overview of Assessment Design for Mature Students

As the required courses for these programs remain largely the same over time (with the exception of changes following program review), already-developed teaching materials to produce a study guide, and a curriculum sample for studying. To ensure assessment security, questions could be exchanged each year using a database of potential questions. This would improve alignment with the foundational knowledge needed for program success, making the assessment fairer and more equitable by removing the barriers erected by standardized testing that are not aligned with program requirements.

The Task Force on Northern Education (2022) found that there is a need for flexible and stackable educational pathways. In Nunatsiavut, credentialing was proposed as a means to reach students in the North as such courses would require less time away from home and away from work. Moreover, a modular credential approach was positioned as a means to allow for learner self-determination as it provides learners with the choices and flexibility they need, which could make the return to education less daunting. Participants in the Readiness Project stakeholder consultations echoed such sentiments, referencing the inflexibility of CNA's sequential programs and declaring that moving away from such an approach would represent a "paradigm shift" (Dowden, 2020, p. 16).

Using a CAS-Transition-informed assessment could provide such an opportunity to increase flexibility and allow prospective students to complete a credential in key area of competence (e.g., foundational math or science), which could also provide space for provisional admissions where programs allow. For example, an applicant who has to complete the math-focused CAS Transition assessment who does not achieve the 60% required for admission could enrol in the CAS transition math course(s) to upgrade their skills. While completing this course, applicants could be provisionally admitted to their program (provided there is space) and then fully admitted after. Ideally, these programs could be developed for asynchronous delivery or offered in a summer semester prior to the start of the fall semester.

Finally, using CAS Transition as the foundation for the assessment would help establish clear transparency about what level of readiness an applicant should be able to demonstrate in order to be admitted to CNA. The courses identified in the table have specific entry requirements and thresholds that applicants should meet. This would help to mitigate instances where there is a belief that some programs are more demanding than others. As such, demonstrating readiness means having the competencies needed to complete Trades Bridging, CAS Transition

(General), CAS Transition (Math focus), or CAS Transition (Math and Science Focus) and these requirements would be consistently applied regardless of program or campus.

3.3.6 Bridging Programs

In addition to developing a relevant assessment, CNA should address how it provides options to adults who need to upgrade their skills. Aside from industry-specific contract training programs, CNA currently has two programs that are open to applicants who do not have a high school diploma or equivalent but are 19 years of age at the commencement date of the program and have a minimum of Grade 9 completion or equivalent:

College Bridging,[84] which was designed for Indigenous Students and is offered on campus at the Happy Valley-Goose Bay Campus. It provides students with an opportunity to raise their grades or to complete academic courses to meet the entrance requirements for a college program. It includes components that allow students who have been away from training or the workforce for some time to refresh their academic skills and to bridge them into other college programs. The program includes courses that address valuable skills for success, including study skills, time management, and critical thinking. Students can also receive credits for the CAS Transition program in Computer Applications, Career Exploration, Indigenous History of Newfoundland & Labrador, and Indigenous Arts & Culture, which also can help alleviate their courseload as they bridge into CAS Transition, which opens the door to all CNA diplomas and certificates.

Trades Bridging,[85] which is offered on campus at the Happy Valley-Goose Bay and Seal Cove campuses. This program aims to increase participants' employability skills and improve their academic competencies so that they meet the admission requirements for entry into most CNA Industrial Trades programs. It was also designed to refresh mature students' academic

[84] CNA, College Bridging Program

[85] CNA, Trades Bridging program

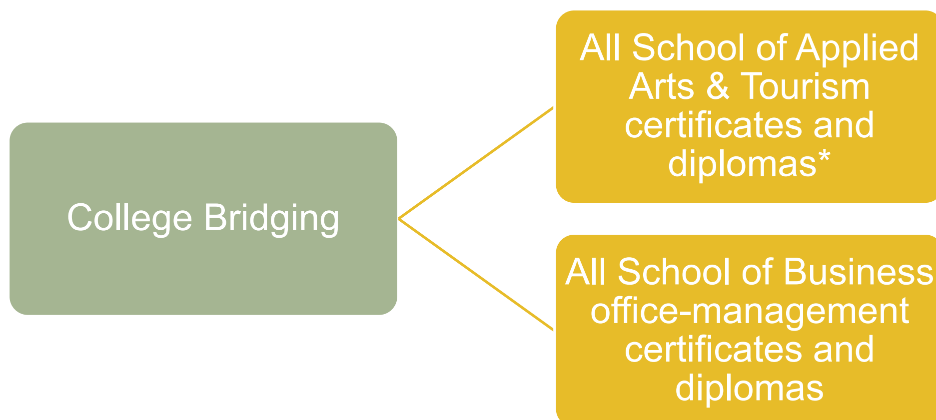
competencies, focusing on establishing a foundational understanding of Industrial Trades, developing fundamental academic skills, and to explore two Industrial Trades. Graduates of Trades Bridging will qualify for admission into most Industrial Trade programs[86] or for admission into the Comprehensive Arts and Science (CAS) Transition program.

During the stakeholder consultations in Phase 1, participants told the Readiness Project about how valuable they felt the former CAS Trades program had been for students and expressed their hopes that the program would be continued and expanded as a regular program (Dowden, 2020). CNA heard this feedback; the new and revised Trades Bridging is being piloted at Happy Valley-Goose Bay Campus in 2023-24. This offers an opportunity to expand this offering across all campuses, with a second offering already planned for the Seal Cove campus in the 2024-25 academic year.

Participants in the stakeholder consultation also expressed that CNA's lack of a high school equivalency program was a serious gap in its program offerings (Dowden, 2020). The College Bridging and Trades Bridging programs address this gap by providing a direct bridge into CAS Transition and other College programs. It may be possible to explore opportunities to position College Bridging's potential to open up access to further training and education, especially for programs that have identified CAS Transition as one of the options to meet the entry requirements. This would open up further opportunities in the Schools of Applied Arts & Tourism and Business for students who would be otherwise excluded from CNA's program offerings. Moreover, College Bridging should be offered for all students across multiple campuses. Working with Indigenous communities, the same curriculum could also address some of the gaps in students' understanding of the Indigenous Peoples of the province (see Indigenous

[86] Exceptions: Aircraft Maintenance Engineering Technician, Power Engineering Technology, Welding Engineering Technician, Welding Engineering Technician (Co-op), and Wind Turbine Technician.

Peoples and Newfoundland and Labrador in this Document), with its courses on Indigenous History and Indigenous Arts & Culture.



*Except Sound Recording and Production; see Table 1 for a complete list of programs.

This would help fulfill a desire that some participants expressed during the stakeholder consultations: That CNA would never have to say "no" to any applicant; instead, when necessary, it could recommend mature student applicants to start with College Bridging as a "feeder program" (Dowden, 2020, p. 15).

Given that CNA has already developed a Trades Bridging program, another route that it could explore would be to create bridging programs or orientation courses for all of CNA's schools. This could help students gain exposure to the careers that people enter after they complete programs in a specific school, while also gaining the competencies that would help them succeed in the program they choose to complete later. Provisional acceptance could also be embedded in such processes. As one participant explained during the consultation: "In an ideal situation, we would have several levels of readiness courses, in multiple subject areas, and students would have the option of building their skills accordingly" (Dowden, 2020, p. 16). This would help students refresh the required academic competencies, acclimate to college life, and identify the supports they may need to succeed in acquiring the credential they need for employment success. Bridging programs not only benefit mature students but all students: Students often graduate from the K-12 system without the literacy, numeracy, social, and other academic skills needed to succeed in post-secondary education, and the Task Force on Northern Education (2022) found that more than 22% of students surveyed had to complete two or more upgrading classes to meet post-secondary entry requirements.

Completing bridging programs, however, adds further financial barriers. As the Task Force on Northern Education (2022) surmised this burden is not only for students but also Indigenous governments who provide the funding so that individuals can complete post-secondary education. As upgrading is often necessary but does not provide the credentials needed to enter the workforce, many Canadian provinces and colleges offer free upgrading opportunities. For example, Okanagan College offers free adult upgrading[87], a returning to education seminar[88], and Adult Academic and Career Preparation.[89] Selkirk College's Choices Program is a one-week career and program exploration class that is offered throughout the year for learners aged 19+. This program is free of charge and helps participants develop an action plan. It also offers the SOAR program (Steps to Opportunities for Academics and Readiness) to meet adult students' needs for meaningful learning.[90]

The literature shows that such programs can help to establish the College as a space where students can see themselves as part of a community and help provide them access to career counselling, mentorship, supports (financial, wellbeing, accessibility), etc., before they start their programs (see, for example, Ottmann, 2017). Using the College and Trades Bridging program model offers CNA an opportunity to focus on improving academic self-efficacy and providing individuals with the competencies needed for post-secondary success. This moves beyond the remediation of academic competencies in fields such as math, reading, and writing. Research shows that such programs build student confidence and ensure that students begin programming on more equitable footing (see, for example, Gakavi, 2011).

3.3.7 Removing barriers

Bailey's (2014) study on the racism that Indigenous students face at Canadian universities found that the post-secondary system itself can be an inherent barrier for Indigenous students because of their lack of Indigenous faculty and staff and a failure to acknowledge Indigenous ways of knowing and culture, resulting in a lack of awareness of understanding about

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[87] Okanagan College, Adult Upgrading

[88] Okanagan College, Going back to school in COVID-times: How OC supports mature students in our communities

[89] Education Planer BC

[90] Selkirk College, SOAR (Steps to Opportunities Academics and Readiness

Indigenous people. In 2023, CNA adopted Equity, Diversity, and Inclusion (EDI) in its three-year strategic plan[91] and is on track to implement an EDI Strategic Action Plan in early 2024 to help realize its goals. This action plan includes EDI training based on CNA's Adult Learning and Teaching Innovation Program.[92] Courses from this program, including but not limited to Reconciliation through Education, Culturally Inclusive Teaching, and Gender Inclusion in the Classroom would help to proactively address systemic biases that exist among CNA employees and students, especially in terms of attitudes towards the Indigenous Peoples of Newfoundland and Labrador.

In addition to education programs for CNA's current students and employees, the EDI action plan aims to review data collection, underrepresentation at the College across programs and campuses, and to develop student and employee recruitment processes with the aim of further diversifying CNA's college community as well as ensuring inclusion and equity. Moreover, it aims to use this review of the admissions system to further inform changes that can make CNA more equitable for all prospective students. This will require working with partners such as First Voice in St. John's to implement its Calls for Action in Education, Training, and Employment outlined in its "Our Shared Vision: A Path toward Truth and Reconciliation in St. John's, Newfoundland and Labrador" and the Task Force on Northern Post-Secondary Education's report, "A Shared Responsibility".

Addressing the barriers that Indigenous Students face will require education as well as a readjustment of how things have always been done. As fear of racism has been documented as a major concern for Indigenous students prior to entering post-secondary education (Deonandan, Janoudi, and Uzun, 2019), working with community partners, as the Readiness Project shows, can help CNA create more open and welcoming spaces and understand problems from a community perspective. There are many ways that CNA can implement such a community focus. For example, Saskatchewan Polytechnic created an Indigenous student success strategy that was overseen by a coordinator who collected and analyzed data on Indigenous enrolments and completions and focused on removing barriers to programs with the lowest amount of Indigenous student admissions and success (SIAST, 2009). Students were provided supports, funding, and a post-secondary summer transition program was established

[91] CNA, Strategic Plan, 2023-2026

[92] CNA, Adult Learning and Teaching Innovation Program

at each campus to help better support Indigenous students' transition from out of education into education.

In addition to being accepted to and accepted in the College, Indigenous mature students also face significant other barriers that need to be addressed:

Transportation, specifically the lack of public transportation. Participants in this research described how they sought to find programs close to where they live, even if the campus did not have programs that really interested them so that they could easily get to campus. The lack of public transportation or CNA-provided options (e.g., shuttle buses to campuses from main communities) places students who need such transportation at a disadvantage. Such a barrier can be experienced by students from lower socio-economic backgrounds, students from rural and remote communities, and international students. Buying a car is often not an option—not just financially but also in terms of the issues with stock currently reported on in NL.[93] and lack of credit history to buy one if such an option was available.

Housing, including associated costs and limited availability. Housing has a broad effect on students' ability to access post-secondary opportunities, their postsecondary success, and has been identified as a hidden curriculum in post-secondary education (see, for example, Sotomayor et al., 2022; Broton, 2021). The Readiness Project heard how students find it difficult to find appropriate and affordable housing while accessing post-secondary, and for those that do, situations can be unsafe or overcrowded, thereby negatively affecting their ability to study. The cost of living has increased alongside rent and mortgage costs, which means that many students are barely above the poverty line, even if they receive funding. Recent media reports have underscored how students are looking for other means to afford everyday necessities, including food.[94] If a student has a family, the costs increase substantially but the funding often does not.

Family responsibilities, including for children and parents**.** Indigenous students spoke of how difficult it was to find childcare during class time and how their responsibilities at home could

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[93] Saltwire, "'It's sold before it shows up': Both new and used cars still hot commodities across Atlantic Canada"

[94] CBC, MUN students struggling to afford food are looking for homegrown solutions; Saltwire, 'The donations have dried up': Memorial University food bank in St. John's shrinks food hampers to accommodate demand

make it difficult to find time to study. The Task Force on Northern Post-secondary Education (2022, p. 15) identified “family and cultural responsibilities” as the main reason why students do not complete their studies.

Funding, including timely access to the amount of money needed to complete studies and pay for daily life costs. At the onset of the Readiness Project, a major barrier that was presented for Indigenous students was the lack of alignment between when programs were open for application (February/March each year) and funding deadlines. In response, CNA was able to move its applications to earlier in the year, so that applicants can apply, be admitted, and then apply for funding. In terms of government funding, the Readiness Project heard that students often had to choose between funding to return to school or deferring their studies until such time that funding was available.[95]

Internet access, including its costs and inaccessibility. While online learning can offer underserved people an opportunity to attend college, limited access to reliable internet can eliminate such possibilities (Task Force on Northern Education, 2022).

These challenges are not unique to Indigenous students. These are experienced by all students in various different ways. Navigating the transition back into education is complex, as a mature student referenced repeatedly in an interview:

“Actually, I had I applied for the program, just as a student, I didn't even know there was such thing as a mature student thing. And they came back right away. And they're like, sorry, you don't get in and I was devastated.”

“I sent an email just inquiring why I wasn't accepted. Because the acceptance letter was basically just like, sorry, you didn't get it.”

“I've worked my whole adult life, but I've never been to a post-secondary institution. So, you know, it was like 20 years ago when I went to school, but even just the process of it took me a few days to be like, Okay, do I really want to do this? Should I apply? […] It still took a couple days for me to build up the courage […]. It's very vulnerable.”

[95] Interview with Mature Student, March 23, 2023.

"In September, because my [ride] graduates in a month or so, I won't have transportation because we carpool. […] I won't have that September. So, I have to get my license between now and then or I might have to [switch to online learning […]."

"Originally, I had applied for funding through because I was on unemployment. […] And I had gotten to talk to [someone from the funding office]. And they said, it takes roughly about eight weeks and asked: Are you willing to hold off going to school in September, like I can do your funding, but you'd have to kind of defer a year."

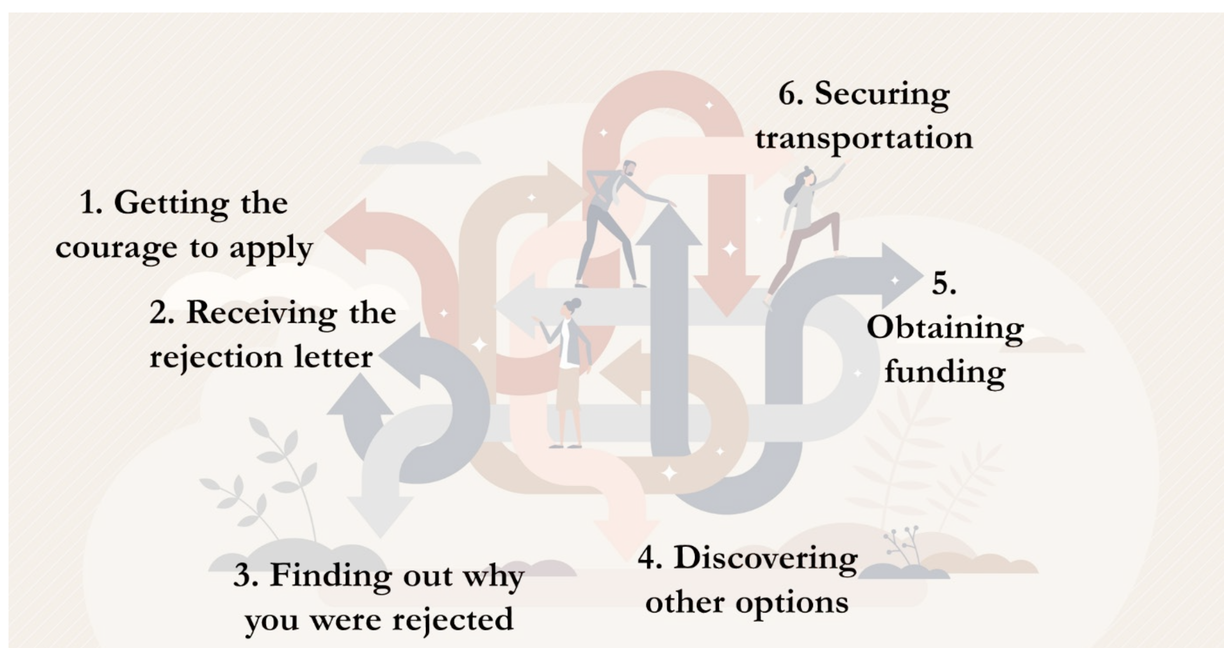

Figure 37: Navigating the transition back into Education

Supports to help alleviate these barriers could be implemented in the bridging programs already offered and in any extended offerings. For example, the University of Manitoba's access programming includes academic support, regular academic advisor consultation, and individual and family counselling, starting with an extensive summer pre-university orientation, and an 'Introduction to University' credit course. Students are offered housing, childcare, university/urban adjustment assistance, communication and personal development workshops, and academic counselling. These programs have increased First Nations enrolment and successes (Assembly of First Nations, 2012).

Additionally, and as the stakeholder consultations identified, there is a need to support students adequately once they are back in education. This can include access to student accessibility

and counselling services but should include additional supports focused on the transition back into education—e.g., finding housing, financing education, dealing with being separated from their community—and the transition out of education—e.g., career counselling, demystifying the job search. CNA Counselling services could develop guidance on how to offer such supports. CNA's post-diploma in Information Management offers a model approach. While the post-diploma program does not have a high number of mature student admissions, it is targeted toward older students who have already completed a post-secondary credential and who may have been in the workplace for some time. As the majority of students are looking to change their careers or to obtain a diploma that makes them eligible for higher-level positions, the program has embedded career supports, with students learning how to write resumes for the field, including guidance on how to amplify their experience and how to network in the industry. Much of this support is provided by the instructor who is closely tied to the provincial information management industry and identified a need among students and developed an intervention to address this need. Students have been able to capitalize on the instructor's support and have used their previous experience and their newly obtained education credential to move up in the career world. Such wraparound supports can make a substantial difference in students' lives.

3.3.8 Alignment

A major challenge experienced during this project was developing an assessment that fairly assessed whether an applicant was ready for an Industrial Trade program and aligning that assessment with specific and measurable learning outcomes, especially in terms of math competencies. Program entry requirements for high school and ABE graduates far exceed the competencies needed for success in courses prescribed by the Provincial Plans of Training. As one Indigenous alumnus told the Readiness Project, they completed a trade program with a grade 11 education level, "so if [CNA] lowered their expectancy to maybe grade 10, grade 11, for the trades itself, they could . . . potentially have very successful people" (Dowden, 2020, p. 16).

For example, AM1101, Math Essentials, is the first math course that Industrial Trades students have to complete in Industrial Trades programs. It includes the following topics:

- Whole number operations
- Order of operations
- Fraction and mixed number operations
- Decimal operations
- Percent/decimal/fraction conversion and comparison
- Percentage operations
- Ratio and proportion operations
- Imperial and metric unit of measurement

Angles, lines and geometric shapes

- Estimation
- Problem solving

By contrast, courses in high school and ABE math cover topics such as:

Program type	Within AM1101 Scope	Beyond AM1101 Scope

ABE	• Measuring Length
	• Measuring Area
	• Getting paid
	• Angles
		• Consumerism and Travel
		• Trigonometry
		  ○ Pythagorean Relationship
		  ○ Slope
		  ○ Right angles
		• Surface Area
		• Drawing and Design
		• Volume and Capacity
		• Interpreting Graphs
		• Banking and Budgeting
		• Probability
		• Linear Relationships
		• Transformations

High school	• Measuring
	• Problem-solving strategies
	• Geometric shapes
	  ○ Triangles
	  ○ Quadrilaterals
	  ○ Regular polygons
		• Probability
		• Reasoning
		• Financial math
		• Statistics (mean, median, mode, percentiles)
		• Linear relations
		• Trigonometry
		  ○ Sine
		  ○ Cosine
		  ○ Tangent
		• Transformations

		• Set Theory • Counting Methods • Probability • Rational Expressions and Equations • Polynomial Functions • Exponential Functions • Logarithmic Functions • Sinusoidal Functions • Financial Mathematics: Borrowing Money

Table 2: Overview of Math Topics in Required Courses, ABE and High School

As Table 2 shows, most topics covered in ABE and high school are beyond the scope of what is needed to successfully complete AM1101. By contrast, CNA Industrial Trades faculty expressed concerns that students were not being adequately prepared for the numeracy demands of trades programs. While AM1101 has a 95% pass rate, many recollected how students struggled and struggled with the later math required in trade-specific math and the math needed to complete major work activities outlined in the National Occupational Analysis or Red Seal Occupational Standard. This raised questions about the degree to which the high school math is preparing people for success in the trades, rather than focusing on preparing them to complete higher level and more complex math at the post-secondary level.

In the past, the entry level for many one-year trades courses was the completion of grade 8/grade 9 when public exams were conducted in grade nine. Considering the analysis of the math outcomes for CNA math courses, it is likely that these prerequisites remain, although the requirements for entry have changed. Indeed, the math outcomes for grade 7 and grade 8 math are far more aligned with the learning outcomes in AM1101:

Grade 7	• Patterns and Relations (factors/divisible by, etc.) • Integers (subtraction/ addition/ multiplication/ division of positive/negative numbers) • Fractions, Decimals and Percents, ratios • Circles and Area • Operations with Fractions • Equations (linear, X + A = B) • Data Analysis (mean, median, mode, probability) • Geometry (measurement)
Grade 8	• Square Roots and the Pythagorean Theorem • Integers • Operations with Fractions • Measuring Prisms and Cylinders • Percent, Ratio, and Rate • Linear Equations and Graphing • Data Analysis and Probability • Geometry

The grade 9 outcomes begin to prepare students for the high-school course requirements.

Grade 9	• Square Roots and Surface Area • Powers and Exponent Laws • Rational Numbers • Linear Relations • Polynomials • Linear Equations and Inequalities • Similarity and Transformations • Circle Geometry • Probability and Statistics

As such, many of CNA trades students are coming into their programs with competencies that exceed what they need to be successful in their programs. However, they can struggle with later math outcomes. It might, therefore, be advantageous to create a Trades Math focus in high-school math that revisits key foundational math concepts and teaches specific math concepts that are relevant for the Trades (e.g., volume, area, trigonometry, etc.). This could help students

not only be successful in completing the courses in the Plan of Training but also their level courses, and in writing the Red Seal exam.

Drawing on the idea of alignment and that high-school competencies go beyond what is needed for success in the trades, there is an opportunity to rethink what Trades students need from their high-school education to support them in successfully completing training and entering the workforce. Research shows that there are models elsewhere that could be considered. For example: The vocational training approach in Quebec allows students to access vocational training after completing the 9th or 10th year of schooling or higher, depending on the admission requirements of the chosen program. All programs lead to an official diploma or certificate so that students can quickly acquire the skills needed to practice a specialized trade and focus on developing real-life skills used in business and industry and the ability to be adapted to the needs of regional economic activity.[96]

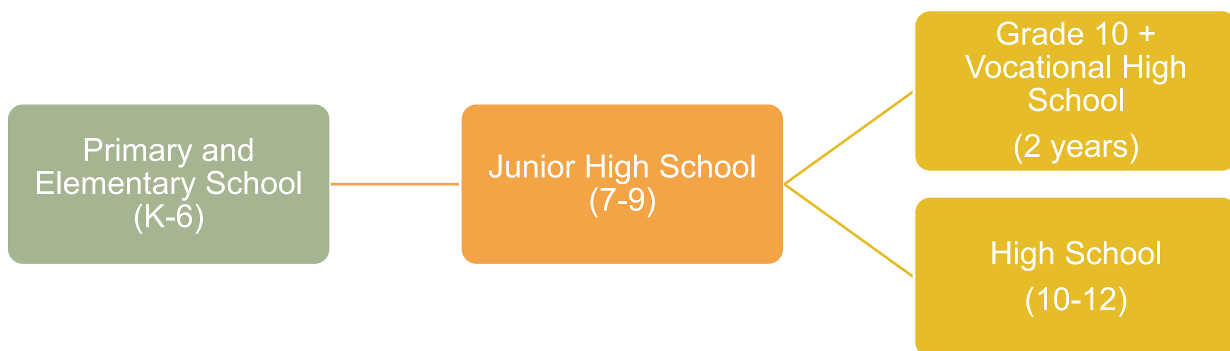

Figure 38: Quebec Model

In Germany, high schools issue specialized qualifications in one study area. Gymnasia (Grades 5-12/13), prepare students for university studies, while Hauptschule, prepares students for

[96] Vocational training in Québec

vocational or university entrance qualification (Grades 5-9/10), followed by apprenticeship if the vocational path is chosen. Realschule allows students to enter vocational training after grade 10. German vocational schools offer formal education alongside practical placement, which prepare pupils for further vocational education or for a job in a profession. They do that based on a dual system in which education and training are combined.[97]

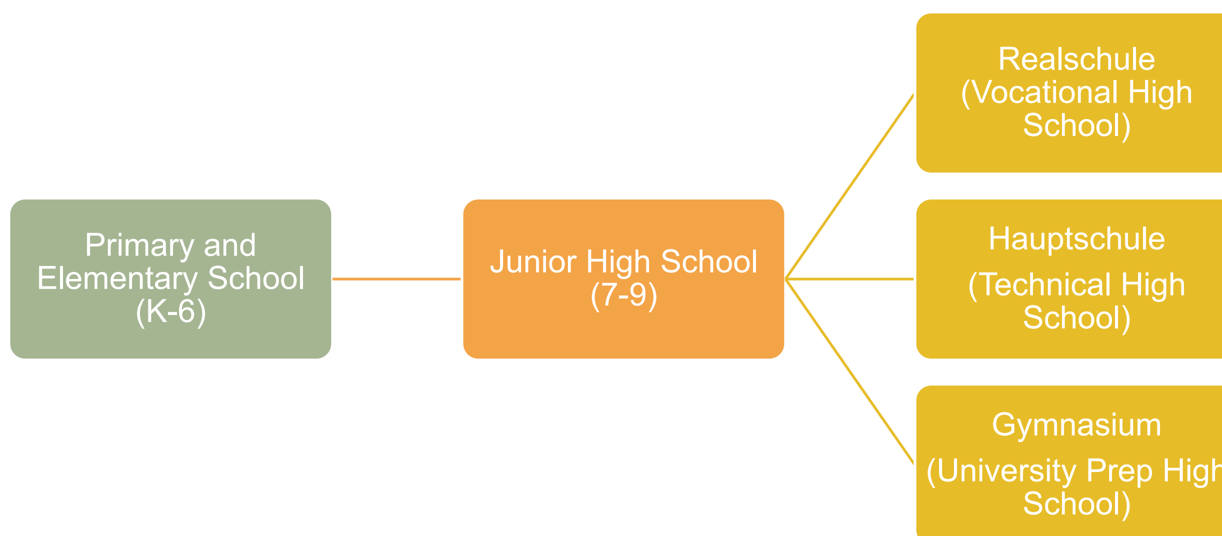

Figure 39: German Model

While there are issues with the streaming approach, especially in terms of how it can recreate inequities in secondary school systems (Kristen and Granato, 2007), further research should be completed on whether there are opportunities to adopt the model and include EDI principles in it to ensure that students are not left behind, improperly streamed, or excluded from higher paying jobs.

Indeed, Brunello and Paola's (2014) literature review on European early school leaving found that despite potential risks of students leaving early because of the anxiety and disappointment

[97] The German Vocational Training System: An Overview

that they ascribe to being wrongly tracked, providing flexible educational programs can also encourage at-risk students to remain in education, especially among those who prefer practical trades over more academic education. As such, streaming students based on their academic interests, when done carefully and data driven, could potentially lessen the number of individuals who leave school early.

3.3.9 Connecting to Community

Throughout this research, participants emphasized the need for CNA to visit communities much more frequently to increase awareness about admissions opportunities, programs, related careers, and entrance requirements. This goes beyond going to visit high schools; CNA should also hold general community information sessions and application workshops. This would also help increase connections between the college and the communities it serves. As one participant in the Stakeholder Consultations explained, "[…] if you've got somebody from CNA that's going out into the community that potential applicants can meet with, once you've made those connections, that will really help the student when they get to campus."

Additionally, CNA should collaborate further with Indigenous communities to determine what their educational needs are and then offer programs that fill these gaps and meet community employment needs. This would help alumni find gainful employment in or near their home communities. This could include the development of CNA satellite campuses in smaller communities that offer community-based programs and provides a bridge for students into larger campuses. Satellite campuses could also provide a space for community members to access computers and assist those interested in applying to CNA. Having a presence in the community will help community members become more familiar with CNA, and hopefully encourage more people to apply to CNA programs. As the recent Task Force on Northern Post-secondary Education (2022, p. 43) frames it: "Learning in place enables people to learn in the ways they want to learn, and learn with their full selves (e.g. with heart, head, and grounded in their identities, cultures, and histories), but it helps instill an obligation to land and community and can be a way of helping connect education with employment opportunities in communities after graduation."

Additionally, CNA should work with Indigenous Communities to establish positions for Indigenous student support, and provide training where needed but hire from the communities, and use its accommodating telework arrangements to facilitate remaining in the community while working for the College. Increasing the number of Indigenous-identifying faculty and staff

could contribute to Indigenizing and decolonizing post-secondary education. As the Task Force on Northern Education (2022, p. 44) framed it, this could mark a step in the direction of creating "educational systems where people see themselves reflected in all aspects, from the program choices to the course content and assessment, to the instructors, to classmates, to student resources."

The Readiness Project shows how impactful embedded work in the community can be. The Indigenous Advisory Committee provided insights into community needs that would not have been possible without such connections. Moreover, it shows the value of hearing and what happens when institutions listen. Because of the close relationship, the Task Force on Northern Education cited the Readiness Project as having the potential to open doors to Indigenous Students. The Readiness Project could only see how those doors could be opened by learning from community leaders, Indigenous students, and key CNA stakeholders with long-standing relationships with Indigenous communities. Such collaborative research should continue as the Readiness Project's recommendations are implemented.

4 Conclusion

The Readiness Project has addressed an issue that existed since the 1990s, whereby mature students were being required to complete unnecessary arduous and outdated testing to return to education. As this report shows, the Readiness Project found ways to make mature student admissions more equitable, while moving away from a test-admit to a more open and holistic mature student admission process that uses testing only in absolutely necessary situations. With the implementation of this new model, CNA has already seen increases in mature student admission rates. Moreover, rates of testing have decreased significantly and there has not been any impact on student success. This makes CNA a trailblazer in the Canadian College landscape as the holistic DISK admissions model is the first such program in the Canadian post-secondary landscape. If the use of standardized test is addressed, CNA could be held up as a role model for how a change in how things have always been done can positively impact tudent experience.

Findings from the preliminary research underscored the benefits of a holistic approach to admissions that considers the whole person, including their literacy and numeracy skills, previous work and learning experiences, life experiences, and motivation level. Many of the challenges Indigenous applicants experience during the application process could be mitigated

by supports, including discussions on program offerings and entrance requirements, expected careers, assistance filling out the application form, and guidance on how to obtain documents required for admission. As standardized tests can be useful but risk marginalization, such tests should only be used when it is necessary to determine whether an applicant has the literacy and numeracy skills necessary to be successful in their program of choice.

Based on these findings, a holistic mature student placement model was developed that used an in-house developed assessment, designed based on a curriculum sample of CNA programs and aligned with the foundational competencies needed for program success. The process begins with a discussion between the applicant and a counsellor from the college. During this discussion, applicants will be guided to narrate their successes and challenges, what they like and dislike, barriers they have faced or need to overcome, explore their motivations for completing post-secondary education and the aspirations they have for their future careers, and outline their strengths, including previous training, work, or volunteer experience as well as cultural- and/or land-based skills. The Counsellor walks Mature Students through document review, including helping applicants gather the formal documents (such as transcripts, certificates, etc.) needed for the application process. During the document review, applicants' education, training, work experience, and community work are examined to determine whether this indicates their readiness for their program of choice. The team will either recommend admissions or assessment. If the applicant is recommended for program admission, the process moves to Step 3. If there are questions about the applicants' readiness, the applicants will be asked to complete a placement assessment or parts thereof. This is noted as a part of step 2 as the assessment will be used to inform placement but is not the sole *determinant*. After the assessment is completed, the admissions team will then review the results together with the applicant and based on the applicants' strengths and weaknesses (self-defined and based on test results), an education pathway and plan will be co-created. Once document review is complete, the counsellor will then meet with the applicant to review their recommendation. If the applicant is about to become a student the counsellor will provide information about available supports and essential information for becoming a student (housing, funding, course registration, etc.). If the applicant has completed the assessment, the Counsellor will review the assessment results, the applicants' strengths, and areas to improve. If the applicant requires upgrading before entry, the Counsellor will create an education plan with the applicant.

At the beginning of the 2021-22 academic year, CNA's Admissions Procedure was modified based on the Readiness Project's findings and the requirement that "applicants must complete

the standardized assessment instrument at a level approved by the College and attain the required scores for the program" (CNA, 2016) was replaced with the requirement that "applicants must engage in CNA's Mature Student Admissions Process". This allowed for the adoption of a more holistic approach to mature student admissions, with the Counselling Team adopting the DISK method in 2021-22. The DISK method was designed based on the Readiness Project's proposed method, with very little difference. The model is a four-step process that amplifies the applicant's voice in the process, and moves away from the old process of assessment-recommendation towards an applicant-centred approach that draws on discussion and documents to establish pathways into education for mature student applicants. It thereby provides applicants the space to demonstrate their academic readiness in a supportive environment. Importantly, the DISK method uses assessment (the CTBS-R) only in cases where readiness is not explicitly demonstrated in documentation. This process therefore represents a more nuanced way of considering applications than simply using the CAAT, a key change influenced by the Readiness Project's recommendations.

4.1 Early Impacts

Although this report is only being released in 2023, over the course of its 4 years of existence, the Readiness Project has had several key impacts on CNA, as this section outlines.

4.1.1 Changes to admissions policy and processes

Already in 2021, CNA modified its admissions policy. This allowed for a movement away from testing and the Counselling team was able to adopt an approach to assessing Mature Students' academic readiness that is largely aligned with the best practices outlined in the Readiness Project.

4.1.2 Improved Mature Student Admissions

Since the implementation of the new model, mature student applicants in all programs are more likely to be admitted and less likely to be tested. Prior to the change in the model only 1 in 3 mature student applicants MS applicants were being admitted to CNA. As the process changed in May 2021 (late in the application period), we could already see an impact—more than 50% of applicants were admitted to a program. By 2022-23, the impact was clear: 3 out of every 4 applicants are successful in their application. Mature Students continue to successfully complete their studies at the same rate as prior to the change.

4.1.3 Changes to bridging programs

For the 2023-24 academic year, CNA introduced two revised bridging programs: College Bridging for Indigenous Students and Trades Bridging for students planning to complete Industrial Trades Programs. Entry in these programs does not require a high school diploma. Instead, people with a grade nine education and above can be admitted to these programs, without having to enter CNA through the mature student process. When the Readiness Project began in 2019, CNA did not offer any programs for students without a high school diploma. As such, this represents a significant shift in how CNA has approached admissions.

4.1.4 Earlier application deadlines

The collaborative research between Indigenous communities and CNA shed light on the fact that CNA's standard application practice. Prior to 2021, CNA opened applications in February/March each year. At the same time, some students need to apply for funding before they could even submit their application. In response to this information, CNA began accepting applications in the fall, which aligns more closely with funding application deadlines. Additionally, students would have more time to apply for government funding, which should mitigate the risk that students would need to defer their program start while waiting for funding.

4.1.5 The Value of Relationships

The Readiness Project shows that collaborative research is impactful. Consulting with stakeholders allows for insights into what stakeholder communities need and is a beneficial way to engage stakeholders in policy and program development. Although it takes time and commitment, collaborative research improves the reliability of findings and the suitability of recommendations. No researcher knows a community better than the community members.

4.1.6 Directions for Future Research

This research has shown the benefit of taking a critical lens to post-secondary policy and program development. It has shown that decreasing barriers opens up further doors and does not impact program success. Given the limitations of the pilot, further research should track the impact of changes to mature student admissions. Moreover, research should be completed on the feasibility of implementing an in-house assessment of mature student readiness as well as piloting further bridging programs. This is especially important as the original task was to create a culturally appropriate pathway for Indigenous adults and any assessment that is created

should be reviewed to ensure its culturally appropriateness. This report found that Indigenous students are likely underrepresented at CNA, especially at PPD campus and in Industrial Trades Programs. Further research is also needed to determine why such gaps exist and to develop strategies to appropriately address them in collaboration with Indigenous stakeholders.

Additionally, opportunities should be explored about how to bring the College into rural, remote, and northern communities, to allow for learning in place. The Task Force on Northern Post-Secondary Education (2022) underscores the value that stakeholders in Labrador place on access to local opportunities for post-secondary education. Learning in place enables “people to learn in the ways they want to learn and learn with their full selves” (p. 43). This can help learners make the connection between their education and their community and envision how education will lead to employment at home after graduation. Participants also expressed a desire for modular, incremental, and flexible education to help learners form their own pathways to post-secondary qualification. Further research should be completed to determine how CNA can support the transition into learning in place and bring CNA into the community.

4.2 Recommendations

The recommendations in this section are a summary of the findings outlined above and how CNA can further contribute to the development of an admissions process and assessment model based on stakeholder feedback, best practices in academic research, and what works to establish a reliable, valid, culturally sensitive and appropriate pathway for mature students to return to education. These recommendations are broad and further information and directions for the recommendations can be found in relevant report sections, which are linked in each of the recommendations.

In total, the Readiness Project makes 10 recommendations, 7 for CNA and 3 for the Government of Newfoundland and Labrador.

4.2.1 Recommendations for CNA

1

Remove remaining temporal and program barriers from the Mature Student Admissions Policy

4.3.4 Mature Student Admission Processes

2

Formalize the Holistic Mature Student Placement Process

4.3.5 The DISK Method

3

Move away from Standardized Testing

4.3.5 The DISK Method

4

Establish more bridging options for all programs.

4.3.7 Bridging Programs

5

Increase Connections to Indigenous Communities

4.3.10 Connecting to the Community

6

Develop culturally appropriate data collection processes in collaboration with Indigenous Stakeholders

4.3.3 Data Collection

7

Establish a communications plan for Mature Students to inform people out of education about their options to return.

4.3.4 Mature Student Admission Processes

4.2.2 Recommendations for Government

1

Explore opportunities to fund bridging programs

4.3.7 Bridging Programs

2

Review the feasibility of aligning Industrial Trades Program Foundational Competencies and High-School Requirements

4.3.9 Alignment

3

Continue to fund impactful research that informs systemic changes to increase Equity, Diversity, and Inclusion in Newfoundland and Labrador.

5.1 Early Impacts

5 Bibliography

Aylward, C. and Joe, C. M. S. (2018). Beothuk and Mi’kmaq: An Interview with Chief Mi’sel Joe. Tracing Ochre: Changing Perspectives on the Beothuk, 117-132.

Andersen, C. (2013). Underdeveloped identities: The misrecognition of Aboriginality in the Canadian census. *Economy and society*, *42*(4), 626-650.

Aronson, P. (2008). Breaking barriers or locked out? Class-based perceptions and experiences of postsecondary education. In J. T. Mortimer (Ed.), Social class and transitions to adulthood. New Directions for Child and Adolescent Development, 119, 41–54.

Asch, M. (2002). From Terra Nullius to Affirmation: Reconciling Aboriginal Rights with the Canadian Constitution1. *Canadian Journal of Law and Society/La Revue Canadienne Droit et Société*, *17*(2), 23-39.

Asher, J. J., & Sciarrino, J. A. (1974). Realistic work sample tests: A review. *Personnel Psychology*. Brascoupé, S., & Waters, C. (2009). Cultural safety: Exploring the applicability of the concept of cultural safety to Aboriginal health and community wellness. Journal of Aboriginal Health, 5(2), 6-41.

Assembly of First Nations. (2012). Assembly of First Nations education, jurisdiction, and governance: Supporting First Nations learners transitioning to post-secondary. Ottawa: Assembly of First Nations. Retrieved from http://www.afn.ca/uploads/files/education2/postsecondarytransitionsreport.pdf

Association of Canadian Community Colleges. (2010, November). *Colleges Serving Aboriginal Learners and Communities, 2010 Environmental Scan: Trends, Programs, Services, Partnerships, Challenges and Lessons Learned.* Ottawa, ON: Author.

Bailey, K. A. (2016). Racism within the Canadian university: Indigenous students’ experiences. *Ethnic and Racial studies*, *39*(7), 1261-1279.

Belley, P., Frenette, M., & Lochner, L. (2014). Post-secondary attendance by parental income in the US and Canada: Do financial aid policies explain the differences?. *Canadian Journal of Economics/Revue canadienne d'économique*, *47*(2), 664-696.

Belshaw, J. D. (2015). *Canadian History: Post-Confederation*. BCcampus, BC Open Textbook Project.

Boeck, C. A. (2022). Trust issues: The role of trusting relationships on students' knowledge about and transition to community college. *Community College Journal of Research and Practice*, *46*(5), 335-351.

Broton, K. (2021). Poverty in American higher education: The relationship between housing insecurity and academic attainment. *Journal of Postsecondary Student Success*, *1*(2), 18-45.

Brunello, G., & Paola, M. D. (2014). The costs of early school leaving in Europe. *IZA Journal of Labor Policy*, *3*, 1-31.

Carr, S. M. (2020). Evidence for the persistence of ancient Beothuk and Maritime Archaic mitochondrial DNA genome lineages among modern Native American peoples. *Genome*, *63*(7), 349-355.

Chapman, A. (2015): Using the assessment process to overcome Imposter Syndrome in mature students. *Journal of Further and Higher Education*, Vol. 41, No. 2, pp. 112-119.

Chow, K., & Healey, M. (2008). Place attachment and place identity: First-year undergraduates making the transition from home to university. *Journal of Environmental psychology*, *28*(4), 362-372.

Chung Sea Law, D. (2010). Quality assurance in post-secondary education: Some common approaches. *Quality Assurance in Education*, *18*(1), 64-77.

Conley, D. T. (2008): Rethinking college readiness. *New Directions for Higher Education*, No. 144, pp. 3–13.

Covarrubias, R., Gallimore, R., & Okagaki, L. (2018). "I know that I should be here": Lessons learned from the first-year performance of borderline university applicants. *Journal of College Student Retention: Research, Theory & Practice*, *20*(1), 92-115.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Creswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing a mixed methods study in primary care. *The Annals of Family Medicine*, *2*(1), 7-12.

Cummings, J. N., & Kiesler, S. (2005). Collaborative research across disciplinary and organizational boundaries. *Social studies of science*, *35*(5), 703-722.

Dalal, D. K., Randall, J. G., Cheung, H. K., Gorman, B. C., Roch, S. G., & Williams, K. J. (2022). Is there bias in alternatives to standardized tests? An investigation into letters of recommendation. *International Journal of Testing*, *22*(1), 21-42.

Deming, W. E. (2018). *Out of the Crisis, reissue*. MIT press.

Deonandan, R., Janoudi, G., & Uzun, M. (2019). Closing the aboriginal education gap: A systematic review of Indigenous educational experiences in Canada.

Dillon, L. (2015). Historical Demography of Canada, 1608–1921. In *Canadian History: Post-Confederation*. Belshaw, J. D. ed. BCcampus, BC Open Textbook Project.

Dingsøyr, T., Nerur, S., Balijepally, V., & Moe, N. B. (2012). A decade of agile methodologies: Towards explaining agile software development. *Journal of systems and software*, *85*(6), 1213-1221.

Dowden, A. (2020): What we Heard from Indigenous Partners and CNA Stakeholders: Recommendations for CNA's Mature Student Admission Pathway and Other Supports. Unpublished report.

Dowden, A. and Williams, F. (2019): Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature. Unpublished report.

Dowden, A. and Williams, F. (2020): Alternate Admission Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges. Unpublished report.

Duffy, J., Gunther, G., & Walters, L. (1997). Gender and mathematical problem solving. *Sex roles*, *37*, 477-494.

Dupuis, J. and Abrams, E. (2017). Student science achievement and the integration of Indigenous knowledge on standardized tests. *Cultural Students of Science Education,* 12, 581 – 604.

Efimoff, I. (2022). A thematic analysis of Indigenous students' experiences with Indigenization at a Canadian post-secondary institution: Paradoxes, potential, and moving forward together. *The International Indigenous Policy Journal*, *13*(1), 1-29.

Elias, N. (1969). *The civilizing process: Sociogenetic and psychogenetic investigations*.

First Voice. Our Shared Vision: A Path toward Truth and Reconciliation in St. John's, Newfoundland and Labrador, 2023-33; an Urban Indigenous Community Action Plan (February 2023). ISBN 978-1-7387971-1-0. https://firstvoicenl.ca/publications/our-shared-vision-a-path-toward-truth-and-reconciliation-in-st-johns-newfoundland-and-labrador-2023-33/

Floreak, M. J. (2020). Designing for The Real World: Using Research to Turn a Target Audience" into Real People. In *Reading Empirical Research Studies* (pp. 158-174). Routledge.

Fowler, A.C., Ewens, B., Vafeas, C., Delves, L. Hayward, C., Nannup, N. and Baum, G. (2018). Closing the gap: a whole of school approach to Aboriginal and Torres Strait Islander inclusivity in higher education. *Nurse Education in Practice*, 30, 86-90.

Gakavi, T. (2011). The transition to post-secondary education for Canadian Aboriginal and nonAboriginal students: A focus on adjustment, fit and anticipated persistence. Doctoral dissertation, University of Saskatchewan. Retrieved from https://ecommons.usask.ca/bitstream/handle/10388/etd-07132011-211458/Gokavi_Tara-PhDThesis_June_2011.pdf

Gallagher-Mackay, K. (2017) Data Infrastructure for Studying Equity of Access to Postsecondary Education in Ontario. Toronto: Higher Education Quality Council of Ontario.

Godlewska, A., Rose, J., Schaefli, L., Freake, S., & Massey, J. (2017a). First Nations, Métis and Inuit presence in the Newfoundland and Labrador curriculum. *Race Ethnicity and Education*, *20*(4), 446-462.

Godlewska, A., Schaefli, L., Massey, J., Freake, S., & Rose, J. (2017b). Awareness of Aboriginal peoples in Newfoundland and Labrador: Memorial's first-year students (2013) speak. *The Canadian Geographer/Le Géographe canadien*, *61*(4), 595-609.

Hanrahan, M. (2003). The lasting breach: The omission of Aboriginal people from the Terms of Union between Newfoundland and Canada and its ongoing impacts. *Royal Commission on Renewing and Strengthening Our Place in Canada. St. John's: Government of Newfoundland and Labrador*.

Hanrahan, M. (2012). A Story of Invisibility: The Reaction of the Print Media to the Formation of Qalipu Mi'kmaq First Nation. *Native Studies review*, *21*(1).

Heath, N. (2011). An Overview of Admissions Practices at BC Post-Secondary Institutions. *British Columbia Council on Admissions and Transfer*.

Honwana, A. (2014). "'Waithood': Youth transitions and social change." In Foeken, D., Dietz, T., de Haan, L., & Johnson, L. (eds). *Development and Equity: an interdisciplinary exploration by ten scholars from Africa, Asia and Latin America* (pp. 28-40). Brill.

Hossain, D., Gorman, D., Williams-Mozely, J., & Garvey, D. (2008). Bridging the gap: Identifying needs and aspirations of Indigenous students to facilitate their entry into university. *The Australian Journal of Indigenous Education*, *37*(1), 9-17.

Howard, Christy M.; Moret, Lanette; Faulconer, Johna; Cannon, Tanya; and Tomlin, Amanda (2018) "Preparing for College Success: Exploring Undergraduate Students' Perceptions of the Benefits of a College Reading and Study Skills Course through Action Research," Networks: An Online Journal for Teacher Research: Vol. 20: Iss. 1. https://doi.org/10.4148/2470-6353.1258

Hyland-Russell, T., & Groen, J. (2011). Marginalized non-traditional adult learners: Beyond economics. *Canadian Journal for the Study of Adult Education*, *24*(1), 61-79.

Jagadish, H., Stoyanovich, J., & Howe, B. (2022). The Many Facets of Data Equity. *ACM Journal of Data and Information Quality*, *14*(4), 1-21.

Jewell, E. and Mosby, I. (2020). Calls to Action Accountability.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, *33*(7), 14-26.

Kirkness, V. J., & Barnhardt, R. (2001). First Nations and higher education: The four r's—respect, relevance, reciprocity, responsibility. In R. Hayoe & J. Pan (Eds.), Knowledge across cultures: A contribution to dialogue among civilizations. Hong Kong: The University of Hong Kong, Comparative Education Research Centre, pp. 1–17.

Klausman, J., & Lynch, S. (2022). From ACCUPLACER to Informed Self-Placement at Whatcom Community College: Equitable Placement as an Evolving Practice. *Writing placement in two-year colleges: The pursuit of equity in postsecondary education. The WAC Clearinghouse*, 59-83.

Kristen, C., & Granato, N. (2007). The educational attainment of the second generation in Germany: Social origins and ethnic inequality. *Ethnicities*, *7*(3), 343-366.

Kuncel, N. R., Kochevar, R. J., & Ones, D. S. (2014). A meta-analysis of letters of recommendation in college and graduate admissions: Reasons for hope. *International Journal of Selection and Assessment*, *22*(1), 101-107.

Lawson, J., & Silver, H. (2013). *A social history of education in England*. Routledge.

Leu, D. J., Kinzer, C. K., Coiro, J., Castek, J., & Henry, L. A. (2018). New literacies: A dual-level theory of the changing nature of literacy, instruction, and assessment. In *Theoretical models and processes of literacy* (pp. 319-346). Routledge.

Lockyer, E. (2020). Who Gets In? Examining Ethics and Equity in Post-Secondary Admissions. In Brown, B et al. (Eds.) *Ethical Use of Technology in Digital Learning Environments: Graduate Student Perspectives*.

Lopez S. and Louis, M. (2009). The Principles of Strengths-Based Education. *Journal of College and Character*, 10:4.

Mackean, T., Fisher, M., Friel, S., Baum, F. (2020): A framework to assess cultural safety in Australian public policy, *Health Promotion International*, Volume 35, Issue 2, pp. 340–351.

MacKenzie, D. (2010). The Indian Act and the Aboriginal peoples of Newfoundland at the time of Confederation. *Newfoundland Studies*, *25*(2), 161-181.

Malcom-Piqueux, L., & Bensimon, E. M. (2017). Taking equity-minded action to close equity gaps. *Peer Review*, *19*(2), 5-9.

Malone, G. (2012). *Don't tell the Newfoundlanders: the true story of Newfoundland's confederation with Canada*. Vintage Canada.

Marshall, I. (1996). *History and Ethnography of the Beothuk.* Montreal: McGill-Queen's University Press.

Maruyama, G. (2012). Assessing college readiness: Should we be satisfied with ACT or other threshold scores?. *Educational Researcher*, *41*(7), 252-261.

Mattern, K. D., & Packman, S. (2009). Predictive Validity of ACCUPLACER® Scores for Course Placement: A Meta-Analysis. Research Report No. 2009-2. *College Board*.

McConlogue, T. (2020). *Assessment and feedback in higher education: A guide for teachers*. UCL Press.

McDonough, P., & Robertson, L. (2012). Gatekeepers or Marketers: Reclaiming the Educational Role of Chief Admission Officers. *Journal of College Admission*, *214*, 92-100.

Miller, A. L. (2011). Investigating Social Desirability Bias in Student Self-Report Surveys. *Association for Institutional Research (NJ1)*.

Morest, V. S. (2009). Accountability, accreditation, and continuous improvement: Building a culture of evidence. *New Directions for Institutional Research*, *2009*(143), 17-27.

Murphy, J. “Reconciliation in Postcolonial Canada”. https://www.unique-online.de/reconciliation-in-postcolonial-canada/11269/

Nagy, G. P. (1986). Validity of CTBS from an analysis of speededness and item response patterns. *Canadian Journal of Education/Revue canadienne de l'education*, 536-556.

Niessen, A. S. M., & Meijer, R. R. (2017). On the use of broadened admission criteria in higher education. *Perspectives on Psychological Science*, *12*(3), 436-448.

Niessen, A. S. M., Meijer, R. R., & Tendeiro, J. N. (2016). Predicting performance in higher education using proximal predictors. *PloS one*, *11*(4), e0153663.

Niessen, A. S. M., Meijer, R. R., & Tendeiro, J. N. (2018). Admission testing for higher education: A multi-cohort study on the validity of high-fidelity curriculum-sampling tests. *PloS one*, *13*(6), e0198746.

Niessen, A. S. M., Meijer, R. R., & Tendeiro, J. N. (2019). Gender-Based Differential Prediction by Curriculum Samples for College Admissions. *Educational Measurement: Issues and Practice*, *38*(3), 33-45.

Oldford, S. and Ungerleider, C. (2010). Aboriginal Self-Identification and Student Data in Ontario's Postsecondary System: Challenges and Opportunities.Toronto: Higher Education Quality Council of Ontario.

Oreopoulos, P. (2007). Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling. *Journal of public Economics*, *91*(11-12), 2213-2229.

Osterhammel, J. (2014). *The Transformation of the World: A Global History of the Nineteenth Century: A Global History of the Nineteenth Century*. Princeton University Press.

Ottmann, J. (2017). Canada's indigenous peoples' access to post-secondary education: The spirit of the 'new buffalo'. *Indigenous pathways, transitions and participation in Higher Education: From policy to practice*, 95-117.

Ottmann, J. (2017). Canada's indigenous peoples' access to post-secondary education: The spirit of the 'new buffalo'. *Indigenous pathways, transitions and participation in Higher Education: From policy to practice*, 95-117.

Palmer, M., O'Kane, P., & Owens, M. (2009). Betwixt spaces: Student accounts of turning point experiences in the first-year transition. *Studies in Higher education*, *34*(1), 37-54.

Papps, E., & Ramsden, I. (1996). Cultural safety in nursing: The New Zealand experience. *International journal for quality in health care*, *8*(5), 491-497.

Pechenkina, E., and Anderson, I. (2011). Consultation paper on Indigenous Australian higher education: trends, initiatives and policy implications. *Department of Education, Employment, and Workplace Relations, Australian Government.* Retrieved from https://docs.education.gov.au/system/files/doc/other/pechenkina_and_anderson_2011.pdf

Pokorny, H., Holley, D., & Kane, S. (2017). Commuting, transitions and belonging: the experiences of students living at home in their first year at university. *Higher education*, *74*, 543-558.

Polack, F. (Ed.). (2018). *Tracing ochre: Changing perspectives on the Beothuk*. University of Toronto Press.

Quinless, J. M. (2022). *Decolonizing data: unsettling conversations about social research methods*. University of Toronto Press.

Ramsden, I. (1990). Moving on: A graduation address. *Nursing Praxis in New Zealand, 5*(3), 34-36. https://doi.org/10.36951/NgPxNZ.1990.009

Readiness Project (2022): Rationale for Holistic Mature Student Placement Model. Unpublished report.

Reis, S., & Gelbar, N. (2018). Iowa tests of basic skills. In *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation* (Vol. 4, pp. 878-880). SAGE Publications, Inc., https://doi.org/10.4135/9781506326139

Restoule, J. P., Mashford-Pringle, A., Chacaby, M., Smillie, C., Brunette, C., & Russel, G. (2013). Supporting successful transitions to post-secondary education for Indigenous students: Lessons from an institutional ethnography in Ontario, Canada. *The International Indigenous Policy Journal*, *4*(4).

Rochecouste, J. Oliver, R., Bennell, D. (2014): Is there Cultural Safety in Australian Universities? International Journal of Higher Education Vol. 3, No. 2, pp. 153-166.

Samson, C. (2003). *A way of life that does not exist: Canada and the extinguishment of the Innu* (No. 67). Verso.

Schmitt, N. (2012): Development of Rationale and Measures of Noncognitive College Student Potential. *Educational Psychologist*, Vol. 47, No. 1, pp. 18-29.

Sedlacek, W. E. (2004): *Beyond the big test: Noncognitive assessment in higher education.* San Francisco, CA: Jossey-Bass.

Sedlacek, W. E. (2011): Using non-cognitive variables in assessing readiness for higher education. *Readings on Equal Education,* 25, 187-205.

Shultz M. and Zedeck, S. (2012): Admission to Law School: New Measures. *Educational Psychologist*, Vol. 47, No. 1, pp. 51-65.

Sider, G. (2014). *Skin for skin: Death and life for Inuit and Innu*. Duke University Press.

Silverman, D. M., Rosario, R. J., Hernandez, I. A., & Destin, M. (2023). The ongoing development of strength-based approaches to people who hold systemically marginalized identities. *Personality and Social Psychology Review*, 10888683221145243.

Snyder, L., Caccamise, D., & Wise, B. (2005). The assessment of reading comprehension: Considerations and cautions. *Topics in Language Disorders*, *25*(1), 33-50.

Sotomayor, L., Tarhan, D., Vieta, M., McCartney, S., & Mas, A. (2022). When students are house-poor: Urban universities, student marginality, and the hidden curriculum of student housing. *Cities*, *124*, 103572.

Statistics Canada. (2018, July 18). *Aboriginal Population Profile, 2016 Census*. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/abpopprof/index.cfm?Lang=E

Steffler, J. (2016). The indigenous data landscape in Canada: An overview. *aboriginal policy studies*, *5*(2).

Sternberg, R. J. (2009). The Rainbow and Kaleidoscope Projects: A new psychological approach to undergraduate admissions. *European Psychologist*, *14*(4), 279-287.

Sternberg, R. J. (2006). The Rainbow Project: Enhancing the SAT through assessments of analytical, practical, and creative skills. *Intelligence*, *34*(4), 321-350.

Sternberg, R. J., Bonney, C. R., Gabora, L., Jarvin, L., Karelitz, T. M., & Coffin, L. (2010). Broadening the spectrum of undergraduate admissions. *College and University*, *86*(1), 2.

Swank, J. M., & Smith-Adcock, S. (2014). Gatekeeping during admissions: A survey of counselor education programs. *Counselor Education and Supervision*, *53*(1), 47-61.

Tanner, A. (1998). The aboriginal peoples of Newfoundland and Labrador and confederation. *Newfoundland Studies*, *14*(2), 238-252.

Task Force on Northern Post-Secondary Education, A Shared Responsibility: Northern Voices, Northern Solutions. 2022. https://northernpse.ca/sites/default/files/2022-05/16513%20CIRNAC%20Northern%20PS%20Edu_AR_EN_2022May20.pdf

Tessaro, D., Restoule, J. P., Gaviria, P., Flessa, J., Lindeman, C., & Scully-Stewart, C. (2018). The five R's for indigenizing online learning: A case study of the First Nations schools' principal's course.

Trumbull, E. and Nelson-Barber, S. (2019). The ongoing quest for culturally-responsive assessment for Indigenous students in the U.S. *Frontiers in Education*, 4(40), 1-11.

Truth and Reconciliation Commission of Canada. (2015). *Truth and Reconciliation Commission of Canada: Calls to Action.* Winnipeg, MB: author.

Truth, & Reconciliation Commission of Canada. (2015). *Canada's Residential Schools: The Final Report of the Truth and Reconciliation Commission of Canada* (Vol. 1). McGill-Queen's Press-MQUP.

Vaccaro, A. (2012). An Analysis of Access Barriers to Post-Secondary Education. *College Quarterly*, *15*(4), n4.

VanDenBerg, J. E. and Grealish, E. (1996). Individualized services and supports through the wraparound process: Philosophy and procedures. *Journal of Child and Family Studies*, *5*, 7-21.

Wolfe, P. (2006). Settler Colonialism and the Elimination of the Native. *Journal of genocide research*, *8*(4), 387-409.

Wollack, J. A., & Fremer, J. J. (Eds.). (2013). *Handbook of test security*. Routledge.

Wyatt, J., Wiley, A., Camara, W., and Proestler (2011): The Development of an Index of Academic Rigor for College Readiness. *College Board Research & Development*, pp. 1-2.

Yeung, S. (2016): Conceptualizing Cultural Safety: Definitions and Applications of Safety in Health Care for Indigenous Mothers in Canada. Journal for Social Thought 1(1), pp. 1-13.

Yu, R., Haddock, A. and Womack, T. (2020). Integrating supports for students with wraparound. *Contemporary School Psychology*, 1-9.

Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Health Education & Behavior*, *40*(4), 381-383.

6 Appendices

6.1 Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature

Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature

College of the North Atlantic
December 2019

Prepared by Amy Dowden and Frank Williams

Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples is a research project led by College of the North Atlantic and funded by the NL Workforce Innovation Centre (NLWIC).

The NLWIC, administered by the College of the North Atlantic (CNA), has a provincial mandate to provide a co-ordinated, central point of access to engage all labour market stakeholders about challenges, opportunities and best practices in workforce development.

The Centre's goal is to promote and support the research, testing and sharing of **ideas** and models of **innovation** in workforce development that will positively **impact** employability, employment, and entrepreneurship within the province's labour force and particularly under-represented groups. Funding for NLWIC is provided by the Department of Advanced Education, Skills and Labour (AESL) under the Canada-Newfoundland and Labrador Labour Market Development Agreement.

Land Acknowledgement

The Readiness Project would like to acknowledge this project is being carried out in the province of Newfoundland and Labrador, within the traditional territories of the Innu, Inuit, Mi'kmaq, and Beothuk peoples. We offer our respects to these Indigenous cultures and recognize their continued connection to the land.

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Introduction

In 2016, as a part of a larger project examining economic development in Indigenous Communities, College of the North Atlantic's Happy Valley Goose Bay Campus in cooperation with the Atlantic Aboriginal Research Program (AAEDIRP), held a two-day workshop entitled "Overcoming Challenges in Aboriginal Access to Post-Secondary Education and Employment" (AAEDIRP, 2016). Present were Elders and other representatives from Innu Nation, Miawpukek First Nation, NunatuKavut, Nunatsiavut, and Tobique First Nation, students, college representatives, industry representatives, campus leadership, and CNA personnel working with Indigenous students. One of the recommendations emerging from a talking circle with Elders in that workshop was that CNA should provide a culturally appropriate pathway for Indigenous adults who apply to CNA as a mature student (that is, applicants 19 years or older who have been out of school for at least one year and do not have a high school diploma). Concerns about mature student admission assessments had been previously expressed by the Labrador Aboriginal Training Partnership, a partnership of three Indigenous groups in Labrador (Innu Nation, Nunatsiavut, and NunatuKavut) whose aim is to assist Indigenous clients to explore career paths and find employment.

To address the concerns expressed by Indigenous partners, CNA, with funding by the NL Workforce Innovation Centre (NL WIC), has initiated a project titled "Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples" (The Readiness Project). The purpose of The Readiness Project is to collaborate with Indigenous partners to improve the admissions pathway to CNA for Indigenous mature student applicants so that it respects Indigenous identities, languages, and ways of knowing. It is our hope that by providing a culturally appropriate process for Indigenous mature students, we will reduce barriers and therefore increase their access to CNA programs.

The Readiness Project is a three-year endeavour consisting of two main phases. Phase one involves information-gathering and consultations with Indigenous partners and key stakeholders and will result in the development (or adoption) of a potential admissions pathway to CNA for Indigenous mature student applicants. In phase two, we will pilot and evaluate the admissions pathway at four CNA campuses. This literature review is part of phase one of the project; key findings will be presented to our Indigenous partners and will be considered when deciding on a new admissions process.

To help inform the project, we have reviewed relevant literature on cultural safety, Indigenous learning and ways of knowing, predictors of student success, post-secondary institute admissions policies and practices, assessments, and programs and other supports implemented by post-secondary institutes to aid Indigenous students on their learning journeys.

Methodology

We have summarized literature relating to mature student post-secondary admission and Indigenous education; we do not intend to imply that any statement or finding in this review represents all indigenous people. As non-Indigenous researchers, we acknowledge that our Western culture, ways of knowing, experiences, and values differ from Indigenous cultures, ways of knowing, experiences, and values. We have taken steps that we hope will allow us to present a balanced perspective that is mutually beneficial to Indigenous communities and CNA. Specifically, for this literature review, we have reviewed and incorporated the values of Indigenous research methods (Barnes, 2018; Olson, 2017; Smith, 1999) and included numerous Indigenous-led articles on Indigenous ways of knowing and learning (e.g., Anuik, Battiste, & George, 2010; Green & Oppliger, 2007; Munroe, Lunney Borden, Murray Orr, Toney, & Meader, 2013), cultural safety (e.g., Aseron, Greymorning, Miller, & Wilde, 2013; Macfarlane, Glynn, Cavanagh, & Bateman, 2007; Ward, Branch Fridkin, & Fridkin, 2016), assessment (e.g., Curtis et al., 2015; Rameka, 2007; Verwoord, Mitchell, & Machado, 2011), and Indigenous experiences in post-secondary education (e.g., Day, Nakata, Nakata, & Martin, 2015; Hossain, Gorman, Williams-Mozely, & Garvey, 2008; Parent, 2017). Many other non-Indigenous-led articles in this review included interviews, focus groups, and talking circles with Indigenous post-secondary students, faculty, and staff. We have adopted a strengths-based approach focusing on progress, promising practices, and areas of active research in Canada and around the world.

We began by conducting a keyword search using Memorial University's One Search tool. One Search scans Memorial's book catalogue and all subscribed online databases from a single platform. Databases subscribed to by Memorial University include: Education Database; Academic Search Complete; PsycINFO; Psychology Database; First Nations Periodical Index; Indigenous Studies Portal; and more (see https://www.library.mun.ca/researchtools/databases/ for a complete list of subscribed databases). Keywords used in our search were: decolonizing assessment; Indigenizing assessment; cultural safety in education; cultural safety in assessment; entrance assessment for Indigenous students; entrance assessment for mature students; entrance assessment for special admissions; cultural bias in assessment; and best and promising practices in college admissions. To narrow our search, we restricted our results to articles from 2012 to present. In some searches, the number of hits was still unwieldy; in those cases, we further narrowed our search to the topics of 'education' or 'college admissions' where appropriate. Our search resulted in 2,785 hits. After an initial scan of titles and abstracts, we weeded out 2,703 articles or books that were not directly relevant to our project or were duplicates, leaving 82 articles or books for review.

From there, we added relevant research identified from reference lists, other frequently cited works, non-peer-reviewed research conducted by Indigenous and/or educational organizations, and news articles that highlight new programs or practices implemented at post-secondary institutions. This gave us a total of 107 articles (or book chapters) for review.

Status of Indigenous Education

International. Internationally, there is a gap in educational attainment between Indigenous and non-Indigenous people (Covarrubias, Gallimore, & Okagaki, 2018; Curtis et al., 2015; Dupuis & Abrams, 2017; Fowler et al., 2018; Hossain et al., 2008; Pechenkina & Anderson, 2011; Sarra & Ewing, 2014; Trumbull & Nelson-Barber, 2019). In Australia, Indigenous post-secondary students tend to be over 25 years old, female, and of low socioeconomic status (SES) (Fowler et al., 2018; Pechenkina & Anderson, 2011). Additionally, Indigenous students are under-represented in Australian universities and frequently experience a “mismatch” in their achievement levels and those required for admission to a post-secondary program (Hossain et al., 2008). Post-secondary institutes in Australia also tend to lack crucial supports for their Indigenous students, which contributes to high attrition rates (Pechenkina & Anderson, 2011).

Research in the United States has found that Indigenous students often report lower levels of belonging, have higher attrition rates, and are less academically prepared than non-minority students (Covarrubias et al., 2018; Dupuis & Abrams, 2017). There are many factors that contribute to this outcome, but chief among them include a lack of culturally responsive curriculum, culturally insensitive testing regimes (such as standardized tests), and poor health care (Dupuis & Abrams, 2017; Trumbull & Nelson-Barber, 2019). International research demonstrates that minority students (including Indigenous students) have less access to science-rich education, often leave high school with lower qualifications than their majority-group peers, often do not receive high-quality university advice, and sometimes are actively discouraged from pursuing professional careers (Cobb II & Russell, 2015; Curtis et al., 2015; Dupuis & Abrams, 2017; Fleet & Kitson, 2009; Hossain et al., 2008; Pechenkina & Anderson, 2011; Sarra & Ewing, 2014; Testa & Egan, 2014).

Canada. Indigenous people in Canada experience similar trends to Indigenous people in other parts of the world (Indigenous Physicians Association of Canada, 2007). While it is challenging to track statistics on Indigenous post-secondary students in Canada, reported attrition rates for Indigenous students vary from 10 to 50 percent, and there remains a gap in educational attainment between Indigenous and non-Indigenous students (Aboriginal Nurses Association of Canada, 2009; Canadian Council on Learning, 2009; Levin & Alcorn, 1999; Statistics Canada, 2018). This disparity in education (and, subsequently, employment) was acknowledged by the Truth and Reconciliation Commission of Canada (2015, p. 1-2), which, among its calls to action, called “upon the federal government to develop with Aboriginal groups a joint strategy to eliminate education and employment gaps between Aboriginal and Non-Aboriginal Canadians.” While it is important to acknowledge that this gap exists and more work needs to be done, it is equally important to acknowledge the gains that have been made. In 2016, 49.3 percent of Indigenous adults 25-64 had a post-secondary certificate, diploma, or degree, an 8.3 percent increase over 2006 census data (Canadian Council on Learning, 2009; Statistics Canada, 2018).

Most Indigenous people in Newfoundland and Labrador are represented by five major Indigenous governing bodies, each with their own unique histories, cultures, and experiences with education. Innu Nation, NunatuKavut Community Council, and the Nunatsiavut Government are based in the Labrador portion of the province, and Miawpukek First Nation and Qalipu First Nation are based in the Newfoundland portion of the province. Innu Nation and Miawpukek First Nation own and operate their own schools and have added cultural aspects to their curricula delivery (AAEDIRP, 2016), while K-12 education for NunatuKavut, Nunatsiavut, and Qalipu First Nation members fall under the jurisdiction of the Newfoundland and Labrador English School District. Each Indigenous community has different rates of high school completion and post-secondary attainment. For some communities, level of educational attainment is similar to the general population of NL; for others, there is still a large educational attainment gap (Statistics Canada, 2019).

When discussing the status of Indigenous education in Canada, it is vital to provide the historical context from which these disparities have arisen. Since the days of first contact with European settlers, Indigenous Peoples in Canada have been subjected to attempts to assimilate them into European culture. Indigenous education was weaponized by colonizers to indoctrinate Indigenous people with European values, religion, and other cultural ideals (Anderson, 2007; Verwoord et al., 2011; Wang, 2013). Starting in the late 1800s, and continuing until 1996, Indigenous children were forced to attend residential schools (Indigenous Corporate Training Inc, 2012). In his 2008 apology to residential school survivors, then Prime Minister Stephen Harper acknowledged there were two main purposes of residential schools: to remove and isolate Indigenous children from the influence of their families, cultures, and homes, and to assimilate them into mainstream Canadian culture (Hanson, 2009). Many Indigenous children who attended residential schools were subjected to physical, mental, and/ or sexual abuse. The impact of residential schools extends beyond the individual, affecting communities and the children of survivors, and their profound negative effects are still visible today (Hanson, 2009; Indigenous Corporate Training Inc, 2012). In Newfoundland and Labrador, Innu and Inuit youth attended residential schools between 1949 and 1980 (Crown-Indigenous Relations and Northern Affairs Canada, 2019).

While residential schools are no longer in operation and Canada has apologized to Indigenous people for the wrongs in its past, some researchers assert that schools are still a medium for the perpetuation of colonialism (Battiste, 1998; Battiste, Bell, & Findlay, 2002; Munroe et al., 2013; Ward et al., 2016). Western ideas of education are often adhered to in schools, and, according to some researchers, mainstream education in Canada results in the conformation of all students to the same progression of learning, which is particularly disadvantageous for those Indigenous students who have different ways of learning, knowing, and value different kinds of knowledge (Dupuis & Abrams, 2017; Munroe et al., 2013). Often, Indigenous people in Canada face extra barriers accessing and succeeding in post-secondary education, making their educational journeys a more difficult path than that experienced by non-Indigenous Canadians (Colleges and Institutes Canada, 2018; Restoule et al., 2013; Ward et al., 2016).

Barriers to education. While many students undergo an adjustment period during their first year of post-secondary education, the gap between home culture and western school culture can be larger for Indigenous students than for other groups (Trumbull & Nelson-Barber, 2019). This cultural gap can lead to more acute feelings of alienation, isolation, and homesickness than majority-group students (Anuik et al., 2010; Foxall, 2013; Pechenkina & Anderson, 2011; Restoule et al., 2013). The cultural gap exists both on a social and pedagogical level. Many Indigenous cultures have traditionally used a competency-based learning system, where knowledge is transmitted experientially by performing tasks and this is markedly different from the transmission and assessment of knowledge in a western academic environment, where concepts are presented in isolation and often without context (Fowler et al., 2018; Testa & Egan, 2014; Weadon & Baker, 2014). Post-secondary institutes often expect Indigenous students to adapt and assimilate to a Eurocentric learning style and have a poor understanding of Indigenous cultures (Aboriginal Nurses Association of Canada, 2009; Anuik et al., 2010; Battiste, 1998; Gallop & Bastien, 2016; Foxall, 2013).

The effects of colonial expectations of assimilation are further exacerbated by a lack of culturally relevant material in course content, a general lack of cultural safety within the institution, and faculty and staff who lack cultural competence (Aboriginal Nurses Association of Canada, 2009; Claypool & Preston, 2011; Fowler et al., 2018; Foxall, 2013; Pio, Tipuna, Rasheed, & Parker, 2014). As a result of cultural misunderstandings, miscommunication, and a belief in negative stereotypes, many Indigenous students also experience racism, discrimination, prejudice, bullying, and micro-aggressions in post-secondary institutions (Aboriginal Nurses Association of Canada 2009; Claypool & Preston, 2011; Covarrubias et al., 2018; Fowler et al., 2018; Foxall, 2013; Parent, 2017; Pechenkina & Anderson, 2011; Restoule, 2011), which can have a profound negative effect on their educational outcomes (Canadian Council on Learning, 2009). To top it off, many post-secondary institutions do not provide sufficient supports to help their Indigenous students succeed (Aboriginal Nurses Association of Canada, 2009; Anuik et al., 2010; Canadian Council on Learning, 2009; Fowler et al., 2018; Pechenkina & Anderson, 2011; Restoule, 2011).

Many Indigenous people experience additional barriers to education that arise as a result of social and political circumstances that are out of their control. These barriers include: financial pressures and lack of funding; life circumstances including poverty, hunger, and health challenges; a lack of educational opportunities and/ or negative experiences during K-12 school, leading to varying degrees of academic readiness; a lack of role models; and intergenerational trauma (Anuik et al., 2010; Battiste, 1998; Burton, Golding, & Griffiths, 2011; Canadian Council on Learning, 2009; Claypool & Preston, 2011; Fowler et al., 2018; Foxall, 2013; Indigenous Physicians Association of Canada, 2007; Parent, 2017; Pechenkina & Anderson, 2011; Restoule, 2011; Weadon & Baker, 2014). These factors and more contribute to a lack of self-confidence, self-esteem, and academic self-efficacy in many Indigenous learners, creating yet more barriers to their educational attainment (Foxall, 2013; Restoule, 2011; Weadon & Baker, 2014).

Further to this, many Indigenous students have community, family, and work responsibilities on top of their studies, and do not have access to reliable and affordable childcare. These responsibilities may take precedence over school work and there is often a lack of understanding by post-secondary faculty and staff (Anuik et al., 2010; Burton et al., 2011; Canadian Council on Learning, 2009; Fowler et al., 2018; Foxall, 2013; Restoule, 2011; Restoule et al., 2013; Testa & Egan, 2014; Weadon & Baker,2014). Efforts at increasing cultural safety in post-secondary institutes could help reduce barriers and improve outcomes for Indigenous students (Aboriginal Nurses Association of Canada, 2009; De & Richardson, 2015; Macfarlane et al., 2007).

Cultural Safety

Many non-Indigenous Canadians believe that colonization is in the past, which can lead to negative beliefs, feelings of prejudice, and discriminatory treatment towards Indigenous people (Hunt, 2013; Macfarlane et al., 2007; Ward et al., 2016). Colonialism and its legacies are often omitted from mainstream education in Canada, with the result that mainstream society is largely unaware of colonial contexts (Anuik et al., 2010; Battiste, 1998; Battiste et al., 2002; Ward et al., 2016). Most Canadians do not know how social, historical, political, and economic factors shaped the lives of Indigenous people, and many non-Indigenous Canadians have the misperception that Indigenous people are a burden on Canada (Hunt, 2013; Ward et al., 2016). Ward et al. (2016) assert that asking questions such as "Why do Indigenous groups have different outcomes?" and "Is there something wrong with the system?" could help extend understanding among Canadians.

Cultural safety is a framework developed by Dr. Irihapeti Ramsden, a New Zealand nurse, to promote equitable health care for Māori patients (Doutrich, Arcus, Dekker, Spuck, & Pollock-Robinson, 2012; Hunt, 2013; Gerlach, 2012). Dr. Ramsden defined cultural safety as the effective nursing of a patient and their family from a different culture. It requires an awareness of the existence of repression, social domination, class, and power differentials (among other variables), and their sources. This awareness can be developed in part by a self-reflection of one's own cultural identity and the impact this has on professional practice. Most importantly, Dr. Ramsden asserted that feelings of cultural safety could *only* be determined by the recipient of the care (Doutrich et al., 2012; Garneau & Pepin, 2015).

The idea of cultural safety has since been embraced by countries around the world, including Canada, and has been expanded to envelop other fields (De & Richardson, 2015; Gerlach, 2012); however, most cultural safety research and application in Canada centres around health care. The Health Council of Canada (2012, p. 5) provides the following definition:

Cultural safety

- *Is an outcome, defined and experienced by those who receive the service – they feel safe;*

- *Is based on respectful engagement that can help patients find paths to well-being;*
- *Is based on understanding the power differentials inherent in health service delivery, the institutional discrimination, and the need to fix these inequities through education and system change; and*
- *Requires acknowledgement that we are all bearers of culture – there is self-reflection about one's own attitudes, beliefs, assumptions, and values*

The Aboriginal Nurses Association of Canada, the Indigenous Physicians Association of Canada, and the National Aboriginal Health Organization have created cultural safety competencies, which include postcolonial understanding and recognizing historical contexts (National Collaborating Centre for Aboriginal Health, 2013). Many other definitions include an understanding of historical, economic, political, and other contexts as a key component of cultural safety (Aboriginal Nurses Association of Canada, 2009; Doutrich et al., 2012; Gerlach, 2012; Hunt, 2013; Ward et al., 2016).

In a series of meetings across Canada to learn about cultural safety practices in health care, Health Council of Canada (2012) found the following trends:

- Culturally competent staff know to ask their clients what they need, and are willing to advocate for those needs on behalf of their client
- Culturally competent organizations learn to meet the needs of Indigenous clients instead of expecting Indigenous clients to adapt to the organization
- Culturally competent organizations develop and enforce policies on cultural competency, require staff to attend cultural safety training, and have zero tolerance for racism. To make these trainings more effective, they should avoid focusing merely on facts, and include stories told directly by Indigenous people to encourage understanding and empathy

Cultural Safety in Education. Cultural safety may have originated in a health care setting, but its premises are just as important in other settings. When educators fail to consider how culture affects learning and class dynamics, the result could lead to inequality, negative stereotyping, poor academic performance, and high rates of attrition (De & Richardson, 2015; Macfarlane et al., 2007). Stoffer (2017) noted that in Inuit communities, the clash between a non-Indigenous educator's sense of educational culture and the Inuit's sense of educational culture was a large concern; educators need resources to understand the culture and worldviews of their students, recognize their position of power, and work to change the unequal relationship. In some cases, one of the first steps in this process needs to include raising awareness among educators of the differences in culture between Indigenous people and mainstream Canadian society. Aseron et al. (2013) found that participants rated themselves lower on a cultural awareness scale *after* taking part in a cultural safety circle, indicating that taking part in the circle helped participants realize there were larger cultural differences between Indigenous and non-Indigenous people than they were aware of.

Educators who are part of the dominant culture sometimes hold negative beliefs, placing the "problem" on the student and their community rather than examining interactions within the classroom and how they could contribute to student behaviour (Macfarlane et al., 2007). In many cases, there is also a "hidden curriculum" within education that promotes the "unspoken rules . . . in school culture and beyond" (Harrison, Lautensach, & McDonald, 2012). Common messages in this hidden curriculum include the marginalization of Indigenous perspectives, such as the teaching that Christopher Columbus "discovered" North America (Harrison et al., 2012; Ward et al., 2016). To help combat these effects, many researchers recommend mandatory, annual cultural safety training (Health Council of Canada, 2012; Hossain et al., 2008; Hunt, 2013; Testa & Egan, 2014; Vogel, 2018; Ward et al., 2016).

Cultural safety training not only aims to increase awareness of cultural differences, power differentials, and the effect of historical, economic, and political contexts on outcomes, but also aims to create a safe space for questions, comments, and stories that attendees may otherwise be afraid to voice (Hunt, 2013; Vogel, 2018). Practicing cultural safety can be demanding and difficult because it challenges deeply rooted beliefs and assumptions on personal and professional levels (Doutrich et al., 2012; Gerlach, 2012; Hunt, 2013; Vogel, 2018). Accordingly, a variety of feelings may be stirred in "descendants of colonizers" and it is important to acknowledge those feelings and show trainees how to cope with them in order to avoid further animosity toward Indigenous people (Hunt, 2013). Relationship-building is key to creating a culturally safe environment in schools and highlights the need for mutual respect and a holistic, inclusive, non-judgmental, and person-centred consideration of students (Macfarlane et al., 2007).

Some guiding principles to help increase cultural safety in a post-secondary context are: increase Indigenous cultural content (such as Indigenous values and traditions); include Indigenous epistemology and increase the relevance of course content (for example, including hands-on components, which are more aligned with Indigenous learning styles than text-book-based learning); recognize that learning is a two-way process between the teacher and the student (learn to "walk beside" rather than "stand over"); and create a more hospitable environment, creating a culture of care (Aboriginal Nurses Association of Canada, 2009; Auger et al., 2019; Doutrich et al., 2012; Macfarlane et al., 2007). De & Richardson (2015) provide some concrete ways educators can increase cultural safety in a classroom environment:

- Avoid leaving expectations unsaid, as not everyone will understand them
- Educators should not assume they know what students need to know about a course, and instead ask them what they need to know
- Educators should welcome students to courses (and post-secondary institutes in general) in a warm, respectful manner to lay the foundation for a constructive and open working relationship
- Educators should be aware that learning styles differ between people and cultures, and try to create a student-centred approach to their teaching and assessments

Indigenous Learning

Part of increasing awareness of cultural differences between Indigenous and non-Indigenous people includes recognizing that Indigenous people have different ways of knowing and learn in different ways than mainstream Canadians. Most education systems in Canada ignore Indigenous ways of knowing, focusing on Eurocentric contexts and western learning styles (Battiste, 1998). Western knowledge is characterized as being disconnected from daily experience, teaching skills without context, and compartmentalizing and decontextualizing information (Barnhardt & Kawagley, 2005; Munroe et al., 2013; Trumbull & Nelson-Barber, 2019). Indigenous learning occurs in a meaningful context using holistic, integrated approaches to education (Anuik et al., 2010; McGregor, 2013; Munroe et al., 2013; Trumbull & Nelson-Barber, 2019; Verwoord et al., 2011). Many Indigenous cultures view all things as being interconnected (Claypool & Preston, 2011). The self is seen as a balance between mind, body, emotion, and spirit, all connected to the environment, and all aspects of the self must be addressed when learning (Anuik et al., 2010; Battiste & Henderson, 2009; Canadian Council on Learning, 2009; Claypool & Preston, 2011; Kim, 2017). Education begins with self-discovery, and then extends out to include family, community, and beyond, allowing each person to find their unique purpose in life (Anuik et al., 2010; Claypool & Preston, 2011; Trumbull & Nelson-Barber, 2019).

Much of schooling in a western context is not in line with Indigenous world views and can create confusion, discomfort, and may not convince Indigenous people of its truth (Kim, 2017; Trumbull & Nelson-Barber, 2019). According to Barnhardt and Kawagley (2005), internationally, many Indigenous people have an aversion to western forms of schooling, which tend to be in direct conflict with Indigenous views of an "interdependent universe and the importance of place." Traditionally, Indigenous learning included environmental knowledge, experiential learning through observation and demonstration, and storytelling – knowledge is acquired through direct experience with the natural world, and details are learned in relation to the whole (Barnhardt & Kawagley, 2005; McGregor, 2013). Even though many Indigenous students speak English, it is problematic to assume they think in "English ways" (Munroe et al., 2013). McGregor (2013) acknowledges that today, Indigenous children are caught between two cultures, and yet are not fully immersed in either. This may be a troubling result, as some researchers believe that students need a solid foundation in their primary culture in order to be successful in a secondary culture (Anderson, 2007; Fusezzy, 1998).

Research in Canada and around the world demonstrates that providing a learning environment that respects and includes Indigenous cultural values, skills, and information results in significantly better outcomes for Indigenous students (Anderson, 2007; Munroe et al., 2013; Kim, 2017; Sarra & Ewing, 2014). Many researchers advocate for incorporating Indigenous knowledge into western curricula, using Indigenous knowledge as a starting point for western math and science concepts (Battiste & Henderson, 2009; Munroe et al., 2013; Friesen & Ezeife,

2009), and programs in Saskatchewan and British Columbia indicate that incorporating Indigenous knowledge in science curricula may be beneficial for *all* students (Kim, 2017).

Warren and Miller (2013) created a learning model for young Indigenous students in Australia, and found that after implementation of their model, students significantly improved their understanding of math and language. This is particularly impressive, as previous research using other learning models found students made negative progress in math after their first year of school. Warren and Miller (2013) found that Indigenous students are imaginal, contextual, kinesthetic, cooperative, and person-oriented learners. They set out the following guidelines for learning frameworks for Indigenous students:

Learning frameworks must:

- Require holistic understanding of the task, by allowing discussion before working through the task
- Be multi-representational, using images, symbols, and diagrams both separately and simultaneously
- Be multi-modal, allowing for a rich range of ways to communicate, including physical activity, gestures, language, sound, texture, manipulating concrete materials, and graphics
- Involve group work
- Require "teacher as modeler", so that the teacher demonstrates rather than tells
- Require "teacher as relational", to create strong, positive relationships with students

Predicting Post-Secondary Success

One of the key questions underlying our larger project on admissions of Indigenous mature student applicants centres around 'readiness.' What does it mean to be ready for post-secondary education? How is that defined and measured? The literature we have found focuses on student success; but what does success mean? Mainstream standards of success in post-secondary education are usually defined in terms of cognitive performance and measured by GPA and the timely completion of a program (Canadian Council on Learning, 2009; Gallop & Bastien, 2016; Niessen & Meijer, 2017). According to research by Pigeon (2008a, as cited in Gallop & Bastien, 2016), Indigenous definitions of success include cultural identity (honouring and maintaining ties to cultural practices, values, and beliefs), finding ones gifts (discovering what you want to do with your life and having the capacity to follow that path), and reciprocity (giving back to Indigenous communities). A series of consultations by Indigenous Services Canada resulted in recommendations to consider success through the lens of persistence rather than retention (Colleges and Institutes Canada, 2018). Marie Battiste, a leading Canadian researcher on Indigenous education, argues that Eurocentric ways of thinking cannot be used to define Indigenous knowledge (Battiste, 1998), and research by the Canadian Council on Learning (2009) echoes that institutes need to create a "balanced understanding" of what success means in Indigenous

learning, warning that failing to do so could perpetuate systems that are irrelevant to Indigenous communities.

Despite this mismatch in western and Indigenous ideas of success, research we have found and reviewed focuses on post-secondary GPA and program completion as measures of success. Stemler (2012) acknowledges that there are other important measures of success (such as interpersonal skills and a drive for continuous learning), but there is no consensus on how to measure these broader outcomes. Due to this, our discussion on predicting post-secondary readiness and success is limited to program completion and GPA.

Peer-reviewed literature identifies a broad range of non-cognitive variables that are correlated with academic success, including: gender, race, age, ethnicity, SES, parental education, study skills, motivation, perseverance, ethics, a positive self-concept, ability to deal with adversity, goal-setting, locus of control, personality, and many others (Chesters & Watson, 2016; Fowler, 1997; Masserini, Bini, & Pratest, 2016; Sandlin, 2019; Schmitt, 2012; Stemler, 2012; Sullivan & Nielsen, 2013). But among this long list, two predictors shine, time and again, as the overall best predictors of post-secondary performance: high school grades and standardized test scores (Curtis et al., 2015; Danilowicz-Gösele, Lerche, Meya, & Schwager, 2017; Fowler, 1997; Masserini et al., 2016; Schmitt, 2012; Westrick, Le, Robbins, Radunzel, & Schmidt, 2015). Danilowicz-Gösele et al. (2017) found that high school grades, in particular, are the best predictors of both program completion *and* post-secondary GPA; marginal improvements to high school leaving grade improved a student's probability of completing a university program by approximately 21 percentage points per grade; and each full grade increase in high school translated to a 0.4 grade increase in university. Other research has corroborated that high school performance is the best predictor of post-secondary performance for regular admission students, or students who are expected to do well (Curtis et al., 2015; Fowler, 1997; Kim, 2015).

When it comes to students who enter post-secondary school via non-traditional pathways (such as enabling programs or mature student pathways), the research is less clear. In general, regular admissions students tend to have higher post-secondary GPAs than non-traditional students (Chesters & Watson, 2016; Kim, 2015), and high school grades are less predictive of post-secondary performance for students who have been out of high school for many years (Fowler, 1997; Masserini et al., 2016). One study found that high school grades were not as strong a predictor of college GPA for special admission students (those admitted to the institute despite not meeting minimum entrance requirements) than for regular admission students, and did not predict college retention at all for special admission students (Kim, 2015). There has been much research into the relationship between non-cognitive variables and post-secondary performance, and while some of these variables show promise, none of them has predicted success as strongly as high school grades or test scores, and there is no consensus on which of these attributes are the best predictors of success for non-traditional students (Chesters & Watson, 2016; Curtis et al., 2015;

Danilowicz-Gösele et al., 2017; Fowler, 1997; Kim, 2015; Masserini et al., 2016; Sandlin, 2019; Schmitt, 2012; Stemler, 2012; Westrick et al., 2015).

In 2016, the British Columbia Council on Admissions & Transfer (BCCAT) conducted a survey of post-secondary schools in BC to determine what factors they deemed important for admissions decisions for mature student applicants. Eighty-nine percent of respondents rated proficiency in English important; 48 percent rated ability to balance study and other responsibilities important; 56 percent rated self-confidence important; 46 percent rated length of time out of formal education important (such that the longer an individual was out of formal education, the more likely they would need upgrading); and 44 percent rated match or suitability to program important (suitability referred to whether a student's commitment, motivation, career aspirations, and aptitudes matched their preferred field of study). Institutes surveyed used portfolios, questionnaires, essays, letters of intent, references, personal interviews, and assessments to help make their admissions decisions. Unfortunately, there was no data available to link these indicators to student performance, and BCCAT called for further research into mature student outcomes. With regards to the admission of Indigenous mature student applicants, respondents recommended a separate Indigenous admission process that enables applicants to upgrade their skills and knowledge *during* the process (BCCAT, 2016).

Admission to Post-Secondary Institutes

Some argue the case for open admission policies, accepting *all* students into post-secondary, and directing students in need of upgrading to developmental courses before starting their chosen program. For example, Sullivan and Nielsen (2013) provide a detailed account of under-prepared students at their community college in the United States. Among those students whose test scores indicated they were at serious risk of failing courses, many of them passed their upgrading courses, and 25 percent of them went on to pass college-level courses. Sullivan and Nielsen argue that while those numbers are low, predicting success for *individual* students based on test scores is problematic, and "there is no clear minimum ACCUPLACER score below which students have no ability to benefit." They highlight that the makers of ACCUPLACER, which is commonly used by colleges for admissions decisions, state that their test should only be used for *placement* purposes, and not for high-stakes admission decisions. In their words:

> *"If students don't come to college, what will they do? How will they make a living and support their families? We have arrived at a historic moment, we believe, where we have a compelling interest to encourage as many people as possible who might be interested in college to give it a try, no matter how ill-prepared they might appear to be" (p. 335).*

The opposite side of the argument, that admission should be limited only to those who demonstrate they are likely to be successful, is eloquently described by Fowler (1997).

Fowler explains that students who enroll in college programs and do not succeed suffer financial losses (due both to paying tuition without gaining benefit and to foregone earnings), damage to their self-concept and self-esteem, and a change in aspirations due to a failure in "achieving personal and academic goals" (p. 31). Fowler believes it is not ethical to allow underprepared students to enroll in college programs.

In Canada, post-secondary institutes generally make admission decisions based on high school grades or transcripts (Restoule et al., 2013). In other countries, many post-secondary institutes consider high school grades, transcripts, and / or standardized test scores for admission decisions (Chesters & Watson, 2016; Masserini et al., 2016; Niessen & Meijer, 2017; Orr & Hovdhaugen, 2014; Stemler, 2012; Sternberg, 2012; Sullivan & Nielsen, 2013). Proponents of these methods argue they provide an impartial and fair means for admission decisions (Hirschman Berrey, & Rose-Greenland, 2016); however, grades and transcripts do not allow admission officers to consider context (such as lack of available courses or resources in high school), and standardized tests disadvantage certain minority groups (including Indigenous students, see discussion under "assessments"), often resulting in fewer Indigenous (and other minority) applicants gaining admission to post-secondary institutes (Hazelrigg, 2016; Niessen & Meijer, 2017; Restoule et al., 2013; Sternberg, Bonney, Gabora, & Merrifield, 2012; Tranter, 2012). In their survey of Indigenous students in Ontario, Restoule et al. (2013) found that 60 percent of respondents accessed post-secondary education through a bridging program or mature student process, indicating a need for flexible admission policies for Indigenous post-secondary applicants.

Due to these considerations, some competitive-entry post-secondary schools are turning to holistic admission processes (Choi, Flowers, & Heldenbrand, 2018; Hazelrigg, 2016; Hirschman et al., 2016; Sandlin, 2019; Schmidt, 2016; Zerwic, Scott, McCreary, & Corte, 2018). Holistic admission takes non-cognitive variables of applicants (such as attributes and experiences) into account in addition to high school grades and test scores, with the aim to diversify the student body and admit individuals who will meaningfully contribute to the school community (Choi et al., 2018; Grove, 2019; Sandlin, 2019). While admission of mature student applicants generally does not occur in a competitive-entry context, some aspects of holistic admission may still be applicable, such as considering the whole person rather than merely test scores and GPA (Choi et al., 2018; Fowler, 1997; Sandlin, 2019). Holistic admission can include interviews, letters of recommendation, prior work and learning experiences, non-standardized assessments, and more to assess applicants (Choi et al., 2018; Fowler, 1997; Niessen & Meijer, 2017; Sandlin, 2019). While there is evidence that holistic admission policies increase diversity and have many benefits for the student body, they also tend to require more time and resources (Hazelrigg, 2016; Zerwic et al., 2018). Additionally, there is evidence that unconscious bias may play a role in holistic admission decisions; because of this, some researchers recommend unconscious bias and cultural competency training for admission officers (Sandlin, 2019; Schmidt, 2016).

Other efforts to create more equitable opportunities include affirmative action – considering race and ethnicity when making admissions decisions – and holding designated seats in a program for Indigenous students (Hirschman et al., 2016; Sutton, 2018; BCCAT, 2016). Some post-secondary schools in the United States that employ affirmative action admission policies based on race and ethnicity are being challenged in court as racist; however, as long as institutes merely consider race, as opposed to using it as a determining factor, the courts have a precedent of ruling in favour of affirmative action (Hirschman et al., 2016; Sutton, 2018). The University of Manitoba no longer uses an applicant's race as a proxy for disadvantage, instead asking direct questions about disadvantage (such as whether an applicant has ever used a food bank or was raised by a single parent) to discern whether their life circumstances acted as a barrier to their success (De Souza, 2019).

Multiple mini interviews (MMIs) are a promising admission practice to assess non-cognitive attributes such as empathy, critical thinking, collaboration, reaction to challenges, knowledge of program applied to, and other traits important for post-secondary success (Choi et al., 2018; Curtis et al., 2015; Niessen & Meijer, 2017). MMIs have a format similar to "speed-dating," in that applicants take part in a series of eight- to ten-minute interviews, each with a different focus (such as career aspirations and academic preparation) and different interviewer (Curtis et al., 2015). In their review of non-cognitive post-secondary admission practices, Choi et al. (2018) cite research indicating MMIs have greater reliability and validity for evaluating non-cognitive skills than other interview formats. They cite a study by Corelli et al (2015) that found MMIs cost less per student than standard interview formats; however, Niessen & Meijer (2017) assert that MMIs are more time-consuming than traditional interview methods.

Due to legislation favouring wider diversity and inclusion in post-secondary education, many European post-secondary schools are focusing on "second chance" routes, assessing applicants on prior learning, life skills, and work experience rather than high school academic performance (Orr & Hovdhaugen, 2014). The "second chance" routes vary by country. For example, in Sweden, those who did not graduate high school can gain access to post-secondary simply by completing the re-requisite courses they lack; in Norway, high school non-graduates can gain access to post-secondary programs on the basis of prior learning assessments (Orr & Hovdhaugen, 2014). Italy takes a different approach, whereby all post-secondary applicants write a "non-selective test" prior to admission; students with low scores can still enroll in their program of choice but may need to take special courses (Masserini et al., 2016). Masserini et al. (2016) found that while Italy's non-selective tests do not predict post-secondary performance better than high school grades, test scores are correlated to an individual's likelihood of enrolling.

In Australia and New Zealand, pathways to post-secondary education include entry based on high school grades; bridging programs; other post-secondary training; age (over 21); professional or life experiences; interviews; and test scores (Chesters & Watson, 2016; Curtis et al., 2015; Pechenkina & Anderson, 2011; Tranter, 2012). In order to address disparities associated with typical admission practices, some Australian universities have adopted a

capabilities approach (measuring traits such as motivation and time management) based on an applicant's life, work, and volunteer experience and other formal and informal learning (Tranter, 2012). Some Australian and New Zealand institutes offer special admission pathways for Indigenous students that include assessments, interviews, and bridging programs (Curtis et al., 2015; Pechenkina & Anderson, 2011); however, in a review of Australian post-secondary schools Pechenkina and Anderson (2011) found the schools with the highest rates of Indigenous enrollment were different from the schools with the highest rates of Indigenous program completion, indicating that increased access, in itself, is not enough. The University of Auckland's admission pathway for Indigenous students is strongly associated with positive first-year outcomes (Curtis et al., 2015). Applicants write a math test, an English test, and take part in MMIs, and, based on their results, are provided with a recommended starting point for their program (Curtis et al., 2015). The authors concluded that "institutions committed to widening participation should prioritise the funding and delivery of a comprehensive, flexible and inclusive admissions process that includes alternative entry pathways for Indigenous and ethnic minority applicants" (Curtis et al., 2015, p. 15).

Assessments

One of the most common tools Canadian colleges use to make admission decisions for mature student applicants is a standardized test (Association of Canadian Community Colleges, 2010). The Glossary of Education Reform (2015) defines a standardized test as

> *"any form of test that (1) requires all test takers to answer the same questions, or a selection of questions from [a] common bank of questions, in the same way, and that (2) is scored in a "standard" or consistent manner, which makes it possible to compare the relative performance of individual students or groups of students. While different types of tests and assessments may be 'standardized' in this way, the term is primarily associated with large-scale tests administered to large populations of students"*

Many educators consider standardized tests (such as SAT, ACT, or ACCUPLACER) to be a reliable measure of a student's aptitude or achievement, and there are endless peer-reviewed research articles that demonstrate test scores are good predictors of post-secondary performance (Kim, 2015; Masserini et al., 2016; Niessen & Meijer, 2017; Schmitt, 2012; Sternberg, 2012; Westrick et al., 2015). However, there is also research indicating that standardized tests disadvantage women, minorities, and those from a low SES background (Austin, 2017; Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Helms, 2006; Johnston & Claypool, 2010; Kim, 2017; Koljatic, Silva, & Cofre, 2013; Niessen & Meijer, 2017; Philpott, Nesbitt, Cahill, & Jeffery, 2004; Poortinga, 1995; Sternberg, 2012), and there is a debate among some researchers and educators about the predictive validity of standardized tests (Belfield & Crosta, 2012; Brijmohan, Khan, Orpwood, Brown, & Childs, 2011; Fowler, 1997; Helms, 2006; James, 2006; James & Francis-Pelton, 2005; Koljatic et al.,

2013; Matthew & Kashyap, 2019; Medhanie, Dupuis, LeBeau, Harwell, & Post, 2012; Sullivan & Nielsen, 2013).

Some studies indicate that relying solely on standardized tests for course placement decisions can lead to errors (such that students are placed into incorrect courses), as they may not be strongly predictive of student success for some courses (Belfield & Crosta, 2012; Brijmohan et al., 2018; Fowler, 1997; James & Francis-Pelton, 2005; Sullivan & Nielsen, 2013). Fowler (1997) examined the relationship between obtained scores on the Canadian Adult Achievement Test (CAAT) and college GPA for 32 mature students at a college in Newfoundland and Labrador. Fowler found that there was no significant positive correlation between overall scores on the CAAT and college GPA; there was, however, a *negative* correlation for CAAT reading comprehension scores and GPA. That is, students who scored higher on the reading comprehension subtest tended to have lower GPAs. In a 2006 survey of assessments used in Adult Basic Education in Canada, educators did not agree on whether the CAAT was reliable for student placement (Campbell 2006). Educators did agree, however, that the CAAT had a psychologically negative effect on test takers, describing it as "intimidating," "scary," or "overwhelming." Educators also agreed that the CAAT was "not culturally sensitive" and favoured those from southern urban areas (Campbell, 2006).

Belfield and Crosta (2012) conducted research on standardized tests used in a state-wide college system in the United States and found a weak correlation between test scores and grades for both remedial courses and college-level courses. They also found that three out of ten students were placed in the incorrect English course and two out of ten students were placed in the incorrect math course based on test scores. There was a positive correlation between test scores and college-level credits earned; however, the predictive power of the tests was low, explaining 6 percent or less of variation in credits earned. Belfield and Crosta were careful to point out that "the validity of the placement tests depends on how they are used" (p. 40).

At one Canadian university, James (2006) found that ACCUPLACER Online tended to be predictive of student performance for developmental math courses but not for developmental English courses. James explained that version of ACCUPLACER did not measure writing skills, which was the focus of the English courses. It should be noted that ACCUPLACER has since undergone revisions and now contains a writing assessment (College Board, 2017). At one US college, Mathew and Kashyap (2019) found a weak correlation between students' ACCUPLACER Algebra scores and performance in a first-year quantitative reasoning course, results which factored into their recommendation to develop an in-house placement test. James and Francis-Pelton (2005) conducted a study to determine whether the Canadian Achievement Test 2nd Edition (CAT/2) could predict student success in an ABE mathematics course. Although the authors concluded that CAT/2 test scores were a 'credible predictor' of student performance, they noted that relying solely on test scores for admission decisions would have resulted in 15 (of 82) successful students not being

admitted to the program. James and Francis-Pelton describe the dilemma in admission decisions – lowering admission cut-off scores would result in admitting more students who could be successful, while at the same time admitting more students who would not be successful. Sullivan and Nielsen (2013) argue that while standardized tests may predict performance tendencies in *groups* of students, they cannot predict how an *individual* student will perform, as they do not measure perseverance, motivation, self-discipline, or other critical attributes that lead to success. Even studies which find high correlations between test scores and post-secondary performance still have a substantial amount of variance in GPA that is not explained by test score alone (Philpott et al., 2004; Stemler, 2012).

There is no debate over the differences in standardized test scores between ethnic majority test-takers and some minority groups, but there is still a question over the causes of these differences. Some researchers argue that standardized tests measure learning outcomes from education, and so students with opportunities for better quality education (such as attending a school with more resources, being able to afford a tutor, having highly educated parents, etc.) do better on standardized tests, leading to further inequities when these tests are used for admission or other high-stakes decisions (Cobb II & Russell, 2015; Dupuis & Abrams, 2017; Koljatic et al., 2013; Sternberg, 2012). Others argue that standardized tests are culturally biased and test-makers do not include sufficient numbers of people from minority groups when developing and norming the tests (Fowler, 1997; Helms, 2006; Johnston & Claypool, 2010; Nunavut Department of Education, 2008; Philpott et al., 2004; Poortinga, 1995; Schmelkes, 2018; Solano-Flores & Nelson-Barber, 2001; Stoffer, 2017; Trumbull & Nelson-Barber, 2019). An individual's language, culture, epistemology, and communication style will affect how they interpret and answer questions, and this puts Indigenous people at a disadvantage when writing a test that was developed and normed using mostly participants of European descent (Johnston & Claypool, 2010; Kim, 2017; Philpott et al., 2004; Poortinga, 1995; Solano-Flores & Nelson-Barber, 2001; Trumbull & Nelson-Barber, 2019). Due to these challenges, there is research into alternate types of assessments (Claypool & Preston, 2011; Delaney et al., 2018; Dupuis & Abrams, 2017; Johnston & Claypool, 2010; Niessen & Meijer, 2017; Philpott et al., 2004; Rameka, 2007; Sandlin, 2019; Schmelkes, 2018; Sternberg, 2012).

In 2008, the Nunavut Department of Education released guidelines on assessment in Inuit schools, outlining seven principles that guide assessment (p. 32-39):

- Continuous learning for all students
- Show respect for all learners
- Recognize each student's unique talents and skills
- Emphasize the interdependence, growth, and success of the group
- Be outcome-based
- Used for different purposes

- Is authentic, meaningful, and builds on student strengths

Standardized tests, in their current format, are not appropriate for many Inuit students (Nunavut Department of Education, 2008), and researchers and educators echo these sentiments, highlighting the tension between western-based approaches to assessment and Indigenous perspectives of assessment (Claypool & Preston, 2011; Johnston & Claypool, 2010; Kim, 2017; Philpott et al., 2004; Stoffer, 2017; Ward, Semken, & Libarkin, 2014).

Niessen and Meijer (2017) indicate that admission criteria focusing on what students *should* be able to do in their program of choice is garnering attention in Europe. Niessen and Meijer (2017) asked applicants to write a trial-studying test, where applicants are given introductory material from their program of choice to study and then come into school to write a test based on that material. The trial-studying test was just as effective as high school grades in predicting first year college GPA, and applicants perceived the process to be more fair than other selection methods. Developing and administering the trial-studying test was comparable in resources and costs to development and administration of other tests.

Other types of assessments researchers considered include: portfolios; essays; oral assessments or interviews, performance-based assessments; curriculum-based assessments; and observation (Delaney et al., 2018; Dupuis & Abrams, 2017; Ewing, 2017; Fleet & Kitson, 2009; Nunavut Department of Education, 2008; Philpott et al., 2004; Schmelkes, 2018; Stemler, 2012; Ward et al., 2014). While there is a broad range of assessments that show promise, performance-based assessments were most commonly mentioned, and researchers agreed that a multi-method, holistic approach was needed when assessing Indigenous students (Claypool & Preston, 2011; Johnston & Claypool, 2010; Nunavut Department of Education, 2008; Philpott et al., 2004; Munroe et al., 2013; Sandlin, 2019; Schmelkes, 2018; Ward et al., 2014).

Supporting Indigenous Recruitment and Success

Research and consultations that are concerned with Indigenous student success in post-secondary education commonly find that transition to post-secondary education starts much younger than many people assume, when students are still in the K-12 school system (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Parent, 2017; Restoule et al., 2013). Findings by Parent (2017) show that for some Indigenous students, the decision to pursue post-secondary education began in elementary school. Others echo these findings, recommending that time should be set aside as early as elementary school, and continuing throughout junior high and high school, to educate students on career options and the training requirements to pursue those careers (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Parent, 2017; Restoule et al., 2013). Post-secondary institutions can aid in these early discussions about careers and training by holding career fairs, workshops, and information

sessions in schools and communities (Aboriginal Nurses Association of Canada, 2009; Colleges and Institutes Canada, 2018; Indigenous Physicians Association of Canada, 2007; Restoule et al., 2013). Relationship building and face-to-face contact, especially in rural communities, is important to create partnerships and informal channels through which Indigenous youth and adults can contact and ask questions about post-secondary institutes, programs, and admission requirements and processes (Aboriginal Nurses Association of Canada, 2009; Burton et al., 2011; Colleges and Institutes Canada, 2018; Hossain et al., 2008; Indigenous Physicians Association of Canada, 2007; Pechenkina & Anderson, 2011; Restoule, 2011; Restoule et al., 2013).

Parent (2017) examined Indigenous students' experiences with Aboriginal Early University Promotion Initiatives (AEUPIs) and the challenges and successes they experienced. AEUPIs are initiatives that aim to encourage Indigenous youth to pursue post-secondary education and include a wide variety of activities including career fairs, summer bridging programs, information sessions, leadership development programs, and mentorship. Many Indigenous students who participated in AEUPIs indicated they had a higher motivation to do well in high school after taking part in the AEUPI. Parent also found that intergenerational learning is important to many Indigenous students and having a role model was vital to help them succeed. Restoule et al. (2013) found that knowing other Indigenous people who had attended post-secondary or received a diploma or degree was one of the best predictors of Indigenous student success.

While increasing motivation to pursue post-secondary education is important for Indigenous students, increasing access without providing additional supports does not create opportunity (Aboriginal Nurses Association of Canada, 2009; Assembly of First Nations, 2018; Colleges and Institutes Canada, 2018; Gallop & Bastien, 2016; Hossain et al., 2008; Pechenkina & Anderson, 2011; Restoule et al., 2013). There are many supports that are recommended and / or are in place at post-secondary institutes to aid Indigenous students on their learning journeys, such as: providing dedicated cultural and social space for Indigenous students; providing personal, academic, and cultural counselling; mentoring programs; academic skills workshops; dedicated seats for Indigenous students in competitive programs; providing funding and child care aid and resources; offering community-based programs; and celebrating Indigenous students and their accomplishments (Aboriginal Nurses Association of Canada, 2009; Assembly of First Nations, 2018; Foxall, 2013; Hossain et al., 2008; Hunt, 2013; Indigenous Physicians Association of Canada, 2007; Penn, 2014; Restoule, 2011; Tranter, 2012). Danilowicz-Gösele et al (2017) found that having appropriate supports available can even decrease the impact of low high school grades on post-secondary performance.

While these supports are helpful, additional efforts are required by post-secondary institutions to decolonize education and create an environment where Indigenous students

feel valued and respected, which will in turn help them achieve better post-secondary outcomes (Battiste et al., 2002; Indigenous Physicians Association of Canada, 2007; Pechenkina & Anderson, 2011). To start, post-secondary institutes should create an Indigenous Support Coordinator or similar position and hire more Indigenous faculty and staff (Battiste et al., 2002; Colleges and Institutes Canada, 2018; Foxall, 2013; Hunt, 2013; Indigenous Physicians Association of Canada, 2007; Penn, 2014; Restoule, 2011). Further to this, they should offer workshops and presentations on cultural safety, communicate and enforce zero tolerance to racism, and include Indigenous content in program curricula (Aboriginal Nurses Association of Canada, 2009; Anuik et al., 2010; Assembly of First Nations, 2018; Battiste et al., 2002; Foxall, 2013; Hunt, 2013). Last, but certainly not least, to ensure Indigenous values remain a priority in all aspects of the organization, Indigenous employees must be represented in senior management or via Indigenous councils with a governance mandate (Assembly of First Nations, 2018; Hunt, 2013; Pechenkina & Anderson, 2011).

Access Programs. Researchers, organizations, and the Government of Canada have consulted with Indigenous people to get their input into what institutions can do to help increase Indigenous access to post-secondary education and close the education gap. Some recommendations that have emerged from those consultations include pre-admission courses to orient prospective Indigenous students to campus life and the realities of study (Colleges and Institutes Canada, 2018; Indigenous Physicians Association of Canada, 2007) and ‘mentor for a day’ programs to allow Indigenous youth to spend a day with an Indigenous post-secondary student or Indigenous employee in a field of their interest (Restoule, 2011). A common theme from many consultations includes the creation of adult upgrading and transition/ preparatory programs for Indigenous adults as admission options for post-secondary programs, with some calling for community-based programs (Colleges and Institutes Canada, 2018; Foxall, 2013; Indigenous Physicians Association of Canada, 2007; Restoule, 2011). Research on such programs indicates promising results.

Alas, Anshari, Sabtu and Yunus (2016) found that 74 percent of students in an alternate admissions program (due to not meeting entrance requirements) achieved a mid-level GPA (compared to only 50 percent of regular admissions students), and between 4 and 9 percent received a high-level GPA. In a study on a similar support program for borderline post-secondary applicants (those who do not meet entrance requirements and otherwise would not have been admitted to a program), Covarrubias et al. (2018) found that support program students performed better than would have been expected for students who do not meet entrance requirements, outperforming similar students who did not take part in a support program. Chesters and Watson (2016) found that while students who entered post-secondary education via an enabling program had lower GPAs than regular admissions students, the enabling program students had higher retention.

Aboriginal Access Programs, created in Manitoba, have shown some promise in closing the education gap (Levin & Alcorn, 1999; The Alberta Counselletter, 2017). These programs are available at universities and colleges in western Canada, and while there are differences in how they are implemented, they are typically full-time, one-year programs where students prepare for full admission to their program of choice (The Alberta Counselletter, 2017). They offer a range of supports including time management, study skills, academic writing workshops, tutoring, personal supports, and more to help students succeed (The Alberta Counselletter, 2017). The programs are based on the principle of "equality of condition," implying that mere access is not sufficient; additional supports for students who are motivated but under-prepared will help them achieve their goals (Levin & Alcorn, 1999). There is a four-day screening process for applicants that involves interviews and an orientation to campus; standardized testing is only completed *after* a student gains admission to the program and is used only as a tool to determine the supports a student will need. While different programs use different strategies, all the Aboriginal Access Programs modify their curriculum and supports to fit the needs of the student rather than trying to modify the students to meet the program. A 1994 review by Hikel (as cited in Levin & Alcorn, 1999) found that 40 percent of students admitted to the Access Programs graduated from their post-secondary programs, which is an unparalleled achievement for students who do not meet entrance requirements.

Conclusion

Many Indigenous people in Canada face barriers accessing post-secondary education and completing their program of choice, making their educational journeys more challenging than most non-Indigenous Canadians. Efforts to increase cultural safety, recognize different perspectives and learning styles, and include more Indigenous knowledge in curricula can help Indigenous people feel more comfortable in a post-secondary environment.

Western ideas of success often focus on GPA and program completion, a narrow definition of success. For some Indigenous people, success encompasses a broader range of criteria and is looked at holistically. Despite this mismatch, many post-secondary institutions still focus solely on GPA and program completion to measure student performance. High school grades and test scores are shown time and again to be the best predictors of post-secondary GPA and program completion; however, they still leave a large portion of variance in GPA unexplained.

While most Canadian colleges primarily use testing and high school grades to make admission decisions for mature students, other processes used include interviews, letters of recommendations, prior learning assessments, and portfolios. Many colleges offer foundation courses to enable those without pre-requisites to upgrade their skills so they can later enroll in their program of choice. Some post-secondary institutes offer specialized bridging or access programs, priority registration, or dedicated seats for Indigenous

applicants. Some research has shown bridging or access programs can help borderline and under-prepared students succeed in post-secondary, but these are context-specific studies, and the content and format of the access program matters. Additionally, literature indicates that unless adequate supports are in place at post-secondary institutes, increased program access will not necessarily translate to increased success for Indigenous students.

Standardized tests are predictive of success in most cases; however, there is evidence that certain tests may not be strongly predictive of student performance for some courses. Also, standardized tests often disadvantage ethnic minorities, including Indigenous people. Non-cognitive variables show some promise for predicting success but are not as highly correlated with success as high school grades and test scores, and there is no consensus on which non-cognitive variables are most important and how to gauge these variables in applicants.

The literature points to the importance of building relationships with Indigenous communities and schools, and to begin exposure to careers and post-secondary options as early as elementary school to encourage Indigenous students to pursue post-secondary education. Showcasing Indigenous role models who have attended post-secondary and / or are working in various careers will help motivate and build confidence in Indigenous youth.

References

Aboriginal Nurses Association of Canada (2009). *Cultural Competence and Cultural Safety in First Nations, Inuit and Métis Nursing Education. An Integrated Review of the Literature.* Ottawa, ON: Author.

Alas, Y., Anshari, M., Sabtu, N. I., and Yunus, N. (2016). Second-chance university admission, the theory of planned behaviour and student achievement. *International Review of Education,* 62, 299 – 316.

Anderson, K. D. (2007). Influences preceding “Nunatsiavut” self-determination: historical, political, and educational influences on the people of northern Labrador. *The Australian Journal of Indigenous Education*, 36, 101-110.

Anuik, J., Battiste, M., George, N. (2010). Learning from promising programs and applications in nourishing the learning spirit. *Canadian Journal of Native Education*, 33(1), 63-155.

Aseron, J., Greymorning, S.N., Miller, A., and Wilde, S. (2013). Cultural safety circles and Indigenous Peoples’ perspectives: inclusive practices for participation in higher education. *Contemporary Issues in Education Research* 6(4), 409 – 415.

Assembly of First Nations. (2018, July). *First Nations Post-Secondary Education Review: Interim Report 2018.* Ottawa, ON: Author.

Association of Canadian Community Colleges. (2010). *Colleges Serving Aboriginal Learners and Communities 2010 Environmental Scan: Trends, Programs, Services, Partnerships, Challenges and Lessons Learned.* Retrieved from https://www.afn.ca/uploads/files/accc-communities.pdf

Atlantic Aboriginal Economic Development Integrated Research Program. (2016). *Making Connections: Key Economic Drivers in Aboriginal Rural and Remote Communities – Aboriginal Youth, Colleges and Industries*. Retrieved from https://www.apcfnc.ca/images/uploads/Making_Connections_FINAL_May_2_2017.pdf

Auger, M., Crooks, C.V., Lapp, A., Tsuruda, S., Caron, C., Rogers, B.J. and van der Woerd, K. (2019). The essential role of cultural safety in developing culturally-relevant prevention programming in First Nations communities: lessons learned from a national evaluation of Mental Health First Aid First Nations. *Evaluation and Program Planning*, 72, 188 – 196.

Austin, T. (2017). What’s at stake in a high-stakes math test? Analysis of multimodal challenges for emergent English bilingual learners. In Pirbhai-Illich, F. Pete, S., and Martin, F. (eds) *Culturally Responsive Pedagogy: Working Towards Decolonization, Indigeneity and Interculturalism* (pp. 185-206). Palgrave Macmillan

Barnes, B. R. (2018). Decolonising research methodologies: opportunity and caution. *South African Journal of Psychology,* 48(3), 379-387.

Barnhardt, R. and Kawagley, A.O. (2005). Indigenous knowledge systems and Alaska native ways of knowing. *Anthropology and Education* Quarterly, 36(1), 8-23.

Battiste, M. (1998). Enabling the autumn seed: toward a decolonized approach to Aboriginal knowledge, language, and education. *Canadian Journal of Native Education*, 22(1), 16-27.

Battiste, M., Bell, L., and Findlay, L.M. (2002). Decolonizing education in Canadian universities: an interdisciplinary, international research report. *Canadian Journal of Native Education*, 26(2), 82-95.

Battiste, M. and Henderson, J.Y. (2009). Naturalizing Indigenous knowledge in Eurocentric education. *Canadian Journal of Native Education*, 32(1), 5-18.

Belfield, C.R. and Crosta, P.M. (2012). *Predicting success in college: the importance of placement tests and high school* transcripts*.* (CCRC Working Paper No. 42). New York, NY: Columbia University, Teachers College, Community College Research Center.

Brijmohan, A., Khan, G.A., Orpwood, G., Brown, E.S. and Childs, R.A (2018). Collaboration between content experts and assessment specialists using a validity argument framework to develop a college mathematics assessment. *Canadian Journal of Education*, 41(2), 584-600.

British Columbia Council on Admissions & Transfers (2016). *Admissions Indicators and Practices Leading to the Success of Mature Students.* Retrieved from http://www.bccat.ca/pubs/maturestudentadmissions2016.pdf

Burton, K., Golding, M., and Griffiths, C. (2011). Barriers to learning for mature students studying HE in an FE college. *Journal of Further and Higher Education*, 35(1), 25-36.

Campbell, P. (2006). *Student Assessment in Adult Basic Education: A Canadian Snapshot.* Winnipeg, MB: Centre for Education and Work.

Canadian Council on Learning (2009). *The State of Aboriginal Learning in Canada: A Holistic Approach to Measuring Success*. Ottawa, ON: Author.

Chesters, J. and Watson, L. (2016). Staying power: the effect of pathway into university on student achievement and attrition. *Australian Journal of Adult Learning* 56(2), 225 – 248.

Choi, A.N., Flowers, S.K., and Heldenbrand, S.D. (2018). Becoming more holistic: a literature review of nonacademic factors in the admissions process of colleges and schools of pharmacy and other health professions. *Currents in Pharmacy Teaching and Learning*, 10, 1429-1437.

Claypool, T.R., and Preston, J.P. (2011). Redefining learning and assessment practices impacting Aboriginal students: considering Aboriginal priorities via Aboriginal and Western worldviews. *[Indigenous Education] in Education* 17(3), 84 – 95.

Cobb II, F., and Russell, N.M. (2015). Meritocracy or complexity: problematizing racial disparities in mathematics assessment within the context of curricular structures, practices, and discourse. *Journal of Educational Policy*, 30(5), 631-649.

College Board (2016). *Next-Generation Accuplacer Test Specifications, Release 1.0.* Retrieved from https://secure-media.collegeboard.org/digitalServices/pdf/accuplacer/next-generation-test-specifications-manual.pdf

Colleges and Institutes Canada (May, 2018). Department *of Indigenous Services Canada federal engagement on Indigenous post-secondary review with Colleges and Institutes Canada member institutions*. Facilitated conference call. Ottawa, ON.

Covarrubias, R., Gallimore, R., and Okagaki, L. (2018). "I know that I should be here": lessons learned from the first-year performance of borderline university applicants. *Journal of College Student Retention,* 20(1), 92 – 115.

Crown-Indigenous Relations and Northern Affairs Canada. (2019, February 15). *Newfoundland and Labrador Residential Schools Healing and Commemoration.* Retrieved from https://www.rcaanc-cirnac.gc.ca/eng/1511531626107/1539962009489

Curtis, E., Wikaire, E., Jiang, L., Loto, R., Reid, A., and Reid, P. (2015). Quantitative analysis of a Maori and Pacific admission process on first-year health study. *BMC Medical Education*, 15, 196 – 212.

Danilowicz-Gösele, K., Lerche, K., Meya, J. and Schwager, R. (2017). Determinants of students' success at university. *Education Economics,* 25(5), 513 – 532.

Day, A., Nakata, V., Nakata, M., and Martin, G. (2015). Indigenous students' persistence in higher education in Australia: contextualizing models of change from psychology to understand and aid students' practices at a cultural interface. *Higher Education Research & Development*, 34(3), 501-512.

De, D., and Richardson, J. (2015, September 23). Ensuring cultural safety in nurse education. *Nursing Times*, 111(39), 17-19.

Delaney, C., Doughney, L., Bandler, L., Harms, L., Andrews, S. Nicholson, P. . . . and Ewan, S. (2018). Exploring learning goals and assessment approaches for Indigenous health education: a qualitative study in Australia and New Zealand. *Higher Education* 75), 255 – 270.

De Souza, R. (2019, September 6). Campus diversity needs to encompass more than just race. *National Post*.

Doutrich, D., Arcus, K., Dekker, L., Spuck, J., and Pollock-Robinson, C. (2012). Cultural safety in New Zealand and the United States: looking at a way forward together. *Journal of* Transcultural *Nursing* 23(2), 143 – 150.

Dupuis, J. and Abrams, E. (2017). Student science achievement and the integration of Indigenous knowledge on standardized tests. *Cultural Students of Science Education,* 12, 581 – 604.

Ewing, B. (2017). An exploration of assessment approaches in a vocational and education training course in Australia. *Empirical Research in Vocational Education and Training,* 9, 14 – 27.

Fleet, A., and Kitson, R. (2009). Rethinking assessment in an Indigenous specific program. *The Alberta Journal of* Educational *Research* 55(3), 397 – 413.

Fowler, J.P. (1997). *Report of an Educational Psychology Internship at Cabot College of Applied Arts, Technology and Continuing Education, Including a Research Report on the Effectiveness of the Canadian Adult Achievement Test in Predicting College Grade Point Average for Mature Students* (Master's thesis). Available from the National Library of Canada Acquisitions and Bibliographic Services. (Document ID 0-612-23135-6).

Fowler, A.C., Ewens, B., Vafeas, C., Delves, L. Hayward, C., Nannup, N. and Baum, G. (2018). Closing the gap: a whole of school approach to Aboriginal and Torres Strait Islander inclusivity in higher education. *Nurse Education in Practice*, 30, 86-90.

Foxall, D. (2013). Barriers in education of Indigenous nursing students: a literature review. *Nursing Praxis in New Zealand*, 29(3), 33 - 36.

Friesen, J.B., and Ezeife, A.N. (2009). Making science assessment culturally valid for Aboriginal students. *Canadian Journal of Native Education,* 32(2), 24-37.

Fusezzy, C. (1998). Biculturalism in postsecondary Inuit education. *Canadian Journal of Native Education,* 22(2), 201 – 209.

Gallop, C.J. and Bastien, N. (2016). Supporting success: Aboriginal students in higher education. *Canadian Journal of Higher Education,* 46(2), 206 – 224.

Garneau, A. B., and Pepin, J. (2015). Cultural competence: a constructivist definition. *Journal of Transcultural Nursing*, 26(1), 9-15.

Gerlach, A.J. (2012). A critical reflection on the concept of cultural safety. *Canadian Journal of Occupational Therapy*, 79, 151-158.

Green, R., and Oppliger, A. (2007). The interface between Indigenous and non-Indigenous systems of knowing and learning: a report on a Dharug language programme. *The Australian Journal of Indigenous Education,* 36, 81-87.

Grove, A. (2019, September 29). *What Are* Holistic *Admissions?* Retrieved from https://www.thoughtco.com/what-are-holistic-admissions-788426

Hanson, E. (2009). *The Residential School System.* Retrieved from https://indigenousfoundations.arts.ubc.ca/the_residential_school_system/

Harrison, E.B., Lautensach, A.K., and McDonald, V.L. (2012). Moving from the margins: culturally safe teacher education in remote northwestern British Columbia. *McGill Journal of Education,* 47(3), 323– 342.

Hazelrigg, K. (2016). Report highlights promise of holistic graduate admissions to increase diversity. *The Hispanic Outlook in Higher Education*, 26(7), 8-9.

Health Council of Canada (December 2012). *Empathy, Dignity, and Respect. Creating Cultural Safety for Aboriginal People in Urban Health Care*. Ottawa, ON: Author.

Helms, J.E. (2006). Fairness is not validity or cultural bias in racial-group assessment: a quantitative perspective. *American Psychologist*, 61(8), 845-859.

Hirschman, E., Berrey, E., and Rose-Greenland, R. (2016). Dequantifying diversity: affirmative action and admissions at the University of Michigan. *Theory and Society,* 45, 265 – 301.

Hossain, D., Gorman, D., Williams-Mozely, J. and Garvey, D. (2008). Bridging the gap: identifying needs and aspirations of Indigenous students to facilitate their entry into university. The Australian Journal of Indigenous Education, 37, 9 – 17.

Hunt, E. (2013). Cultural safety in university teaching and learning. *Procedia - Social and Behavioral Science*, 106, 767-776.

James, C.L. (2006). ACCUPLACER Online: accurate placement tool for developmental programs? *Journal of Developmental Education,* 30(2), 2-4, 6-8.

James, C.L., and Francis-Pelton, L. (2005). Using achievement test scores to predict student success in adult basic education. *The Canadian Journal for the Study of Adult Education,* 19(2), 1-13.

Johnston, A. and Claypool, T. (2010). Incorporating a multi-method assessment model in schools that serve First Nations, Inuit, and Métis Learners. *Native Studies Review*, 19(2), 121-138.

Indigenous Corporate Training, Inc. (2012, April 18). *Indian Residential Schools.* Retrieved from https://www.ictinc.ca/indian-residential-schools

Indigenous Physicians Association of Canada. (2007). *Best Practices to Recruit Mature Aboriginal Students to Medicine.* Retrieved from https://www.ipac-amac.ca/downloads/recruitment.pdf

Kim, M. (2017). Indigenous knowledge in Canadian science curricula: cases from western Canada. *Cultural Studies of Science Education*, 12, 605-613.

Koljatic, M., Silva, M., and Cofre, R. (2013). Achievement versus aptitude in college admissions: a cautionary note based on evidence from Chile. *International Journal of Educational Development* 33, 106 – 115.

Levin and Alcorn (1999). Post-secondary education for Indigenous populations. *Adult Learning*, 11(1), 20-26.

Macfarlane, A., Glynn, T., Cavanagh, T., and Bateman, S. (2007). Creating culturally-safe schools for Māori students. *The Australian Journal of Indigenous Education*, 36, 65 – 76.

Masserini, L., Bini, M., and Pratest, M. (2016). Effectiveness of non-selective evaluation test scores for predicting first-year performance in university career: a zero-inflated beta regression approach. *Quality & Quantity,* 51, 693 – 708.

Matthew, S., and Kashyap, U. (2019). Reliability of ACCUPLACER score in predicting success in quantitative reasoning course. *Journal of Research in Science, Mathematics and Technology Education,* 2(1), 1-7.

Medhanie, A.G., Dupuis, D.N., LeBeau, B., Harwell, M.R., and Post, T.R. (2012). The role of ACCUPLACER mathematics placements test on a student's first college mathematics course. *Educational and Psychological Measurement,* 72(2), 332-351.

McGregor, H.E. (2013). Situating Nunavut education with Indigenous education in Canada. *Canadian* Journal *of Education*, 36(2), 87-118.

Munroe, E.A., Lunney Borden, L., Murray Orr, A., Toney, D. and Meader, J. (2013). Decolonizing Aboriginal education in the 21st century. *McGill Journal of Education*, 48(2), 317-337.

National Collaborating Centre for Aboriginal Health. (2013). *Cultural Safety in First Nations, Inuit and Métis Public Health: Environmental Scan of Cultural Competency and Safety in Education, Training and Health Services.* Prince George, BC: Author.

Niessen, A.S.M., and Meijer, R.R. (2017). On the use of broadened admission criteria in higher education. *Perspectives on Psychological Science*, 12(3), 436-448.

Nunavut. Department of Education. (2008). *Foundation for dynamic assessment: Ilitaunnikuliriniq as learning in Nunavut schools.* NU: Author.

Olson, T.A. (2017). Privilege, decentring and the challenge of being (non-) Indigenous in the study of Indigenous issues. *The Australian Journal of Indigenous Education,* 47(2), 206-215.

Orr, D., and Hovdhaugen, E. (2014). 'Second change' routes into higher education: Sweden, Norway and Germany compared. *International Journal of Lifelong Education*, 33(1), 45-61.

Parent, A. (2017). Visioning as an integral element to understanding Indigenous learners' transitions to university. *Canadian Journal of Higher Education,* 47(1), 153 – 170.

Pechenkina, E., and Anderson, I. (2011). Consultation paper on Indigenous Australian higher education: trends, initiatives and policy implications. *Department of Education, Employment, and Workplace Relations, Australian Government.* Retrieved from https://docs.education.gov.au/system/files/doc/other/pechenkina_and_anderson_2011.pdf

Penn, H. (2014). Recognizing cultural safety issues for Indigenous students in a baccalaureate nursing programme: two unique programmes. *Whitireia Nursing and Health Journal*, 21, 29-33.

Philpott, D., Nesbitt, W., Cahill, M. and Jeffery, G. (2004). Educational assessment of First Nations students: a review of the literature. In (Philpott, D.F., Nesbitt, W.C., Cahill, M.F., and Jeffery, G.H. (eds)) *Cultural Diversity and Education: Interface Issues.* St. John's, NL: Memorial University

Pio, E., Tipuna, K., Rasheed, A. and Parker, L. (2014). Te Wero – the challenge: reimagining universities from an Indigenous world view. *Higher Education,* 67, 675 – 690.

Poortinga, Y.H. (1995). Cultural bias in assessment: historical and thematic issues. *European Journal of Psychological Assessment*, 11(3), 140-146.

Rameka, L. (2007). Mäori approaches to assessment. *Canadian Journal of Native Education*, 30(1), 126-144.

Restoule, J-P. (2011). Looking for a way in: Aboriginal youth talk about access to university in Ontario. *The Canadian Journal of* Native *Studies,* 31(2), 47 – 62.

Restoule, J-P., Mashford-Pringle, A., Chacaby, M., Smillie, C., Brunette, C., and Russel, G. (2013). Supporting successful transitions to post-secondary education for Indigenous students: lessons from an institutional ethnography in Ontario, Canada. *The International Indigenous Policy Journal,* 4(4), Art. 4.

Sandlin, M. (2019). And admissions/enrollment imperative for predicting student success. *College and University*, 4(2), 2-11.

Sarra, G., and Ewing, B. (2014). Indigenous students transitioning to school: responses to pre-foundational mathematics. *Springer Plus,* 3, 685 – 693.

Schmelkes (2018). Toward an intercultural approach to evaluation: a perspective from the National Institute for Educational Evaluation in Mexico (INEE). *Education Policy Analysis Archives* 26(52), 1-11.

Schmidt, P. (2016). In admissions decisions, the deciders' own backgrounds play a big role. *The Chronicle of Higher Education*; Washington, April 12, 2016.

Schmitt, N. (2012). Development of rationale and measures of noncognitive college student potential. Educational *Psychologist,* 47(1), 18 – 29.

Smith, L.T. (1999). *Decolonizing Methodologies Research and Indigenous Peoples.* London, UK: Zed Books Ltd.

Solano-Flores, G., and Nelson-Barber, S. (2001). On the cultural validity of science assessments. *Journal of Research in Science Teaching*, 38(5), 553-573.

Statistics Canada. (2018, July 18). *Aboriginal Population Profile, 2016 Census*. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/abpopprof/index.cfm?Lang=E

Statistics Canada. (2019, June 18). *Census Profile, 2016 Census*. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

Stemler, S.E. (2012). What should university admissions tests predict? *Educational Psychologist*, 47(1), 5-17.

Sternberg, R. (2012). College admissions: beyond conventional testing. *Change: The Magazine of Higher Learning* 44(5), 6-13.

Sternberg, R.J., Bonney, C.R., Gabora, L., and Merrifield, M. (2012). WICS: a model for college and university admissions. *Educational Psychologist,* 47(1), 30 – 41.

Stoffer, J. (2017). The importance of culturally safe assessment tools for Inuit students. *The Australian Journal of Indigenous Education*, 46(1), 64-70.

Sullivan, P. and Nielsen, D. (2013). "Ability to benefit": making forward-looking decisions about our most underprepared students. *College English*, 75(3), 319-343.

Sutton, H. (2018). Race-conscious admission requires focus, evidence-based results – not perfection. Enrollment *Management Report*, 22(3), 6-7.

Testa, D., and Egan, R. (2014). Finding voice: the higher education experiences of students from diverse backgrounds. *Teaching in Higher Education,* 19(3), 229 – 241.

The Alberta Counselletter. (2017, February). Aboriginal Access Programs. *The Alberta Counselletter*, 10 - 12.

The Glossary of Education Reform. (2015, November 12). *Standardized Test*. Retrieved from https://www.edglossary.org/standardized-test/

Tranter, D. (2012). Unequal schooling: how the school curriculum keeps students from low socio-economic backgrounds out of university. *International Journal of Inclusive Education* 16(9), 901 – 916.

Trumbull, E. and Nelson-Barber, S. (2019). The ongoing quest for culturally-responsive assessment for Indigenous students in the U.S. *Frontiers in Education*, 4(40), 1-11.

Truth and Reconciliation Commission of Canada. (2015). *Truth and Reconciliation Commission of Canada: Calls to Action.* Winnipeg, MB: author.

Verwoord, R., Mitchell, A., and Machado, J. (2011). Supporting Indigenous students through a culturally relevant assessment model based on the medicine wheel. *Canadian Journal of Native Education*, 34(1), 49-66.

Vogel, L. (2018, June 25). Residency programs grapple with new Indigenous cultural safety training requirement. *Canadian Medical Association Journal*, 190(25), E778-9.

Wang, F. (2013). Educational equity in the access to post-secondary education: a comparison of ethnic minorities in China with Aboriginals in Canada. *Interchange*, 44, 45-62.

Ward, C., Branch Fridkin, C., and Fridkin, A. (2016). What is Indigenous cultural safety –and why should I care about it? *Visions: BC's Mental Health and Substance Use Journal*, 11(4), 29-34.

Ward, E.M.G., Semken, S., and Libarkin, J.C. (2014). The design of place-based, culturally informed geoscience assessment. *Journal of Geoscience Education,* 62(1), 86 – 103.

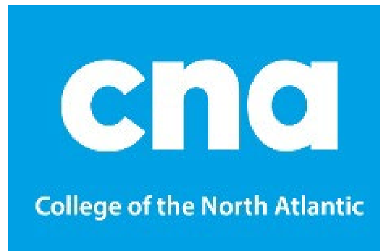
Warren, E. and Miller, J. (2013). Young Australian Indigenous students; effective engagement in mathematics: the role of language, patterns, and structure. *Mathematics Education Research Journal,* 25, 151 – 171.

Weadon, H. and Baker, A. (2014). Deviation from the norm: innovative student pathways for successful TAFE/university transition. *International Journal of Training Research,* 12(3), 192 – 202.

Westrick, P.A., Le, H., Robbins, S.B., Radunzel, J.M.R., and Schmidt, F.L. (2015). College performance and retention: a meta-analysis of the predictive validities of ACT scores, high school grades, and SES. Educational *Assessment,* 20, 23 – 45.

Zerwic, J.J., Scott, L.D., McCreary, L.L., and Corte, C. (2018). Programmatic evaluation of holistic admissions: the influence on students. *Journal of Nursing Education* 57(7), 416 – 421.

6.2 Alternate Admission Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges



Alternate Admission Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges

College of the North Atlantic
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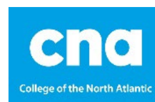
Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples is a research project led by College of the North Atlantic and funded by the NL Workforce Innovation Centre (NLWIC).

The NLWIC, administered by the College of the North Atlantic (CNA), has a provincial mandate to provide a co-ordinated, central point of access to engage all labour market stakeholders about challenges, opportunities and best practices in workforce development.

The Centre's goal is to promote and support the research, testing and sharing of **ideas** and models of **innovation** in workforce development that will positively **impact** employability, employment, and entrepreneurship within the province's labour force and particularly under-represented groups. Funding for NLWIC is provided by the Department of Advanced Education, Skills and Labour (AESL) under the Canada-Newfoundland and Labrador Labour Market Development Agreement.



Land Acknowledgement

The Readiness Project would like to acknowledge this project is being carried out in the province of Newfoundland and Labrador, within the traditional territories of the Innu, Inuit, Mi’kmaq, and Beothuk peoples. We offer our respects to these Indigenous cultures and recognize their continued connection to the land.

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Introduction

As early as the 1990s, Indigenous organizations in Labrador have expressed concerns about how College of the North Atlantic (CNA) has approached admission assessments of Indigenous adults applying as mature students. The use of the Canadian Adult Achievement Test (CAAT) as the primary deciding factor for alternate admissions has been seen as unnecessarily arduous and culturally inappropriate. In 2016, as part of an Indigenous research project sponsored by the Atlantic Aboriginal Economic Development Integrated Research Program (AAEDIRP), CNA's Happy Valley-Goose Bay Campus hosted a two-day series of talking circles with Indigenous Elders, representatives of Indigenous governments, Indigenous students, and industry. During those discussions, Chief Eugene Hart of the Sheshatshiu Innu First Nation reiterated issues around admission assessment and asked that CNA find another way.

To address the concerns expressed by Indigenous partners, CNA, with funding by the NL Workforce Innovation Centre (NL WIC), has initiated a project titled "Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples" (The Readiness Project). The purpose of The Readiness Project is to collaborate with Indigenous partners to improve the admission pathway to CNA for Indigenous mature student applicants so that it respects Indigenous identities, languages, and ways of knowing. It is our hope that by providing a culturally appropriate process for Indigenous mature students, we will reduce barriers and therefore increase their access to CNA programs.

The Readiness Project is a three-year endeavour consisting of two main phases. Phase one involves information-gathering and consultations with Indigenous partners and key stakeholders and will result in the development (or adoption) of an admission pathway to CNA that is appropriate for Indigenous mature student applicants. In phase two, we will pilot and evaluate the admission pathway. This environmental scan is part of phase one of the project; key findings were presented to our Indigenous partners and will be considered when deciding on a new admission process.

Background

Status of Indigenous Education

While it is challenging to track statistics on Indigenous post-secondary students in Canada, reported attrition rates for Indigenous students vary from 10 to 50 percent (Aboriginal Nurses Association of Canada, 2009; Canadian Council on Learning, 2009). Census data indicates that there remains a gap in educational attainment between Indigenous and non-Indigenous students in Canada at both the high school and post-secondary levels (Statistics Canada, 2018). This disparity in education was acknowledged by the Truth and Reconciliation Commission of Canada (2015, p. 1-2), which called "upon the federal government to develop with Aboriginal groups a joint strategy to eliminate education and employment gaps between Aboriginal and

non-Aboriginal Canadians." While it is important to acknowledge that this gap exists and more work needs to be done, it is equally important to acknowledge the gains that have been made. In 2016, 49.3 percent of Indigenous adults 25 – 64 had a post-secondary certificate, diploma, or degree, an 8.3 percent increase over 2006 census data (Canadian Council on Learning, 2009; Statistics Canada, 2018).

In Newfoundland and Labrador, most Indigenous people are represented by five major Indigenous governing bodies, each with their own unique histories, cultures, and experiences with education. Innu First Nation, NunatuKavut Community Council, and Nunatsiavut Government are based in the Labrador portion of the province, and Miawpukek First Nation and Qalipu First Nation are based in the Newfoundland portion of the province. Innu First Nation and Miawpukek First Nation own and operate their own schools and have added cultural aspects to their curricula delivery (AEDIRP, 2016), while K-12 education for NunatuKavut, Nunatsiavut, and Qalipu First Nation members falls under the jurisdiction of the Newfoundland and Labrador English School District. Each Indigenous community has different rates of high school completion and post-secondary attainment. For some communities, education levels are similar to the general population of NL; for others, there is still a gap in education compared to the general population of NL (Statistics Canada, 2019).

This disparity in education matters, as higher levels of education are associated with higher rates of employment, higher wages, and better health outcomes (Saskatchewan, 2016). Obtaining education credentials can have a powerful, transformative effect on the lives of mature students, improving feelings of self-worth, opening up employment opportunities, and enabling mature students to be self-sufficient (Youmans, Godden, & Hummell, 2017).

Barriers to Education

When discussing Indigenous education in Canada, it is vital to acknowledge the effect of the residential school system and other negative and assimilative historic practices (Indigenous Corporate Training Inc, 2012; R.A. Malatest & Associates Ltd. 2002). While the last residential school closed in 1996, their profound negative effects are still visible today, extending beyond the individual and affecting communities, children, and grandchildren of survivors (Hanson, 2009; Indigenous Corporate Training Inc, 2012). In Newfoundland and Labrador, Innu and Inuit youth attended residential schools between 1949 and 1980 (Crown-Indigenous Relations and Northern Affairs Canada, 2019). For some Indigenous communities, there remains a legacy of distrust in the education system, and many Indigenous students still perceive post-secondary institutes as having strong assimilative forces at play (R.A. Malatest & Associates Ltd. 2002). In addition to these historical barriers, previous environmental scans have identified additional barriers to education that some Indigenous students must overcome to access and complete post-secondary education. These include social, financial, cultural, personal, and systemic barriers.

Social Barriers. Social barriers arise due to the circumstances in which people are born, grow, live, learn, work and age (Centers for Disease Control and Prevention, 2019). Social barriers faced by some Indigenous students include:

- Difficulties relocating for school – many Indigenous people live in rural communities and must move away from their families and sources of social support to access post-secondary education (Association of Canadian Community Colleges (ACCC), 2010)
- Loneliness, isolation, and social discrimination – while attending school, some Indigenous students feel isolated and cut off from their friends and families, and some face discrimination and racism (ACCC, 2010; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002).
- Lack of academic preparation and/ or prerequisite courses – this is especially true for students living in rural areas, as often schools in rural areas do not offer advanced courses that are pre-requisites for some post-secondary programs. This can contribute to high drop-out rates or, for those that finish high school, may cause them to face additional years of upgrading to get the necessary courses to gain entry to their desired post-secondary program. Additionally, some Indigenous students did not have the opportunity to complete high school, and may not have the study skills, computer skills, or other skills needed for post-secondary programs (ACCC, 2010; J. Lane, personal communication, June 4, 2020; R.A. Malatest & Associates Ltd. 2002).
- Lack of awareness of role models – role models are an important source of motivation, and a perceived lack of Indigenous role models who have completed a post-secondary program can be interpreted to mean that post-secondary education is not an option for Indigenous people (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002)
- Family responsibilities – Indigenous post-secondary students are more likely to have dependents than non-Indigenous post-secondary students, and this can translate into a host of demands such as finding daycare, babysitting, transportation, and more. Additionally, some Indigenous communities have a larger focus on family and communal responsibilities than mainstream Canadian communities. These additional responsibilities often take precedence over academic goals and are very real barriers to higher academic achievement (ACCC, 2010; McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; Youmans et al. 2017).

Financial barriers. Higher rates of unemployment and poverty in Indigenous communities mean that many prospective Indigenous students are unable to bear the cost of post-secondary education without funding from other sources. While there are programs that provide Indigenous adults with funding for school, there is often not enough funding for everyone wishing to attend. Available funding can be inadequate to cover the real costs of living away from home, and funding often does not factor in childcare, existing debt, and other payments and family costs that mainstream students usually do not have (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002; Seston, Talija, & Aitchison, 2018). In some cases, mature students leave

programs because they must work in order to cover their expenses (McQuarrie, 2013; Youmans et al. 2017).

Cultural barriers. Cultural differences often exist between Indigenous communities and post-secondary institutions. In many cases, faculty and staff have a different cultural and socioeconomic background than Indigenous students. They often do not understand Indigenous traditions or core values, do not fully understand the complexity and diversity within Indigenous communities, and do not understand that some Indigenous students have different cognitive and learning styles than mainstream Canadian students. These differences can act as barriers to the recruitment, retention, and success of Indigenous students in post-secondary programs (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002).

Personal barriers. Some Indigenous students experience barriers such as low self-esteem, feelings of powerlessness, anger, and frustration. This can manifest as poor physical health and mental health, apathy, anxiety and panic attacks. Some Indigenous students may also have had negative experiences with formal education in the past (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002).

Systemic barriers. Policies and practices may inadvertently disadvantage certain groups. For Indigenous mature students systemic barriers can include a lack of accessible information about options for Indigenous and mature students; lengthy, confusing, and inflexible admission processes; application deadlines that do not align with funding agency requirements; and strict program attendance requirements or timetabling that does not fit the needs of mature students with family or work responsibilities (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002).

Previous Environmental Scans

Public post-secondary institutions in Canada have started implementing policies, procedures, and services to level the playing field, with a goal to increase Indigenous adults' access to and completion of post-secondary education programs (ACCC, 2010; Colleges Ontario, 2018; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017; University of Windsor Senate, n.d.). Before presenting findings from our environmental scan, we will provide an overview of practices that have been identified in other environmental scans of Canadian public post-secondary institutions meant to address some of the above barriers to education for Indigenous adults and/ or mature students in Canada.

Challenges with Data Collection

When reviewing environmental scans related to mature students and Indigenous post-secondary students, it is important to consider the challenges involved with tracking and accessing data. Canadian post-secondary institutes rely on students to self-identify as Indigenous (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002). It is optional to self-identify, and there are often students who choose not to, leading to incomplete or inconsistent data,

sometimes "patched together" by manually combining data from different sources (ACCC, 2010; R.A. Malatest & Associates Ltd. 2002). Some Indigenous organizations have indicated that even census data should be viewed as an estimate rather than precise information, as some Indigenous people distrust the government and avoid providing the government with information (R.A. Malatest & Associates Ltd. 2002). Some reasons students may choose not to self-identify include mistrust of the institute, fear that self-identifying will negatively impact their application, or a desire not to be "singled out" as an Indigenous person (ACCC, 2010). Efforts to encourage more students to self-identify focus on increasing student awareness of the importance of tracking this information and ensuring students are aware of the services and supports available to Indigenous students (ACCC, 2010).

There are also challenges related to data on mature students. There is a lack of a standard definition of 'mature student' across Canada, and a lack of research surrounding mature students, as often, mature students are examined in the context of other research rather than on their own (Karpinsky, 2016; McQuarrie, 2013; Seston et al. 2018). Additionally, barriers and solutions are not easily quantified or compared, different barriers may be more or less challenging to different students, and the idea of educational success can be culturally dependent (McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002). Last, but certainly not least, figures on student retention do not take into account that many mature students and Indigenous students that "drop out" later return and finish their program (R.A. Malatest & Associates Ltd. 2002; Youmans et al. 2017).

General Best Practices

There are three broad, administration-level best practices that were commonly brought up in the environmental scans we reviewed.

Engaging with Indigenous communities is critical to providing program and training opportunities that will meet their needs (ACCC, 2010; Saskatchewan, 2016; University of Windsor Senate, n.d.). Post-secondary institutes should also work with Indigenous communities when developing strategic plans and keep open lines of communication to build partnerships and trust (Colleges Ontario, 2018; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017).

Increasing Indigenous representation at post-secondary institutions will help provide a welcoming environment for Indigenous students and allow them to celebrate their culture. This can include hiring more Indigenous faculty and staff and ensuring there is Indigenous representation at the senior management level and/ or creating an Indigenous education council with a governance mandate (ACCC, 2010; Colleges Ontario, 2018; Saskatchewan, 2016). All public colleges in Ontario have Indigenous Education Councils, and at least half of Ontario colleges are working to hire more Indigenous faculty and staff (Colleges Ontario, 2018).

Increasing awareness of Indigenous cultures, values, and issues will help create a safe atmosphere for Indigenous students. Specific activities to achieve this include seminars,

workshops, conferences, cultural competency training, presentations for new hires, and developing Indigenous land acknowledgements (Colleges Ontario, 2018; Saskatchewan, 2016; University of Windsor Senate, n.d.; Zarpa & Shea, 2018).

Recruitment

Some colleges are leveraging their Indigenous student recruitment strategies as a tool to reduce barriers to higher education (Saskatchewan, 2016; R.A. Malatest & Associates Ltd. 2002; University of Windsor Senate, n.d.). According to a 2010 environmental scan of Canadian colleges by the Association of Canadian Community Colleges, 98% of colleges surveyed had a recruitment strategy in place specifically aimed at increasing Indigenous participation in their programs. In a 2018 environmental scan of public colleges in Ontario, Colleges Ontario reported that a "large majority" worked with Indigenous workforce development boards, held community engagement sessions, and/ or promoted post-secondary pathways. In order to effectively utilize Indigenous recruitment strategies to reduce barriers, the University of Windsor's (n.d.) Indigenous recruitment efforts include the following (and more, p. 76):

- Profile Indigenous learners
- Promote student success
- Identify Indigenous learners in transition to post-secondary education
- Engage with Indigenous learners as role models
- Work with Indigenous communities to enhance post-secondary education
- Increase awareness of post-secondary programs and services
- Build and maintain positive relationships with Indigenous communities
- Develop and maintain web-based information on programs, funding, extracurricular activities, and more
- Create ease of information and best practices catalogue

Admission Processes and Procedures

Previous environmental scans point to a need for supportive admission policies and procedures, based on evidence, that address key issues for Indigenous and mature students (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002). Some mature students have been out of formal education for a long time, yet many post-secondary institutions still require them to submit transcripts that are many years old (Karpinsky, 2016). This can be problematic and may not indicate current capabilities. Karpinsky (2016) indicates that for mature students, length of time out of formal education, self-confidence, and the ability to balance work, life, and school responsibilities are noteworthy criteria when making admission decisions. Additionally, McQuarrie (2013) points out that incomplete, insufficient, or late information can be enough to discourage mature students from applying.

Ways that admission policies can be supportive for Indigenous students include offering reserved seats in some programs; waiving application fees; offering flexible deadlines to allow for funding agency requirements; and creating opportunities for Indigenous applicants to

upgrade their academic knowledge and skills during the admission process (ACCC, 2010; Karpinsky, 2016). Some environmental scans recommend a separate admission process for Indigenous students, enabling Indigenous students to upgrade their academic skills during the admission process if necessary, offering widened or different admission criteria, and using alternative assessment techniques (Karpinsky, 2016; R.A. Malatest & Associates Ltd. 2002). While none of the colleges we included in our environmental scan offered a separate admission process for Indigenous students, Australian post-secondary institutes do, and Kwantlen Polytechnic University in British Columbia offers an alternative pathway for Indigenous students who do not meet normal entrance criteria (Kwantlen Polytechnic University, n.d.; R.A. Malatest & Associates Ltd. 2002).

Some environmental scans indicated a need to deepen the available supports to Indigenous and mature students before, during, and after they have been accepted to a program (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013). They recommend integrating recruitment, upfront career counselling, and linkages to support services into Indigenous student support departments, and highlighted the importance of first contact, one-on-one services for Indigenous applicants throughout the application phase and during pre-registration for subsequent semesters (ACCC, 2010; Karpinsky, 2016). This includes ongoing communication with communities and high school counsellors, strengthening communication ties between Indigenous services departments and other departments (such as registrar offices, cash offices, and financial aid offices), and recognition that admission should not be examined in isolation (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013).

Assessments

In Canada, most colleges do not have assessment services specifically for Indigenous students and applicants, instead using the same services for everyone (ACCC, 2010). ACCUPLACER and the Canadian Adult Achievement Test (CAAT) were the most common tests used among the colleges included in ACCC's environmental scan in 2010, although anecdotal evidence from one college suggested that the CAAT was a potential barrier for Indigenous applicants, as they tended to not perform well on that test. In addition to tests, other entrance assessments included prior learning assessments, career assessments, and assessing the match or suitability of the applicant to the program (ACCC, 2010; Karpinsky, 2016). Colleges agreed that flexible, customized practices should be used for Indigenous applicants, such as alternate, culturally appropriate assessments, and that admission decisions should be holistic in nature, considering the history and challenges applicants may have faced, as well as past school and work experiences (ACCC, 2010; Karpinsky, 2016; R.A. Malatest & Associates Ltd. 2002).

In response to evidence that mainstream assessment disadvantages Indigenous Australians, Australian post-secondary institutions began measuring Indigenous students in different ways than non-Indigenous students, using oral assessments and accommodating Indigenous learning styles (R.A. Malatest & Associates Ltd. 2002). Some view this as favouritism or lowering of standards, and some Canadian stakeholders did not view alternative assessment as a viable

option, believing it could lead some students to feel ill-prepared and overwhelmed during their program of study (R.A. Malatest & Associates Ltd. 2002). However, many stakeholders felt that because many Indigenous people have made it to post-secondary education under extremely difficult circumstances, they should have different admission criteria than non-Indigenous people (R.A. Malatest & Associates Ltd. 2002).

Program Considerations

ACCC (2010) provided estimates of the types of programs self-identified Indigenous students were enrolled in at the colleges included in their environmental scan (p. 13):

- 24% enrolled in ABE
- 3% enrolled in preparatory programs
- 28% enrolled in career or technical programs
- 11% enrolled in trades and apprenticeship programs
- 6% enrolled in Indigenous-specific career or technical programs
- 7% enrolled in university preparatory or transfer programs
- 20% enrolled in other programs

Preparatory programs, unlike ABE or other upgrading programs, require students to possess a high school diploma or equivalent, and allow students to gain pre-requisite courses for college programs (ACCC, 2010). ACCC (2010) noted that a significant portion of Indigenous students at the colleges in their scan were enrolled in adult upgrading, and that almost all colleges in their scan offered adult upgrading. The University of Calgary (2017) similarly acknowledged that Indigenous post-secondary students in Alberta follow a different pathway than non-Indigenous post-secondary students; a larger proportion of Indigenous post-secondary students were enrolled in preparatory, upgrading, or other non-credential courses. Other environmental scans have also highlighted the importance of offering adult upgrading for those who have not had the opportunity to finish high school, as it can act as a transition to post-secondary programs, improve Indigenous student success in post-secondary programs, and can increase the employability of Indigenous high school non-graduates, ultimately contributing to a "sustainable and diversified economy" (McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017; Youmans et al. 2017).

In addition to upgrading and preparatory programs, Canadian post-secondary institutions are also focusing on Indigenous-specific certificate and diploma programs (offered by 71% of colleges in ACCC's 2010 environmental scan) and community-based programs (offered by 50% of colleges in ACCC's 2010 environmental scan). Previous scans highlighted the importance of asking Indigenous communities what they need and responding with appropriate programs, embedding Indigenous content in curriculum, offering alternative delivery models with options for those with work and family responsibilities, and offering community-based programming (College Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; Youmans et al. 2017).

Support Services

A theme which has repeatedly emerged from previous environmental scans (and also in other literature we reviewed, see Dowden & Williams, 2019) is that admission policies for Indigenous mature students cannot be viewed in isolation; many factors unrelated to academic ability impact the success of Indigenous and mature students in post-secondary programs, and supports can help students overcome these barriers (McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; University of Calgary, 2017; Youmans et al. 2017).

Creating a welcoming environment is a critical component to supporting Indigenous mature student success, as student persistence can be dependent on feelings of safety and belongingness (Ontario, 2018; University of Calgary, 2017; Youmans et al. 2017). ACCC (2010) and Colleges Ontario (2018) found that most colleges included in their environmental scans have made efforts to provide a welcoming environment. Common practices include:

- A gathering place for Indigenous students (ACCC, 2010; Colleges Ontario, 2018; Ontario, 2018; Saskatchewan, 2016; University of Calgary, 2017)
- Land acknowledgements (Colleges Ontario, 2018)
- Organizing social gatherings or events showcasing traditional activities (Colleges Ontario, 2018; Ontario, 2018; University of Windsor Senate, n.d.)
- Displays of Indigenous art or artifacts (Colleges Ontario, 2018)
- Signs and/ or building names in Indigenous languages (Colleges Ontario, 2018; Saskatchewan, 2016)

Wrap-around supports were also deemed critical. Most colleges reviewed by ACCC (2010) and all colleges reviewed by Colleges Ontario (2018) offered Indigenous-specific wrap-around supports (however specific supports offered differed by college). Below is a list of wrap-around supports that could help increase success of Indigenous and/ or mature students:

- Academic and learning supports (ACCC, 2010; Colleges Ontario, 2018; R.A. Malatest & Associates Ltd. 2002)
- Personal counselling (ACCC, 2010; Colleges Ontario, 2018; Ontario, 2018; Youmans et al. 2017)
- Support or referrals for housing, daycare, financial counselling, and/ or food banks (ACCC, 2010)
- Transportation (ACCC, 2010; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016)
- Mentorship and/ or peer support programs (ACCC, 2010; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; University of Calgary, 2017)
- Access to Elders (ACCC, 2010; Colleges Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016)

- Information or access to scholarships, bursaries, or awards (Colleges Ontario, 2018; McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; University of Calgary, 2017; University of Windsor Senate, n.d.)

R.A. Malatest & Associates Ltd. (2002) notes that for supports to be most effective at reducing barriers they must be provided on an on-going basis, relevant to the needs of students, and *proactive*. Post-secondary institutes must also be careful not to assume the needs of students are being met. Survey results by Ontario's Ministry of Education (2018) indicated a disparity between student perceptions and faculty and staff perceptions on Indigenous events – faculty and staff were much more likely to agree their institution held Indigenous events than students.

Current Project

To obtain a better understanding of the alternate admission policies and practices in place for Indigenous and mature students at other Canadian colleges, we conducted an environmental scan of a selection of colleges across Canada. Specifically, we reviewed mature student policies and processes and supports for Indigenous students and applicants.

Methodology

Due to the large number of colleges in Canada, we originally limited our environmental scan to the 52 English colleges who signed Colleges and Institutes Canada's (CICan) Indigenous Education Protocol (CICan, n.d.) as of June 2019. Signatories to the Protocol commit to making Indigenous education a priority. See Appendix A for a complete list of colleges included in the environmental scan. Because Prince Edward Island (PEI) did not have a signatory to the Protocol by June 2019, we included one non-signatory college from PEI to ensure we captured current practices in PEI; this gave a total of 53 colleges for review. We adopted a multi-pronged approach to obtain as much information as possible. We began by reviewing the websites of each college to record their policies for mature student applicants, including admission tests used and available access or bridging programs. We also noted any special supports for Indigenous applicants and specialized services available to Indigenous applicants and students. Many of the colleges had sufficient information on their websites; however, a little more than half (28) of the college websites did not state which admission assessments they used or provided incomplete information on their mature student policy. To fill these information gaps, we partnered with CICan to distribute a survey to member colleges. CICan sent 55 colleges a short questionnaire on our behalf; however only 2 colleges responded, leaving a very low response rate of 4 percent. We next called the admission offices and/ or testing centres of the 28 colleges we were seeking further information from. We spoke with someone in the admission office or the testing centre at 21 colleges; for those colleges we could not reach on the phone (6), we followed up via e-mail.

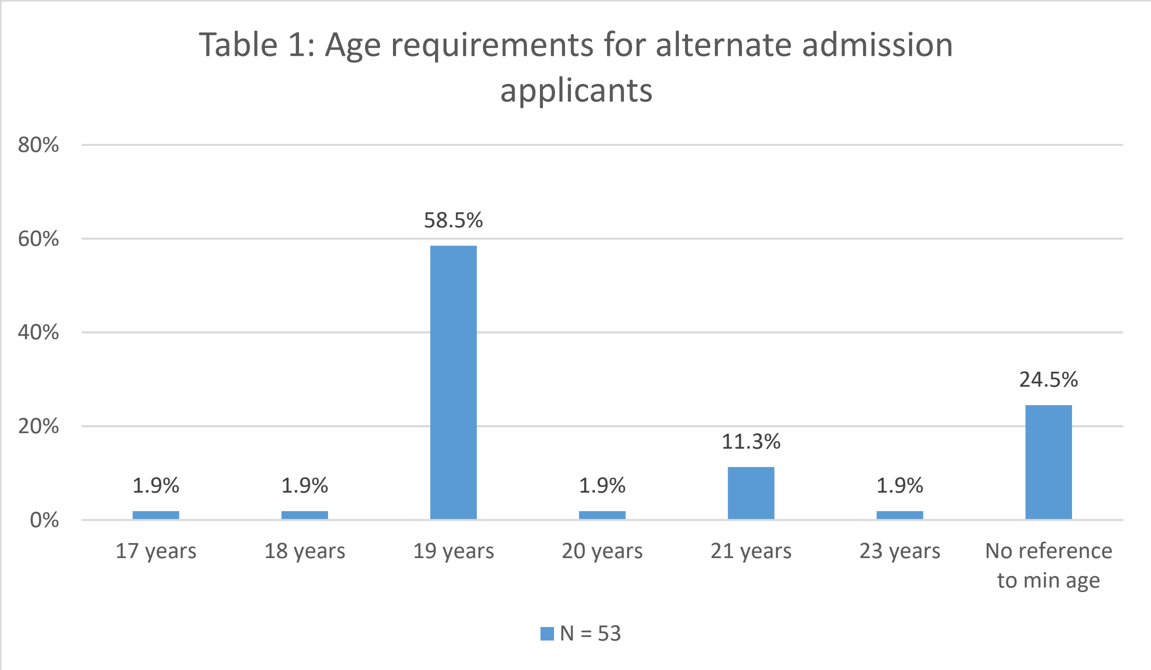
Results

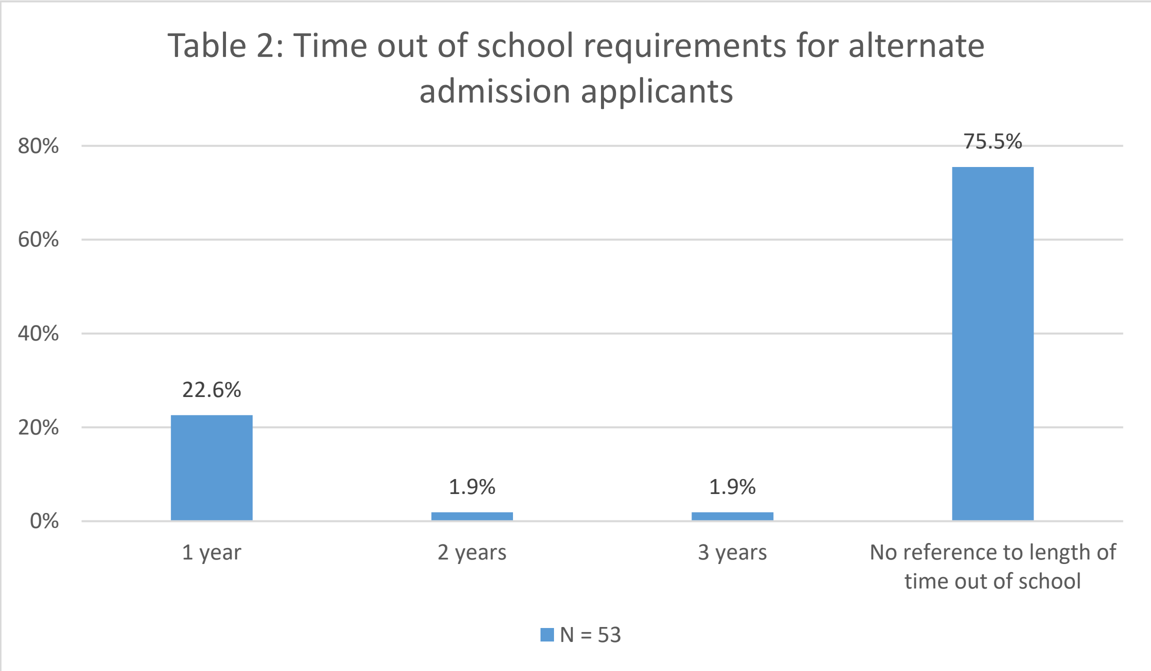
We reviewed the policies and practices of 53 colleges across Canada. While every province except NL was represented, most colleges were located in Ontario (19), British Columbia (11), and Alberta (7). For comparison purposes, we provided a description of CNA policies, practices, and supports in the appropriate sections. CNA is NL's only public college and has 17 campuses across the province.

Alternate Admission Policies. There were a variety of alternate admission policies in place for applicants who do not meet entrance requirements, but most colleges (75.5%) require these students to meet a minimum age requirement under a 'mature student' policy. The minimum age requirement ranges from 17 years to 23 years, but 19 years is most commonly used (see Table 1). Most colleges (75.5%) do not require alternate admission applicants to be out of school for a period of time before they can be considered for admission; but for those schools who do, the requirement for time out of school ranges from 1 year to 3 years (see Table 2). Some colleges that offer Bachelor Degrees have separate requirements for degree program applicants, and one college (Yukon College) has two sets of guidelines: either 17 years and older and out of school for at least one year; *or* 19 years and older with no required time out of school.

CNA has two alternate admission procedures for applicants who do not meet minimum entrance requirements: mature student admission and special admission. Mature student admission is only available for programs following the "First Qualified, First Accepted" admission process, and requires applicants to be at least 19 years old when they apply *and* out of school for at least one year (CNA, 2019). The special admission procedure allows CNA to "designate groups comprised of individuals who face traditional barriers to post-secondary entry" (CNA, 2019, p. 4), and these admission decisions are made by a committee. Through special admissions, applicants may be asked to provide a letter of recommendation and/or meet other requirements as determined by the College. There is also a process, also referred to as special admissions, for applicants with disabilities who have completed a modified high school curriculum.

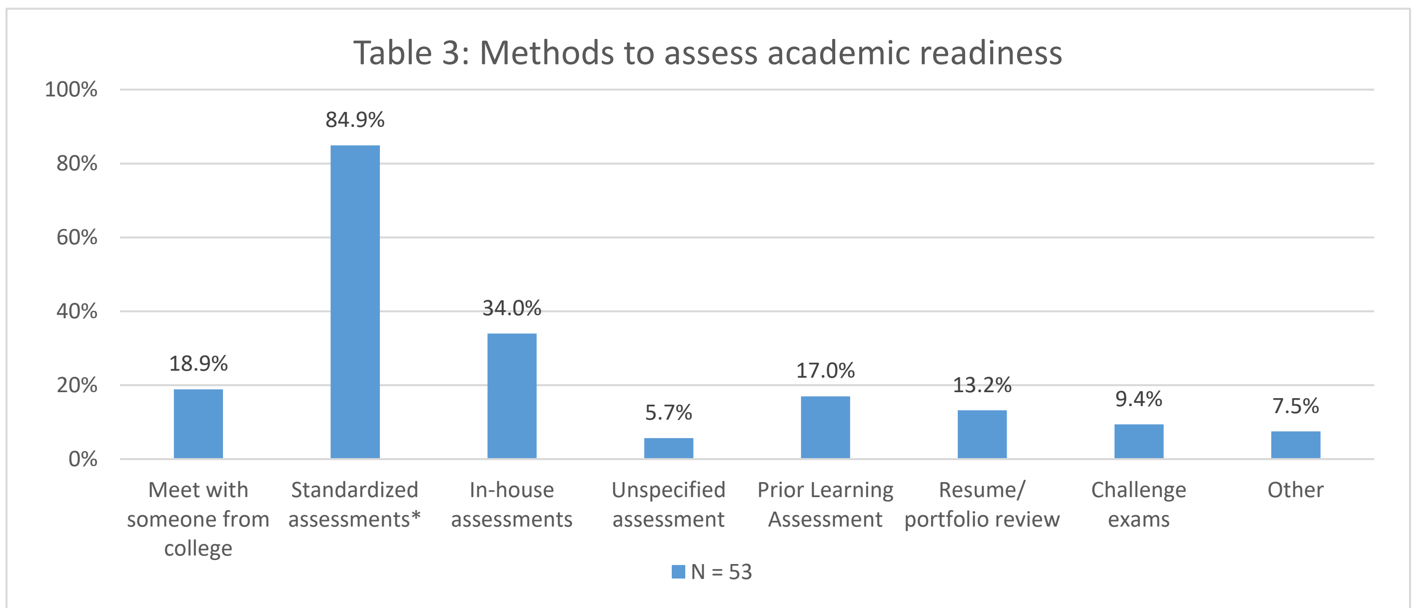
Many colleges (39.6%) do not require a high school diploma or equivalent for some of their programs, instead listing pre-requisite courses as requirements based on the program content. In Quebec, the provincial government has mandated that the minimum requirement for entry to post-secondary institutes is a high school diploma or equivalent (Service Régional d'admission du Montréal Métropolitan, n.d); however, there still appears to be processes in place to admit applicants without a high school diploma or equivalent.





Most programs at CNA have a minimum entrance requirement of a high school diploma or equivalent, although occasionally special contract training programs are available with lower entry requirements (CNA, 2019). Further, some CNA programs have specific course pre-requisites (in addition to minimum entrance requirements) that cannot be waived through the mature student process.

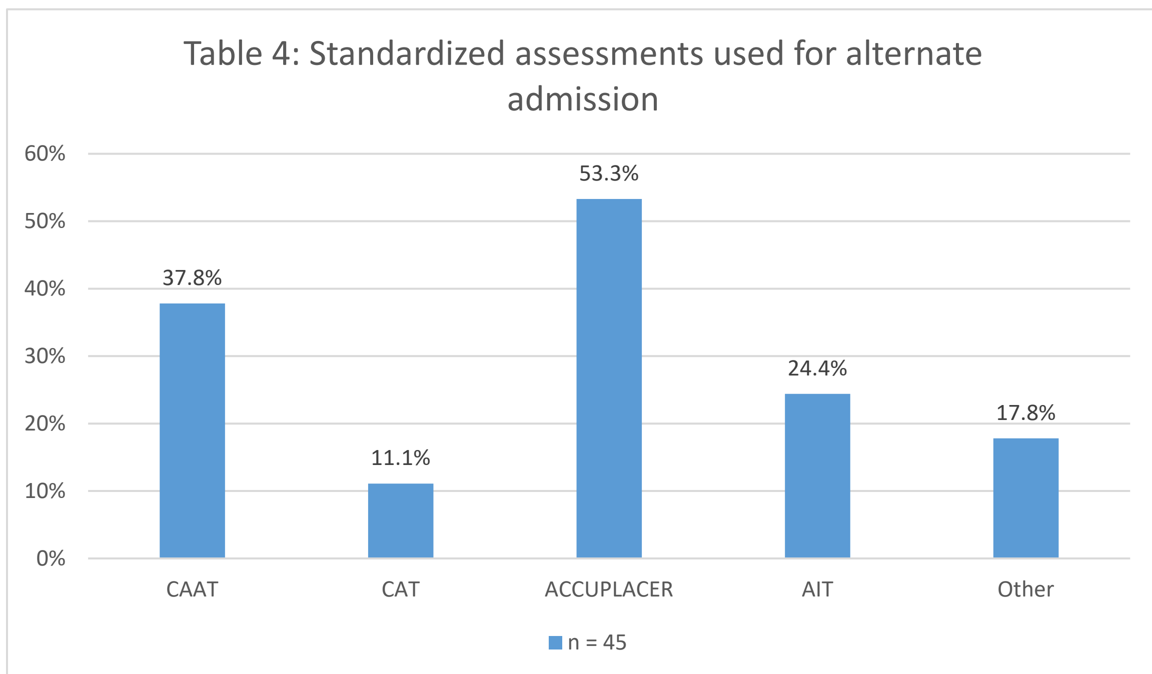
Assessing Readiness. There was variation in methods to assess academic readiness for applicants who do not meet entrance requirements, although almost all colleges use a standardized or in-house test as part of their assessment (21 colleges use multiple assessment methods, see Table 3). The two colleges that do not use testing to assess readiness require their applicants to complete the pre-requisite courses they are missing before they can be admitted to their program of choice. Other methods to assess readiness include meeting with someone from the college (18.9%), prior learning assessments (17%), résumé or other document review (13.2%) and challenge exams for specific courses (9.4%). A small number of schools use other methods to assess readiness, including letters of recommendation and permission of the instructor (the program instructor has reasonable evidence that a student could be successful despite not meeting program requirements). Interestingly, many colleges offer prior learning assessments to provide students with credit for college courses, but only 9 colleges use it to assess readiness for applicants who do not meet entrance requirements.



* Standardized assessments refer to assessments developed by test publishing companies or other organizations outside of the college. These may or may not be norm-referenced.

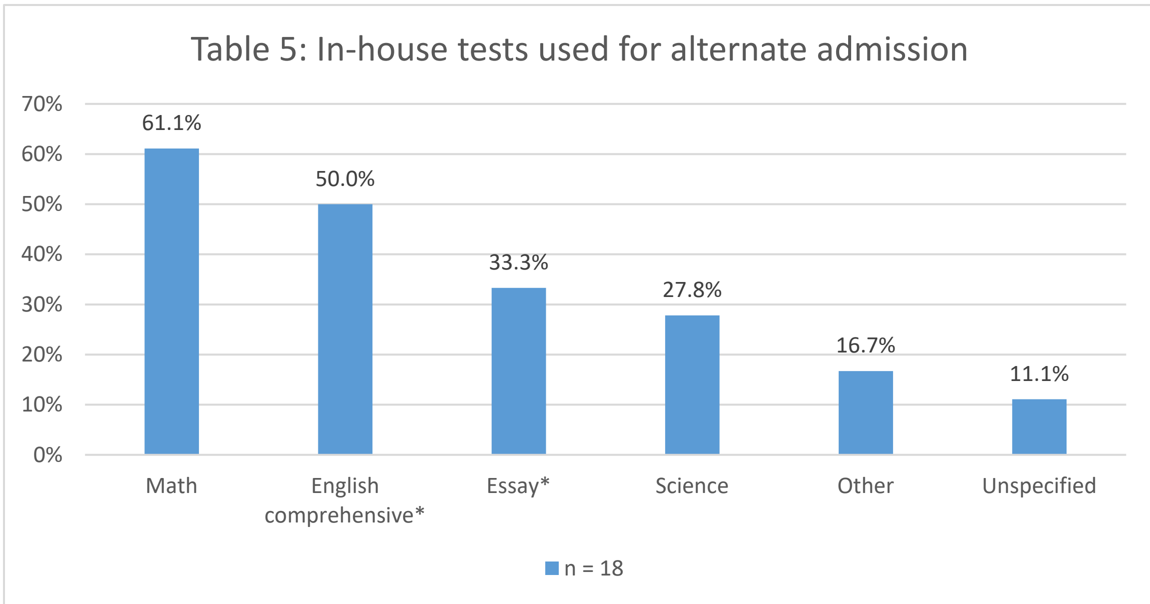
Colleges in Alberta, Ontario, and Montreal use an outside organization to streamline the application process. Under this type of system, applicants submit their application to one organization (Apply Alberta, Ontario Colleges, or SRAM, respectively) regardless of college they wish to apply to. The organization then processes the applications and directs applications to the appropriate college.

The most commonly used test for applicants who do not meet entrance requirements is ACCUPLACER, used by 53.3% of colleges who offer standardized testing services for alternate admission applicants (see Table 4). Many colleges who use standardized testing for alternate admissions are still using the *Canadian Adult Achievement Test* (CAAT, 37.8%), while 35.3% of colleges developed in-house tests to determine whether applicants meet entrance requirements. The most commonly used in-house tests were math and English (see Table 5). See Appendix B for a brief description of a selection of commonly used and/or noteworthy tests. Of note is a culturally relevant reading and writing test developed by Nunavut Arctic College for ABE placement.

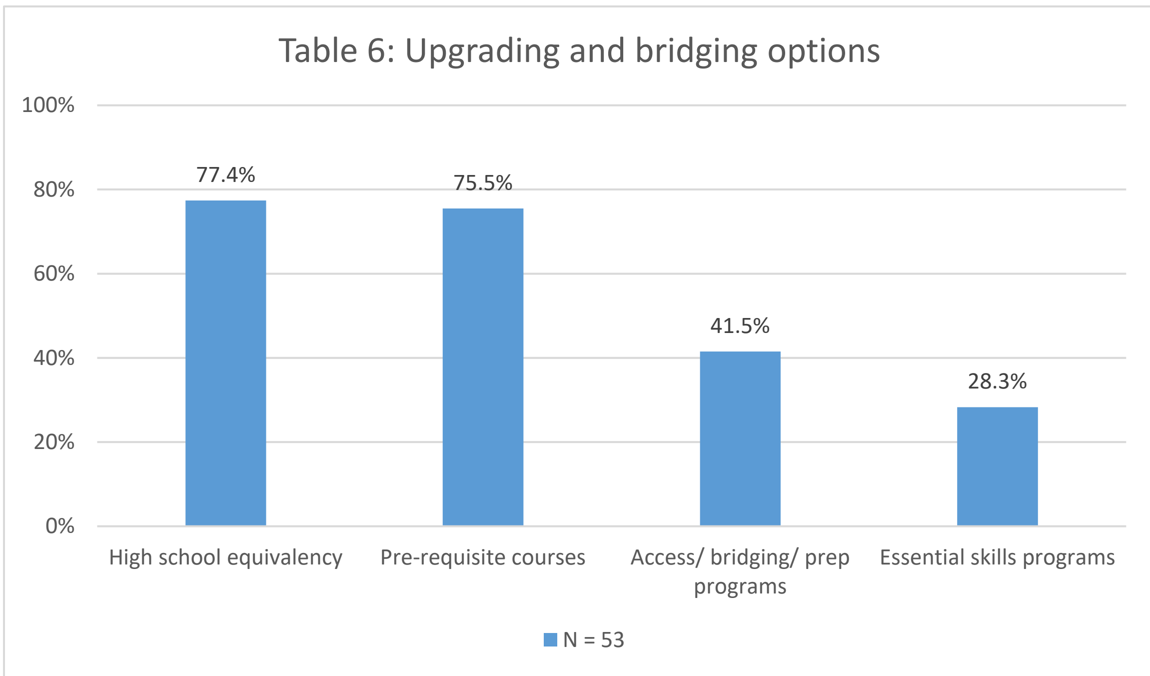


Under CNA's mature student process, applicants without minimum program requirements must write a standardized test (currently, the Canadian Adult Achievement Test, CAAT) and achieve the minimum scores required for their program of choice.

Upgrading and Bridging Options. All colleges reviewed offer upgrading and/or transition programs for applicants who do not meet entrance requirements. Most colleges (77.4%) offer a high school equivalency program (many of which are tuition-free), and almost as many (75.5%) allow high school non-graduates (or high school graduates who are missing a specific pre-requisite) to enroll in specific pre-requisite courses in order to meet entrance requirements for their program of choice. Access/ bridging programs are also commonly offered (41.5%), and some colleges offer essentials skills programs (28.3%). Many colleges offer more than one option for applicants to acquire pre-requisite skills (see Table 6).



* Some English comprehensive tests may include essay questions. Essay tests only include essay questions.



CNA also offers upgrading and bridging program options. The Comprehensive Arts & Science (CAS) Transition is a one-year bridging program that allows high school or ABE graduates to take specific courses to meet entrance requirements for other CNA programs and provides the opportunity for students to develop academic and learning skills. CAS Transition graduates also meet requirements for general admission to Memorial University.

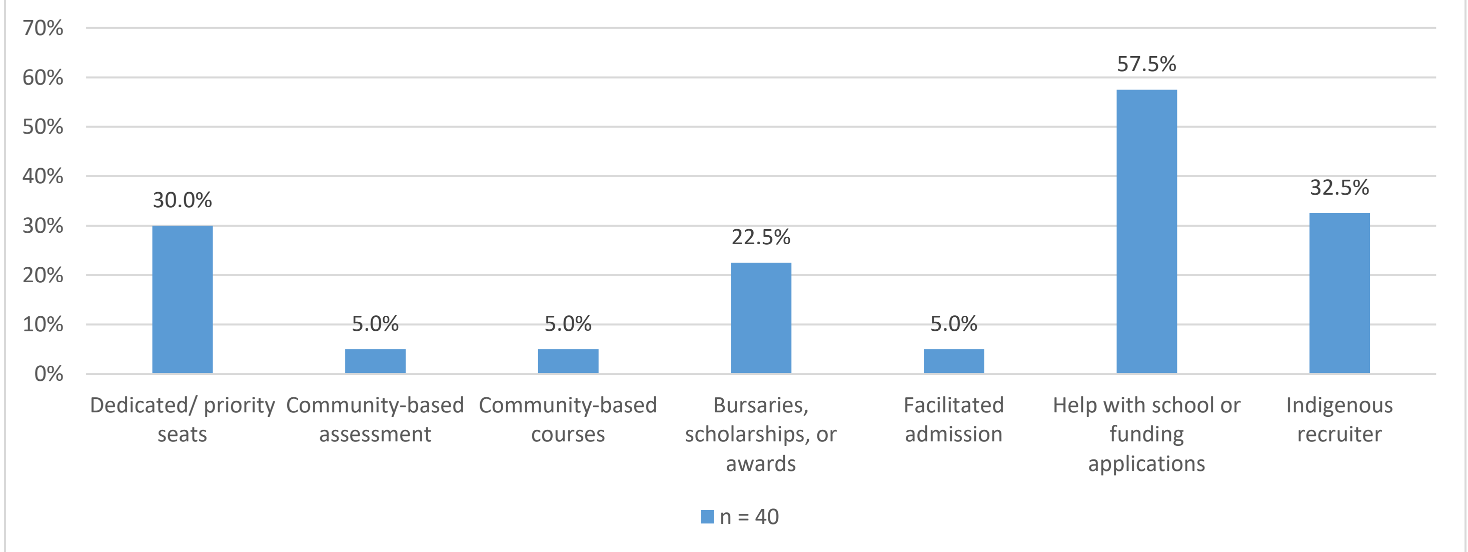
The Aboriginal Bridging Program (ABP) is a one-year bridging program offered at the Happy Valley – Goose Bay campus that focuses on building academic, personal and employability skills for Indigenous students. The academic level of the program prepares students for CAS Transition, although students who complete ABP may decide to enter other programs if they meet entrance requirements. Applicants to both ABP and CAS Transition who have not graduated high school may gain admission through the mature student process.

CAS Trades is an upgrading program offered at the Happy Valley – Goose Bay campus intended to prepare mature students to enter industrial trades programs by enhancing their academic and practical skills. Applicants must be 19 years of age or older and have completed at least Grade 9. Applicants not meeting this requirement can also apply via the mature student process. Successful completion of the program allows students to enter most industrial trades programs offered by CNA as well as CAS Transition. CNA used to offer ABE at 16 of its campuses and at satellite learning centres in northern Indigenous communities; however, the provincial government decided to privatize this service in 2013.

Supports for Indigenous Applicants and Students. When reviewing admission policies and processes, we originally looked for special processes for Indigenous students. We soon discovered that no colleges included in our scan use a separate process for Indigenous students; although many colleges offer additional supports for Indigenous people during the application and admission phase (see Table 7). Forty colleges described admission supports for Indigenous applicants either on their website, during a phone call, or in an e-mail; of the 13 colleges that did not describe admission supports, 2 had almost all Indigenous students. The most common support offered is assistance with school and funding applications (57.5%). Other supports include an Indigenous recruiter (32.5%), dedicated or priority seats for Indigenous students (30%), and bursaries, scholarships, or awards offered by the college (22.5%). Two colleges offer community-based assessments for Indigenous applicants, and 2 colleges offer at least one community-based course.

Whereas 75% of colleges in our scan offered admission supports for Indigenous prospective students and applicants, almost all colleges (50, or 94%) offered supports specifically for registered Indigenous students (although in some cases, there is some overlap in services for prospective and registered students). An Indigenous Coordinator, Advisor, or Navigator was the most commonly mentioned support, with 86% of colleges offering this service. Other commonly mentioned supports include a gathering/ cultural space (70%), Elders or other knowledge keepers onsite (58%), and cultural and/ or social events (58%). See Table 8.

CNA offers a number of supports for Indigenous students at the Happy Valley-Goose Bay Campus, which has the highest percentage of Indigenous student across all CNA Campuses. These include two dedicated positions (Aboriginal Support Coordinator and Aboriginal Support Specialist), an Aboriginal Resource Centre, Indigenous artwork around campus, and cultural events.



Conclusion

Indigenous adults face a number of complex barriers to education that many non-Indigenous adults do not face (ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013; Ontario, 2018; R.A. Malatest & Associates Ltd. 2002; Seston et al. 2018; Youmans et al. 2017). Due to these barriers, Indigenous adults often take a different pathway to post-secondary education than non-Indigenous adults (ACCC, 2010; University of Calgary, 2017). Since higher education is associated with more positive outcomes (McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017; Youmans et al. 2017) and a significant portion of Indigenous post-secondary students enroll as mature students and/or take upgrading courses and programs (ACCC, 2010; University of Calgary, 2017), it is imperative that post-secondary institutes provide flexible admission options and adequate supports for their Indigenous students.

All colleges included in our environmental scan have an alternate admission process in place to make admission decisions for high school non-graduates. Most of these colleges consider high school non-graduates under a mature student policy (although there is no consistent definition of a mature student); however, some colleges do not reference the term “mature student” and do not have age requirements in place for their alternate admission policies. Most mature student policies do not require students to be out of school for a minimum amount of time in order to qualify for consideration under the policy. Further to this, many colleges included in our environmental scan have some regular programs that do not require high school graduation as a minimum entrance requirement. Instead, these colleges list specific pre-requisite courses

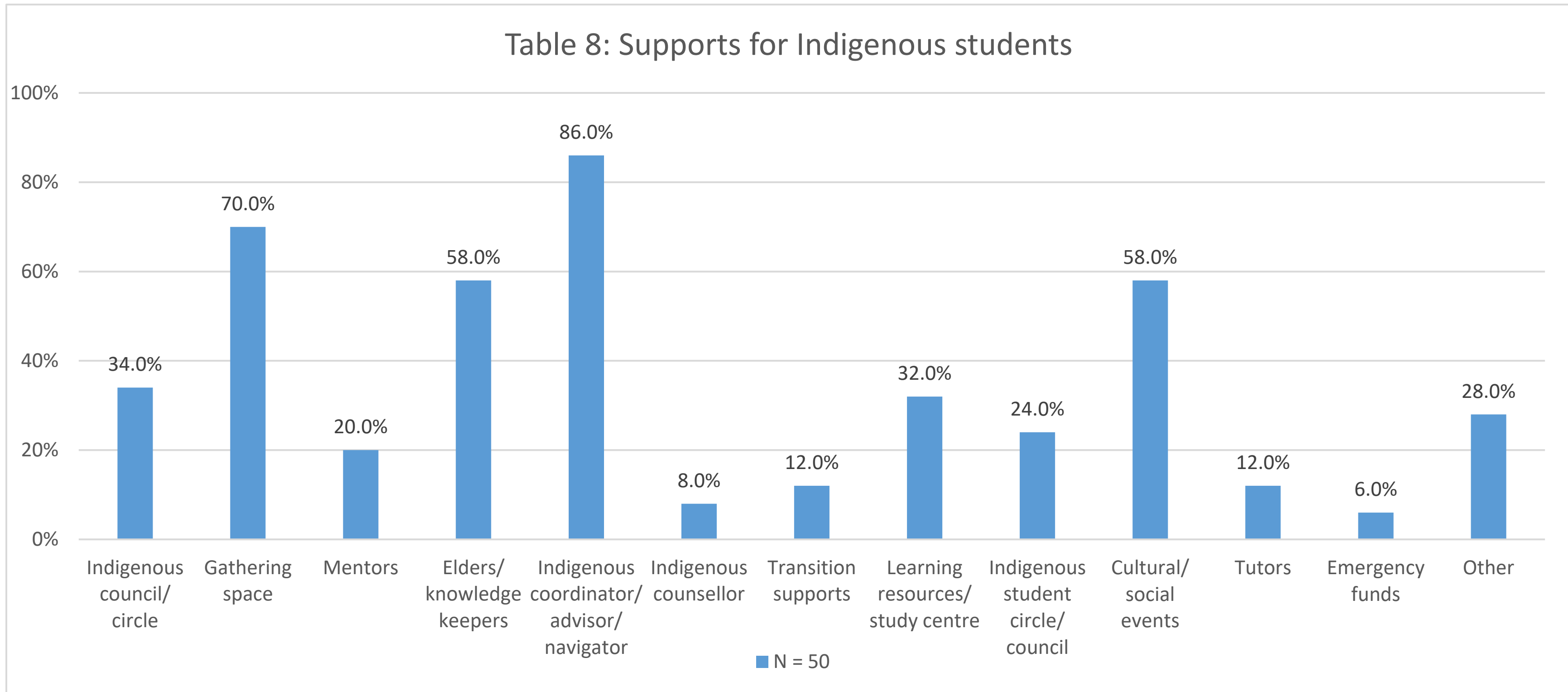


Table 8: Supports for Indigenous students
100%
80%
60%
40%
20%
0%
34.0%
70.0%
20.0%
58.0%
86.0%
8.0%
12.0%
32.0%
24.0%
58.0%
12.0%
6.0%
28.0%
Indigenous council/ circle
Gathering space
Mentors
Elders/ knowledge keepers
Indigenous coordinator/ advisor/ navigator
Indigenous counsellor
Transition supports
Learning resources/ study centre
Indigenous student circle/ council
Cultural/ social events
Tutors
Emergency funds
Other
N = 50

for their programs, allowing high school non-graduates who have the appropriate pre-requisites to enter programs without going through an alternate admission process.

When making admission decisions for students who are missing program pre-requisites, most colleges in our scan use testing to determine applicant readiness, and many colleges use more than one assessment method when making admission decisions. Common tests used include ACCUPLACER Next Generation, CAAT, and in-house tests developed by the college. Much research in this area indicates that holistic, culturally appropriate assessment methods should be used for Indigenous applicants (Claypool & Preston, 2011; Johnston & Claypool, 2010; Munroe, Lunney Borden, Murray Orr, Toney, & Meader, 2013; Nunavut Department of Education, 2008; R.A. Malatest & Associates Ltd. 2002; Schmelkes, 2018; Ward, Semken, & Libarkin, 2014); however, Nunavut Arctic College is the only college in this environmental scan using a culturally relevant placement test. Additional assessment methods used include meeting with someone from the college, prior learning assessments, and a review of résumés, portfolios, or other documents.

A large majority of colleges in our scan offered a high school equivalency program, and a large majority offered pre-requisite courses to applicants who were missing required courses for their program of choice. This is significant, as previous environmental scans highlighted flexible academic upgrading as a powerful and transformative tool, opening employment and further education opportunities for high school non-graduates and enabling them to become self-sufficient (McQuarrie, 2013; R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Calgary, 2017; Youmans et al. 2017).

While there were no colleges in our scan that offered a separate admission process for Indigenous students, some previous scans indicated that using different or additional criteria to make admission decisions for Indigenous students could be beneficial (Karpinsky, 2016; R.A. Malatest & Associates Ltd. 2002). Australian post-secondary institutes do this, and Kwantlen Polytechnic in B.C. has a separate admission policy for Indigenous applicants who do not otherwise meet admission requirements (Kwantlen Polytechnic University, n.d.; R.A. Malatest & Associates Ltd. 2002). Most colleges included in our scan offered application supports for Indigenous applicants, such as help filling out college or funding applications, dedicated seats in certain programs, and dedicated Indigenous recruitment efforts. The University of Windsor (n.d.) considered Indigenous recruitment plans to be powerful tools to help increase Indigenous adults' access to post-secondary education. If used to their full potential, dedicated Indigenous recruitment teams could help Indigenous adults overcome some common barriers to post-secondary education (R.A. Malatest & Associates Ltd. 2002; Saskatchewan, 2016; University of Windsor Senate, n.d.).

Almost all colleges we reviewed have dedicated supports for Indigenous adults who have been accepted into a program. These supports include an Indigenous coordinator, advisor, and/ or navigator, a dedicated gathering space, cultural and/ or social events, access to Elders, and

more. Previous research has stressed that wrap-around supports are crucial to the retention and success of Indigenous and mature post-secondary students, and that admission processes should not be examined in isolation (Aboriginal Nurses Association of Canada, 2009; Assembly of First Nations, 2018; Colleges and Institutes Canada, 2018; Gallop & Bastien, 2016; Hossain, Gorman, Williams-Mozely, & Garvey, 2008; McQuarrie, 2013; Pechenkina & Anderson, 2011; R.A. Malatest & Associates Ltd. 2002; Restoule et al., 2013).

Appendix A: Colleges Included by Province/ Territory

Alberta
Grand Prairie Regional College
Keyano College
Lethbridge College
Medicine Hat College
Norquest College
Northern Lakes College
Red Deer College
British Columbia
British Columbia Institute of Technology (BCIT)
Camosun College
Coast Mountain College
College of the Rockies
Langara College
Native Education College
Nicola Valley Institute of Technology
North Island College
Okanagan College
Selkirk College
Vancouver Community College
Manitoba
Assiniboine Community College
Manitoba Institute of Trades and Technology
New Brunswick
New Brunswick Community College
Nova Scotia
Nova Scotia Community College
Northwest Territories
Aurora College
Nunavut
Nunavut Arctic College
Ontario
Algonquin College
Canadore College of Applied Arts and Technology
Conestoga
Confederation College
Durham College

Fanshawe College of Applied Arts and Technology
George Brown College
Georgian College of Applied Arts and Technology
Humber College Institute of Technology and Advanced Learning
Lambton College
Loyalist College
Mohawk College
Niagara College
Northern College
Sault College
Seneca College of Applied Arts and Technology
Sheridan College
St. Clair College
St. Lawrence College
Prince Edward Island
Holland College
Quebec
Dawson College
Vanier College
Saskatchewan
Cumberland College
North West College
Northlands College
Parkland College
Saskatchewan Indian Institute of Technology
Saskatchewan Polytechnic
Yukon
Yukon College

Appendix B: Brief Description of Select Tests for Alternate Admission

Test	# Colleges used by	Brief description
ACCUPLACER Next Generation **(College Board, 2020)**	24 of 53 colleges	• Placement test designed for US colleges • Reading, writing, math, and other areas • Computer *or* pencil and paper • Most recent version in 2018 (continuously updated)
Apprenticeship & Industry Training (AIT) Entrance Exam **(Alberta, 2018)**	11 of 53 colleges	• Trades entrance exam created in Alberta • Math, science, and reading • Pencil and paper • Published in 2003
Canadian Adult Achievement Test (CAAT) **(Pearson, n.d.)**	17 of 53 colleges	• Measures adults' functional level • Language, reading, math, and other areas • Pencil and paper • Published in the 1980s (no updates since)
Canadian Adult Reading Assessment (CARA) **(Grass Roots Press, 2019)**	1 of 53 colleges	• Provides placement and diagnostic information • Reading test • Individually administered • Published in 2000
Canadian Achievement Test Fourth Edition (CAT 4) **(Canadian Test Centre, 2020)**	5 of 53 colleges	• Measures essential learning skills from kindergarten to post-secondary • Reading, writing, and math • Pencil and paper • Published in 2008
Canadian General Education Development (GED) **(Newfoundland and Labrador, n.d.)**	2 of 53 colleges	• Measures knowledge, ideas, and thinking skills normally acquired through 3 years of high school • Reading, writing, math, social studies, and science • Computer *or* pencil and paper • Published in 2014 (latest version)
Nunavut Arctic College Placement Assessment (NAPA)	1 of 53 colleges	• A culturally relevant assessment for ABE placement • Reading and writing • Pencil and paper • In-house test developed in 2014-16
Test of Workplace Essential Skills (TOWES) **(TOWES, 2020)**	3 of 53 colleges	• Measures essential skills for working and learning • Reading, document use, and math • Computer *or* pencil and paper • Published in 2000

References

Aboriginal Nurses Association of Canada. (2009). *Cultural Competence and Cultural Safety in First Nations, Inuit and Métis Nursing Education. An Integrated Review of the Literature.* Ottawa, ON: Author.

Alberta. Advanced Education. (2018, October). *Apprenticeship Training: Trade Entrance Exam Study Guide.* Edmonton, AB: Author.

Assembly of First Nations. (2018, July). *First Nations Post-Secondary Education Review: Interim Report 2018.* Ottawa, ON: Author.

Association of Canadian Community Colleges. (2010, November). *Colleges Serving Aboriginal Learners and Communities, 2010 Environmental Scan: Trends, Programs, Services, Partnerships, Challenges and Lessons Learned.* Ottawa, ON: Author.

Atlantic Aboriginal Economic Development Integrated Research Program. (2016). *Making Connections: Key Economic Drivers in Aboriginal Rural and Remote Communities – Aboriginal Youth, Colleges and Industries*. Retrieved from https://www.apcfnc.ca/images/uploads/Making_Connections_FINAL_May_2_2017.pdf

Canadian Council on Learning. (2009). *The State of Aboriginal Learning in Canada: A Holistic Approach to Measuring Success*. Ottawa, ON: Author.

Canadian Test Centre Educational Assessment Services (2020). CAT4: Canadian achievement tests fourth edition. Retrieved from https://www.canadiantestcentre.com/CAT4/CAT4-Home.php

Centres for Disease Control and Prevention. (2019, September 4). Disability and Health Promotion. Retrieved from https://www.cdc.gov/ncbddd/disabilityandhealth/disability-barriers.html

Claypool, T.R., and Preston, J.P. (2011). Redefining learning and assessment practices impacting Aboriginal students: considering Aboriginal priorities via Aboriginal and Western worldviews. *[Indigenous Education] in Education* 17(3), 84 – 95.

College Board. (2020). Accuplacer. Retrieved from https://accuplacer.collegeboard.org/?navId=accu_site-accu

College of the North Atlantic. (2019, April). Operational Procedure. Topic: Admission. Procedure No. AC-102-PR. Retrieved from https://www.cna.nl.ca/About/pdfs/policies-and-procedures/Academic/Admission/2Procedure/AC-102-PR_Admission.pdf

Colleges and Institutes Canada (2018, May). Department *of Indigenous Services Canada federal engagement on Indigenous post-secondary review with Colleges and Institutes Canada member institutions*. Facilitated conference call. Ottawa, ON.

Colleges and Institutes Canada. (n.d.). Indigenous Education Protocol. Retrieved from https://www.collegesinstitutes.ca/policyfocus/indigenous-learners/protocol/

Colleges Ontario. (2018, March). *Assessing Truth and Reconciliation: Summary Report of Ontario's Colleges.* Toronto, ON: Author.

Crown-Indigenous Relations and Northern Affairs Canada. (2019, February 15). *Newfoundland and Labrador Residential Schools Healing and Commemoration.* Retrieved from https://www.rcaanc-cirnac.gc.ca/eng/1511531626107/1539962009489

Dowden, A. and Williams, F. (2019). *Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature*. St. John's, NL: College of the North Altantic.

Gallop, C.J. and Bastien, N. (2016). Supporting success: Aboriginal students in higher education. *Canadian Journal of Higher Education,* 46(2), 206 – 224.

Grass Roots Press. (2019). Canadian Adult Reading Assessment: Student's Assessment Booklet. Retrieved from https://www.grassrootsbooks.net/ca/canadian-adult-reading-assessment-student-s-assessment-booklet.html

Hanson, E. (2009). *The Residential School System.* Retrieved from https://indigenousfoundations.arts.ubc.ca/the_residential_school_system/

Hossain, D., Gorman, D., Williams-Mozely, J. and Garvey, D. (2008). Bridging the gap: identifying needs and aspirations of Indigenous students to facilitate their entry into university. The Australian Journal of Indigenous Education, 37, 9 – 17.

Indigenous Corporate Training, Inc. (2012, April 18). *Indian Residential Schools.* Retrieved from https://www.ictinc.ca/indian-residential-schools

Johnston, A. and Claypool, T. (2010). Incorporating a multi-method assessment model in schools that serve First Nations, Inuit, and Métis Learners. *Native Studies Review*, 19(2), 121-138.

Karpinsky, V. (2016, April). *Admissions Indicators and Practices Leading to the Success of Mature Students.* Vancouver, BC: British Columbia Council on Admissions & Transfers.

Kwantlen Polytechnic University. (n.d.). Aboriginal Admission. Retrieved from https://www.kpu.ca/admission/aboriginal

McQuarrie, F. (2013, October). *Mature Students: Admissions Policies in BC.* Vancouver, BC: British Columbia Council on Admissions & Transfers.

Munroe, E.A., Lunney Borden, L., Murray Orr, A., Toney, D. and Meader, J. (2013). Decolonizing Aboriginal education in the 21st century. *McGill Journal of Education*, 48(2), 317-337.

Newfoundland and Labrador. Education and Early Childhood Development. (n.d.). GED – high school equivalency. Retrieved from https://www.gov.nl.ca/eecd/ged/#general

Nunavut. Department of Education. (2008). *Foundation for dynamic assessment: Ilitaunnikuliriniq as learning in Nunavut schools.* NU: Author.

Ontario. Ministry of Education. (2018). *Strengthening Our Learning Journey: Third Progress Report on the Implementation of the Ontario First Nation, Metis, and Inuit Education Policy Framework.* Toronto, ON: Author.

Pearson. (n.d.). Canadian adult achievement test (CAAT). Retrieved from https://www.pearsonclinical.ca/en/products/product-master/item-584.html

Pechenkina, E., and Anderson, I. (2011). Consultation paper on Indigenous Australian higher education: trends, initiatives and policy implications. *Department of Education, Employment, and Workplace Relations, Australian Government.* Retrieved from https://docs.education.gov.au/system/files/doc/other/pechenkina_and_anderson_2011.pdf

R.A. Malatest & Associates Ltd. (2002, May). *Best Practices in Increasing Aboriginal Postsecondary Enrolment Rates.* Toronto, ON: Council for Ministers of Education, Canada.

Restoule, J-P., Mashford-Pringle, A., Chacaby, M., Smillie, C., Brunette, C., and Russel, G. (2013). Supporting successful transitions to post-secondary education for Indigenous students: lessons from an institutional ethnography in Ontario, Canada. *The International Indigenous Policy Journal,* 4(4), Art. 4.

Saskatchewan. Advanced Education. (2016, October). *First Nations and Metis Initiatives: Promising Practices and Challenges in Saskatchewan's Post-Secondary Sector.* Regina, SK: Author.

Schmelkes (2018). Toward an intercultural approach to evaluation: a perspective from the National Institute for Educational Evaluation in Mexico (INEE). *Education Policy Analysis Archives* 26(52), 1-11.

Service Régional d'admission du Montréal Métropolitan. (n.d.). Admission Requirements. Retrieved from https://www.sram.qc.ca/diploma-of-college-studies/admission-conditions

Seston, D., Talijan, Z., and Aitchison, C. (2018). *Policy Paper: Mature Students.* Toronto, ON: Ontario Undergraduate Student Alliance.

Statistics Canada. (2018, July 18). *Aboriginal Population Profile, 2016 Census*. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/abpopprof/index.cfm?Lang=E

Statistics Canada. (2019, June 18). *Census Profile, 2016 Census*. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

TOWES (2020). About us. Retrieved from http://www.towes.com/en/about-towes/about-us

Truth and Reconciliation Commission of Canada. (2015). *Truth and Reconciliation Commission of Canada: Calls to Action.* Winnipeg, MB: author.

University of Calgary. (2017, January). *Energizing Eyes High Strategy 2017-22: Environmental Scan Working Paper.* Calgary, AB: Author.

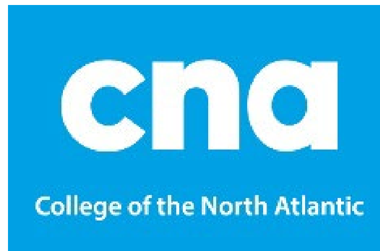
University of Windsor Senate (n.d.). *Report of the Senate Working Group on Benchmarking the University of Windsor in Relation to Universities Canada 13 Principles on Indigenous Education.* Windsor, ON: University of Windsor.

Ward, E.M.G., Semken, S., and Libarkin, J.C. (2014). The design of place-based, culturally informed geoscience assessment. *Journal of Geoscience Education,* 62(1), 86 – 103.

Youmens, S., Godden, L., and Hummell, F. (2017, June). *Phase One Part B: An Environmental Scan of Adult and Continuing Education in the Eastern Ontario Region.* Kingston. ON: Eastern Regional Partnership for Adult Education.

Zarpa. E. and Shea, J. (2018, May). *Environmental Scan: Indigenous Cultural Competency Training within Newfoundland and Labrador, the Traditional Territory of the Inuit, Beothuck, Innu, and Mi'kmaq.* Fredericton, NB: New Brunswick Aboriginal Peoples Council.

6.3 What we Heard from Indigenous Partners and CNA Stakeholders: Recommendations for CNA's Mature Student Admission Pathway and Other Supports



What we Heard from Indigenous Partners and CNA Stakeholders: Recommendations for CNA's Mature Student Admission Pathway and Other Supports

College of the North Atlantic
September 2020

Prepared by Amy Dowden

Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples is a research project led by College of the North Atlantic and funded by the NL Workforce Innovation Centre (NLWIC).

The NLWIC, administered by the College of the North Atlantic (CNA), has a provincial mandate to provide a co-ordinated, central point of access to engage all labour market stakeholders about challenges, opportunities and best practices in workforce development.

The Centre's goal is to promote and support the research, testing and sharing of **ideas** and models of **innovation** in workforce development that will positively **impact** employability, employment, and entrepreneurship within the province's labour force and particularly under-represented groups. Funding for NLWIC is provided by the Department of Immigration, Skills, and Labour (ISL) under the Canada-Newfoundland and Labrador Labour Market Development Agreement.

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Report Summary

We spoke with Indigenous CNA students and alumni, representatives from Indigenous governments and organizations, and CNA faculty and staff to learn about their experiences, expertise, and insights on the admission of Indigenous and mature students to CNA.

Indigenous students and alumni told us they were interested in CNA mainly to get more education or training so they can increase their employment opportunities. Many of them experienced barriers to accessing post-secondary training, experienced some difficulties when applying to CNA, and knew very little about their program before starting. Those we spoke with mostly enjoyed their program and felt that CNA opened doors for them, although we received mixed responses when we asked students if they felt culturally safe. They suggested that CNA could help more Indigenous adults access post-secondary education by holding more community information sessions and application workshops, increasing awareness of options for high school non-graduates, and increasing program offerings for high school non-graduates. Some Indigenous students felt that CNA could allow anyone who applies to enter a program, while others felt that interviews and tests could help determine whether an Indigenous adult was ready for a CNA program.

Representatives from Indigenous governments and organizations told us they are placing a high priority on education. They celebrate those who want to go back to school and want to give community members the resources and tools they need to further their education. We also heard that reviewing curricula with an Indigenous lens could help Indigenous students to succeed. For example, since Innu First Nation took control of their own schools, they have added cultural elements to their curricula, while still meeting provincial standards, and have seen more high school graduates than ever before.

All groups agreed that CNA offers great supports for Indigenous students at the Happy Valley-Goose Bay campus, and these supports could be extended to more campuses. Expanding existing supports and adding additional supports will encourage student retention and success and could encourage more Indigenous adults to apply to CNA. We heard that Indigenous students could benefit from more guidance when considering post-secondary options and help with the application process. This could include discussion about entrance requirements and expected careers, as well as assistance filling out the application form and locating documentation required by CNA for consideration for admission. There is a need to offer more learning resources, such as increased staff and expanded hours in help centres, and expanded tutoring services. Additionally, participants told us there is a need for expanded and additional supports specific to Indigenous students and applicants, such as an Innu language translator, a safe gathering space at more campuses, and transition supports.

When it comes to cultural safety there is room for improvement. Some things CNA can focus on to increase cultural safety include increasing Indigenous representation in the college, enhancing application and transition supports, offering culturally relevant testing for admission,

and expanding its cultural awareness workshops for students, faculty, and staff. We also heard that increasing CNA visits to Indigenous schools and communities can help to build relationships and introduce potential students to CNA faculty and staff. This can help new Indigenous students feel more comfortable and welcome.

Most people we spoke with recommended using multiple and flexible methods to assess whether a mature student applicant has a reasonable chance of success in their program of choice. Suggestions included interviews, consideration of prior work and learning experiences, motivation and knowledge of the program, the applicant's career goals, and testing. These suggestions are in line with holistic admission approaches, which use multiple assessment options to consider the whole person, rather than just one aspect of a person. We heard from most participants that tests can be good tools to determine the literacy and numeracy skills of applicants if the test is culturally appropriate, includes only the pre-requisite knowledge and skills needed for the applicant's program of choice, and allows for accommodations for those with learning exceptionalities and those whose first language is not English.

We heard there is a need for CNA to increase program offerings, including a high school equivalency program, more preparatory and access programs for high school non-graduates, and more variety in program offerings at the Happy Valley-Goose Bay campus, perhaps alternating different programs in different years. There is also a need for CNA to collaborate with Indigenous communities and governments at a deeper level. This includes more frequent visits to Indigenous communities and schools as well as more consultation to learn about the employment needs of Indigenous communities.

Introduction

As early as the 1990s, Indigenous organizations in Labrador have expressed concerns about how College of the North Atlantic (CNA) has approached admission assessments of Indigenous adults applying as mature students (CNA defines a mature student as someone who is 19 years or older who has been out of school for at least one year and does not meet educational pre-requisites, CNA 2019). CNA uses the Canadian Adult Achievement Test (CAAT) as the primary deciding factor for alternate admissions, but Indigenous applicants, governments, and organizations perceive the CAAT to be unnecessarily arduous and culturally inappropriate (F. Williams, 2019). In 2016, as part of a project examining economic development in Indigenous communities, CNA partnered with the Atlantic Aboriginal Economic Development Integrated Research Program (AAEDIRP) to host a two-day workshop at the Happy Valley-Goose Bay campus with Elders, representatives from Indigenous governments, Indigenous students, and representatives from industry (AAEDIRP, 2016). During those discussions, Chief Eugene Hart from Sheshatshiu Innu First Nation reiterated that there were issues around admission assessments for Indigenous applicants, and asked CNA to provide a culturally appropriate pathway for Indigenous adults.

To address these concerns, CNA secured funding from the Newfoundland and Labrador Workforce Innovation Centre (NL WIC) for a project titled "Alternate Admissions Academic Readiness Assessment Processes and Tools for Indigenous Peoples" (The Readiness Project). The purpose of The Readiness Project is to collaborate with Indigenous partners to develop or identify an admission pathway to CNA for mature student applicants that is reliable, valid, culturally sensitive, and appropriate for Indigenous adults. It is our hope that by providing a culturally appropriate process for Indigenous mature students, we will reduce barriers and increase their access to CNA programs.

The Readiness Project is a three-year endeavour consisting of two main phases. Phase one involves information-gathering and consultations and will result in the development of an admission pathway to CNA that is appropriate for Indigenous mature student applicants. In phase two, we will pilot and evaluate the admission pathway. This report is part of phase one of the project and summarizes conversations with Indigenous students and alumni, representatives from Indigenous governments and organizations, and CNA faculty and staff. The experiences, views, expertise, and recommendations from those who participated in these consultations were combined with findings from a literature review (Dowden & Williams, 2019) and environmental scan (Dowden & Williams, 2020) to develop a framework for mature student admissions at CNA.

Who Did We Speak With?

We spoke with 63 people, including 17 Indigenous students and alumni, 13 representatives from Indigenous governments and organizations, and 33 CNA faculty and staff. Our consultations took place from October 2019 to April 2020. In total, we held 19 conversations (5 group discussions, 7 group interviews, and 7 individual interviews).

We held nine conversations with 17 Indigenous students and alumni, including students from Innu First Nation, Nunatsiavut Government, and NunatuKavut Community Council. We held three conversations with 13 representatives from Indigenous governments and organizations, including representatives from Sheshatshiu Innu First Nation, Mushuau Innu First Nation, Nunatsiavut Government, NunatuKavut Community Council, and Qalipu First Nation (Miawpukek First Nation was not represented in our interviews and group discussions due to scheduling conflicts, although we did include their input when developing the proposed new admission model for mature student applicants). We held seven conversations with 33 CNA faculty and staff.

Those we spoke with came from a variety of backgrounds and experiences. The Indigenous students and alumni group included both those who enrolled as a mature student and those who enrolled via regular admission. Representatives from Indigenous governments and organizations included directors of education, other government officials, and staff from funding organizations and other Indigenous education organizations. CNA faculty and staff included counsellors, instructors, accessibility coordinators, admission officers, and more. Many participants from CNA had worked at more than one campus. We spoke with both those who have worked with CNA for many years as well as more recently hired employees. See Appendix A for sample interview and group discussion guides.

Some conversations were not recorded. For those conversations we relied on written notes to capture the views of those we spoke with. For group discussions and group interviews that were not recorded, it was not possible to determine which participants discussed which topics. Because of this, our analysis focused on *conversations* rather than on individuals. Notes and transcripts of conversations were sent to those we spoke with for verification. We made any required corrections and clarifications to our notes before analyzing the discussions.

Indigenous students and alumni and representatives from Indigenous governments and organizations provided some unique perspectives that were not widely discussed by other groups, while CNA faculty and staff shared their knowledge and experiences on topics that were discussed by all groups. To capture the unique perspectives of students and alumni and representatives from Indigenous governments and organizations, we have organized our findings into three sections: What We Heard from Indigenous Students and Alumni; What We Heard from Representatives from Indigenous Governments and Organizations; and What We Heard from All Groups.

What We Heard from Indigenous Students and Alumni

Most of the following information comes from Indigenous students and alumni; however, in some cases representatives from Indigenous organizations and governments were able to tell us about students who either were not able to gain admission to CNA, or were not able to complete their program. Also, some CNA faculty and staff told us about students they have had experiences with. We included these comments where appropriate, indicating when the information did not come directly from a student or alumnus.

She told me about CAS Trades. She said, 'It will open doors for you.'
- CNA student/alumnus

Reasons for applying and knowledge of program

The most common reason Indigenous students wanted to attend CNA was to improve their employability, and this was true for both mature students and regular admission students. Mature students were attracted to opportunities to upgrade their education so they could better support themselves and their families. One student described their journey to the Comprehensive Arts and Science – Trades program (CAS Trades), "CNA needed a transcript and I couldn't get funding for CNA. I went to LATP and met someone there. She told me about CAS Trades. She said, 'it will open doors for you.'" Some students were pleased to have options for post-secondary programs close to home, and others mentioned they chose CNA because they offered a family residence. In the words of one student, "The family residence was a big draw."

I knew very little about the program. I said, 'ok, I'll give it a try.'
- CNA student/alumnus

Many students told us that they knew little about their program before starting. Students tended to learn about CNA programs from family and friends or from funding agencies. One student told us, "I knew very little about the program. I was given a little bit of information from LATP, and I said, 'ok, I'll give it a try.'"

Challenges accessing post-secondary education

In Canada, many Indigenous adults and mature students face barriers to accessing post-secondary education that most non-Indigenous adults and regular admission students do not face (for example, see ACCC, 2010; Karpinsky, 2016; McQuarrie, 2013; Seston, Talija, & Aitchison, 2018; Youmans, Godden, & Hummell, 2017). CNA Indigenous students we spoke with who have young children told us they found it challenging to find childcare during class time and sometimes found it challenging to find time to study. One of our advisory committee members, Tim Jack, Community Director of Education with MTIE, said "Once they are in Goose Bay, trouble with funding for daycare, and trouble finding daycare can cause people to miss school."

We heard that some Indigenous adults in Newfoundland and Labrador struggle to access post-secondary education because they do not meet entrance requirements. This could be because they have not had an opportunity to finish high school due to other circumstances in their lives, or because they could not access pre-requisite courses in their high school. Tim Jack, Community Director of Education with MTIE, told us, "Many students need to wait to apply to CNA as a mature student because of lack of course availability in school." For these students, CNA's policy that applicants must be out of school for at least one year before they are eligible to apply as a mature student is an added barrier. One student told us that many Indigenous adults are afraid to apply to CNA because "They think they won't get in, or they don't have their high school, and they're trying to get their ABE done, get their upgrading, and go from there."

I was just told 'no' at the wicket, and otherwise had no contact with CNA. It reminded me of being bullied.
- CNA student/alumnus

Representatives from Indigenous governments and organizations offered additional challenges faced by Indigenous adults seeking to go back to school. These include a lack of confidence; lack of opportunity and information; housing needs; lack of transportation; rigid policies and practices; relocating for school (and subsequent culture shock and separation from their support network); and lack of available funding.

Experiences applying to CNA

There were mixed responses about experiences applying to CNA. Most students and alumni we spoke with told us they had help applying from family and friends, their funding agency, or high school teachers or counsellors. Some students did not experience challenges during the application process, but many students did. Some students were scared or nervous, had difficulty applying, or had negative experiences with CNA staff, such as this student: "When I applied for my first program, I was told I needed a transcript. I was just told 'no' at the wicket, and otherwise had no contact with CNA. It reminded me of being bullied." Many didn't know where to find an application form or found the form confusing. Some students found it frustrating to do everything they needed to do in order to attend CNA, including completing a large amount of paperwork, applying for funding, finding a place to live, arranging childcare, and more. Other students commented that CNA's timing for releasing course offerings does not coincide with funding agency deadlines, further complicating an unfamiliar process.

Some CNA faculty and staff agree that there is too much paperwork involved in admissions. In the words of one interviewee, "The amount of paperwork involved to actually get in school is tremendous. For us and for them." Another CNA interviewee commented, "I had a student last year that . . . got accepted, and they brought me in the documents they received in the mail, and oh my god, there was so much information in

People become more successful through CNA.
- CNA student/alumnus

the one envelope! . . . [the student] said, 'I don't know what they're asking me, I need you to help me.'"

Once accepted, most of the students we spoke with had positive experiences while attending CNA. Many enjoyed their program and felt that CNA programs opened doors to opportunities for employment and/or further education. "People become more successful through CNA."

> *The amount of paperwork involved to get in school is tremendous. For us and for them.*
> *- CNA faculty/staff*

Cultural safety

Cultural safety is a term that originated in New Zealand and has been adopted by countries around the world (Doutrich, Arcus, Dekker, Spuck, & Pollock-Robinson, 2012; Gerlach, 2012; Hunt, 2013). It refers to providing an environment where individuals feel safe, respected, welcome, and free of discrimination. Only the individual receiving the service can determine whether they feel culturally safe, but efforts by service providers can increase feelings of cultural safety in their clients (Doutrich et al., 2012; Garneau & Pepin, 2015).

We received mixed responses from Indigenous students and alumni on whether they felt culturally safe while attending CNA. Some felt culturally safe during their entire time with CNA, in the words of one Indigenous alumnus, "Yes, I thought it was culturally safe . . . My overall experience with CNA was absolutely amazing." Some felt culturally safe at times and culturally unsafe at times, and others indicated they often did not feel culturally safe. Some students told us they feel they are treated differently than non-Indigenous students and they deal with discrimination every day.

> *My overall experience with CNA was absolutely amazing.*
> *- CNA student/alumnus*

Participants from all stakeholder groups told us ways CNA can help to increase feelings of cultural safety for Indigenous students and prospective students. We will discuss these suggestions under 'What We Heard from All Groups'.

Recommendations

Students who took part in group discussions gave us recommendations that will help reduce barriers for Indigenous adults seeking post-secondary education:

- CNA could hold information sessions in Indigenous schools, bringing application forms and information on programs, careers, and entrance requirements.
- CNA could hold general information sessions open to everyone in Indigenous communities, bringing application forms and information on programs, careers, and entrance requirements.
- CNA could bring *both* CNA faculty/staff and a community member who has completed a CNA program to information sessions. People in Indigenous communities will relate better to someone from their own culture.

- A centre in communities where people can access computers and receive assistance with application forms could help more Indigenous adults gain admission to CNA
- CNA could create more awareness of options that do not require high school graduation or equivalency, and the application process for those options
- CNA could offer more programs for people who have not completed high school
- CNA could allow open admissions rather than screen applicants out based on what they do or do not know
- CNA could remove the application fee for low-income students, or allow low-income students flexibility to pay their application fee later

What We Heard from Representatives from Indigenous Governments and Organizations

The following is a summary of themes unique to representatives from Indigenous governments and organizations. This is a small portion of the information they gave us; the rest of their input involves topics discussed by all groups and will be discussed in the section 'What We Heard from All Groups'.

> *Education is the key. All the studies show, if you go out and get a good education, you get a good job, you have stability in your life, and your kids grow up happier*
> *- representative from MTIE*

Education is a priority

We heard that Indigenous governments are prioritizing education in their communities. One interviewee told us, "Education is the key . . . All the studies show, if you go out and get a good education, you get a good job, you have stability in your life, and your kids grow up happier, and on and on." Indigenous governments and funding agencies want to provide Indigenous adults who wish to go back to school with the funding and tools they need to further their education. Advisory Committee member Jimmy Nui, Director of Education, Post Secondary with Mushuau Innu First Nation, said "In Natuashish, when someone decides they want to go to school, they are celebrated and wished well . . . We celebrate people. We encourage them to follow their dreams." Funding agencies communicate with each other to allow more students to get funded. PSSSP currently cannot provide funding for programs that do not require high school graduation but are considering whether they can change that policy.

> *In Natuashish, when someone decides they want to go back to school, they are celebrated and wished well*
> *- Jimmy Nui, Mushuau Innu First*

Review curricula with an Indigenous lens

In line with recommendations from our literature review (Battiste & Henderson, 2009; Friesen & Ezeife, 2009; Kim, 2017; Munroe, Lunney Borden, Murray Orr, Toney, & Meader, 2013;

Warren & Miller, 2013), many of those we spoke with from Indigenous governments or organizations (as well as some students and CNA faculty and staff) recommended incorporating culturally relevant material into program curricula. To illustrate the point, representatives from Innu First Nation told us that since the Innu have taken over their own education 10 years ago, they are seeing more high school graduates than ever before. In the words of an MTIE representative, ". . . we've already graduated more kids now than in the past 50 years combined." They are still following provincial high school standards, but have incorporated culturally relevant material into their curricula, and they are seeing great success. Students will perform better with material that is relevant to them.

We've already graduated more kids now than in the past 50 years combined.
- representative from MTIE

Another aspect of reviewing curriculum with an Indigenous lens includes offering training to meet the needs of Indigenous communities. Several people we spoke with strongly recommended that CNA consult with Indigenous governments and communities to find out where the skills gaps are and offer appropriate programs to fill those gaps. In the words of one participant, ". . . there should be dialogue, obviously, between the college and different Indigenous groups to ensure that the college, as a community learning environment, is meeting the needs of Indigenous groups."

Recommendations

The Readiness Project Advisory Committee, comprised of representatives from Indigenous governments and organizations, took part in a day-long workshop (along with welcomed guests) to inform the project. The workshop concluded with a list of recommendations to reduce barriers for Indigenous mature student applicants to CNA.

- Create a geographically/culturally relevant and program-specific test for the mature student process.
- Conduct interviews in addition to a test as part of the mature student process.
- Have a committee evaluate Indigenous mature students, assessing things like traditional/cultural knowledge, grades, land-based knowledge, learning and work experiences, and more.
- As part of the mature student process, CNA could reach out to funding agencies to ask their opinions about applicants.
- Offer more upgrading programs (like ABE).
- Create more options for students with lower academic abilities.
- Increase course offerings (especially at the Happy Valley-Goose Bay campus).
- Offer more community-based programs.
- Revise the application form – use plain language.

- On the application form, explain why CNA asks applicants to indicate if they are Indigenous (linking self-identification to available supports).
- Implement a peer mentoring program.
- Employ (or partner with another agency to hire) an Innu liaison.
- Offer help with transportation (especially from Sheshatshiu to Happy Valley-Goose Bay).
- Visit community high schools and junior high schools more often to increase awareness about program offerings, related careers, and entrance requirements. At these sessions, ask students and community members what programs they would like to see at CNA.
- Hold community presentations (for those not in school) more often and put more thought into how to advertise these presentations to community members.
- Create a culturally safe place at *all* campuses.
- Offer more residences and family residences and ensure there are flexible policies with respect to who qualifies for a family residence.
- Offer daycare at more campuses and increase capacity of day cares.

What We Heard from All Groups

The following themes are common to all groups we spoke with and present the experiences and knowledge from Indigenous students and alumni, representatives from Indigenous governments and organizations, and CNA faculty and staff.

A need for enhanced supports

> *Students will not get through without needed supports.*
> *- Odelle Pike, Qalipu First Nation*

While the Readiness Project is primarily concerned with developing a new mature student admission model, a need for CNA to offer enhanced supports was mentioned in more conversations (all 19 conversations) than considerations for the new admission model (18 conversations). Additionally, discussion around supports for Indigenous students yielded the second-highest number of comments (166 comments), second only to comments on a new admission model (254 comments). This is not surprising, as many articles we reviewed emphasized that admission cannot be viewed in isolation, as many factors outside of academic ability can affect post-secondary success (Assembly of First Nations, 2018; Colleges and Institutes Canada, 2018; Gallop & Bastien, 2016; Pechenkina & Anderson, 2011; Restoule et al., 2013). In the words of Odelle Pike, Elder from Qalipu First Nation, "Students will not get through without needed supports." There are four main areas for enhanced supports that were discussed:

Supports in general. People from all groups agreed that flexible and easily accessible supports are paramount to the educational success of Indigenous and mature students in CNA programs. While CNA offers many supports for students, some students and some CNA faculty and staff were not aware of some supports, indicating a need for CNA to increase awareness about

> *When they got their letter asking for a high school transcript, when they got a rejection letter, how many disappeared and went to the wayside because they felt they weren't accepted, or couldn't be accepted?*
> *- CNA faculty/staff*

available supports. Additionally, all groups we spoke with agreed there is room for CNA to enhance and expand upon existing supports. Transition and orientation supports were viewed as essential to help acclimate Indigenous and mature students to life as a college student, especially for those who must relocate for school. We heard from two conversations with CNA faculty and staff that there is a need for CNA to hold open channels of communication with Indigenous students (through surveys for enrolled students and exit interviews for those who leave their program early) to learn where there are gaps in support. This would enable CNA to do what it can to fill those gaps and, ultimately, increase student retention.

Application supports. All groups discussed the importance of application supports. Some interviewees expressed concern that CNA's approach to mature student admissions may discourage potential students. One CNA interviewee asked, "When they got their letter asking for their high school transcript, when they got a rejection letter, how many disappeared and went to the wayside because they felt that they weren't accepted or couldn't be accepted?" CNA offers guidance during the application process from counsellors, student development officers, and, at the Happy Valley-Goose Bay campus, from the Aboriginal support coordinator. However, many people we spoke with were not aware prospective students could go to CNA for help with their application, and some students and alumni described difficulty in finding someone from CNA to talk to before they were admitted to a program. We heard that many prospective students need assistance with the application process. One Indigenous student told us about their confusion the first time they applied, "The first time I applied to CNA they asked for a transcript. I didn't know if I had one, I didn't know what a transcript was." In addition to creating a better experience for Indigenous applicants and decreasing the number of applicants who fall through the cracks, application supports could also increase the number of students who self-identify as Indigenous (or as needing accessibility supports). Odelle Pike, Elder from Qalipu First Nation, commented, "Having someone help them fill out the application form and explain why [CNA asks about Indigenous status], and how it will benefit them to identify they are Indigenous, could encourage more students to self-identify."

> *The first time I applied to CNA they asked for a transcript. I didn't know if I had one, I didn't know what a transcript was.*
> *- CNA student/alumnus*

Participants also described a need for more or better advisement for Indigenous adults who are considering post-secondary options. Indigenous students and alumni told us that many prospective students do not know who to go to with questions about CNA. Many Indigenous adults are not aware of what is involved in going back to school, entrance requirements for

programs, or the appropriate place to start for high school non-graduates. Engaging Indigenous alumni and current students as mentors and role models for Indigenous adults who are considering going back to school and visiting Indigenous communities and schools more often are great ways to help address this gap.

Learning supports. CNA offers help centres and tutors to help students with their studies. Students and alumni were pleased that learning resources were available but indicated a need for more staff and extended hours in help centres, and more tutors, as current resources are not enough to meet demand. Some people we spoke with suggested that, if possible, offering Indigenous students a peer tutor from their own culture would be most beneficial. To maximize benefits to students, learning supports need to be in place *before* a student falls behind in their coursework. We heard that learning supports "should be there ahead of time, as a proactive thing and not just a reactive thing."

[Learning supports] should be there ahead of time, as a proactive thing and not just a reactive thing.
- CNA faculty/staff

Another aspect of learning supports relates to students with learning exceptionalities. We heard that some students arrive at CNA with undiagnosed learning issues, and it can be difficult for CNA to provide the appropriate accommodations for these students. In the words of Jodie Lane, Director of Education with Nunatsiavut Government, "There are challenges when students are not diagnosed with a learning disability in high school. Organizations cannot provide funding for those disabilities without documentation." CNA interviewees told us they do the best they can to support students with suspected learning exceptionalities, but it can be challenging to get an assessment to provide the formal documentation needed to secure funding for proper supports.

Indigenous student supports. The CNA campus at Happy Valley-Goose Bay has the highest percentage of Indigenous students of any CNA campus, and offers many supports for Indigenous students that are in line with those offered by most CICan Indigenous Protocol signatory colleges in Canada (Dowden & Williams, 2020). All groups we spoke with were pleased with the supports offered at the Happy Valley-Goose Bay campus for Indigenous students. These supports include a dedicated gathering space for Indigenous students, cultural and social events on campus, and three dedicated CNA staff members to assist Indigenous students. Many people we spoke with indicated they would like to see these supports expanded, so that Indigenous students at any CNA campus can avail of the same supports. We heard that it is important to have a bilingual Innu liaison at CNA to assist Innu students and provide translation services. An Innu translator allows students to speak and ask questions in their own language and helps to improve cultural safety. LATP currently employs an Innu translator to work at the Happy Valley-Goose Bay campus.

> *We need to embrace a broader aspect here and support Indigenous students with a coordinator who can really understand the barriers and help mitigate them.*
> *- CNA faculty/staff*

Specific supports that could be expanded to more CNA campuses include a safe gathering space for Indigenous students; transition supports to assist with relocating for school and to help acclimate students to college life; and an Indigenous navigator or liaison. Many people we spoke with stressed the importance of an Indigenous navigator/liaison, envisioning this position to assist Indigenous students and prospective students to navigate barriers, connect students to other supports, and to advocate on behalf of Indigenous students. In the words of one CNA interviewee, "we need to embrace a broader aspect here and support Indigenous students with a coordinator who can really understand the barriers and help mitigate them."

Opportunities to increase cultural safety

Above, we discussed student perceptions of cultural safety at CNA. While some Indigenous students felt very comfortable and safe while attending CNA, others did not. Below are some things CNA can do to increase cultural safety for Indigenous students.

Increase Indigenous representation. A representative from an Indigenous government told us Indigenous people "feel welcomed when they see themselves in the organization somewhere." Increasing Indigenous representation can include hiring more Indigenous faculty and staff, employing an Indigenous liaison, and including Indigenous CNA alumni or faculty/staff during community and school recruitment sessions. Additionally, recruiting more Indigenous students to CNA will also help to increase feelings of cultural safety. Students who were taking classes with other Indigenous students told us they felt comfortable and welcome, but students who were the only Indigenous person in a program or on a campus felt isolated. One student told us, "I was nervous going to [a new CNA campus]. There were no Innu people there. People don't talk to each other." Another student said, "I felt really comfortable just knowing that I had other Indigenous people with me." Increasing Indigenous representation at CNA can help lessen the culture shock and loneliness that some Indigenous students feel when they move away from home for school.

> *I felt really comfortable just knowing that I had other Indigenous people with me.*
> *- CNA student/alumnus*

Other opportunities to increase cultural safety. Other ways participants felt that CNA can help to increase cultural safety overlap with suggestions for expanded supports and recommendations for a new admission process. These include creating a safe gathering space for Indigenous students at more CNA campuses; offering culturally relevant testing during the admission process; ensuring regular, two-way communication between CNA and applicants during the admission process; enhancing orientation and transition supports for Indigenous

students; and visiting Indigenous communities and schools more frequently to build relationships and rapport with community members.

Some participants felt that a cultural awareness/ sensitivity workshop could increase student, faculty, and staff awareness of the different Indigenous groups in Newfoundland and Labrador. One CNA interviewee told us, “We need some cultural sensitivity training, as a general group.” They told us that when they first started their position, they accidentally said something inappropriate to an Elder, unaware that the phrase was inappropriate. Tim Jack, Community Director of Education with MTIE, suggested, “It would help if CNA offered a one- or two-day cultural sensitivity course or workshop for students, faculty, and staff.” The Happy Valley-Goose Bay campus has developed a Cultural Awareness Workshop that is delivered to students each September and encourages faculty and staff to attend these workshops. There is an opportunity to expand this workshop so students, faculty, and staff at other CNA campuses can avail of the training.

We need some cultural sensitivity training, as a general group
- CNA faculty/staff

Considerations for a new mature student admission model

The main focus of the Readiness Project is to develop a new model for mature student admissions that is appropriate, reliable, and valid for Indigenous adults. Under the old mature student process, admission decisions are primarily based on applicant scores on the Canadian Adult Achievement Test (CAAT). Most people we spoke with told us the CAAT was not an appropriate tool to use for admission decisions. They told us the CAAT:

- Is unreasonably long (it takes a minimum of 3.5 hours to write, although some students take days to complete the test)
- Is a higher difficulty level than necessary for many CNA programs
- Does not allow for accommodations for people with disabilities
- Is old and outdated (the last update was in the 1980s)
- Was normed using mostly white North Americans
- Makes some students feel judged and humiliated

CNA recognizes that a new approach to mature student admissions is warranted. The Readiness Project Advisory Committee told us that mature students are a large group with a variety of different challenges and needs; although “the CAAT is a barrier for *all* mature students.” Most discussion on a new model for mature student admission centered around two main themes: holistic assessment and testing.

Holistic assessment. A holistic approach for admission considers the whole person rather than one aspect of a person (Choi, Flowers, & Heldenbrand, 2018; Grove, 2019; Sandlin, 2019). Holistic admission can include any of the following: interviews, prior work and learning experiences; community involvement; testing; essays; letters of reference; and more (Choi et al., 2018; Fowler, 1997; Niessen & Meijer, 2017; Sandlin, 2019). The key is that *more than one* of these elements are used when making admission decisions. Many participants felt that simply replacing the CAAT with another test will not give robust enough information to determine whether an applicant could be successful in a program. In the words of one CNA interviewee, "I think we need to be very cognizant and aware that scores don't necessarily mean everything. I mean I am not suggesting we throw out [test] scores. They do tell us a little bit of a story here, but I think we need a more holistic and broader means of assessing applicants."

I am not suggesting we throw out [test] scores. They do tell us a little bit of a story here, but I think we need a more holistic means of assessing applicants.
- CNA faculty/staff

Many participants recommended creating a process with multiple assessment options, highlighting a need for flexible policies because a "one size fits all" approach does not work for everyone. Participants suggested CNA could consider the following attributes of applicants when making admission decisions: determination and motivation; potential barriers and strategies to overcome them; goals and expected career; lived experiences and personal strengths; interest in and knowledge of the program applied to; and previous paid and unpaid work experience.

Previous work and learning experiences were frequently discussed as important considerations for admission decisions. Sometimes applicants have work experience related to their program of choice, cultural or land-based skills that are more advanced than skills needed for their program of choice, and/or lived experiences and personal strengths that have prepared them for post-secondary training. Some applicants have already completed post-secondary training at other institutions, which can be a good indication they have the skills needed to complete a program at CNA. Our Advisory Committee told us that character references could help with admission decisions; however, ". . . it is not in the nature of some Indigenous people to be boastful, so it can be hard to ask someone to write a letter of reference."

It is not in the nature of some Indigenous people to be boastful, so it can be hard to ask someone to write a letter of reference.
- Readiness Project Advisory Committee

Having an interview or discussion with the person applying was a popular suggestion, and we were told that many counsellors are already holding informal interviews with mature student applicants. We heard about the success CNA has had in the past when using interviews

as part of the admission process for previous contract training programs. Interviews are currently used when assessing students under CNA's special admissions policy; although we heard there is a need for a standard conversation guide to assist counsellors conducting these interviews. We also heard that LATP and some Indigenous governments have conversations with those seeking funding to return to school. In the words of Carol Best, Manager, Program Development and Learner Supports with LATP, "We don't want to send anybody out to fail." Some CNA faculty and staff felt it would be a great practice to allow a counsellor, student development officer, or Aboriginal support coordinator to have first contact with Indigenous and mature student applicants to CNA.

Testing. There were a range of opinions on the use of tests in the admission process for mature student applicants; however, overall, people from all groups felt that testing could be a good tool to determine whether an applicant has the literacy and numeracy skills needed to be successful in their program of choice, given an appropriate test is used. Some people we spoke with preferred that CNA let everyone who applies enter a program. Jimmy Nui, Director of Education, Post-Secondary with Mushuau Innu First Nation, said, "We do not want to say no to a student. We do not want to tell them they can't do it." However, many Indigenous students, many representatives from Indigenous governments and organizations, and almost all CNA faculty and staff recognized that a culturally appropriate and program-specific test could be a good tool to use to assist with admission decisions for mature student applicants. Some people we spoke with expressed concern for doing more harm than good by admitting students to programs they are not prepared for. Concerns included psychological harm to the student, high drop-out rates, and reduced student retention.

We do not want to say no to a student. We do not want to tell them they can't do it.
- Jimmy Nui, Mushuau Innu First Nation

A test must be culturally relevant for it be appropriate to use for Indigenous mature student applicants. This means that questions should include things familiar to people living in rural communities in Newfoundland and Labrador, such as cold weather, snow mobiles, hunting, or local place names. Including familiar contexts will make questions easier to understand. It was also pointed out that CNA should collaborate with Indigenous organizations when developing any admission test to ensure it is culturally relevant. Some participants suggested that since the CAAT is not appropriate for *any* mature student, a new admission test must work for *everyone* in Newfoundland and Labrador.

In addition to cultural relevance, admission tests should also have *program* relevance. For example, the skills required for academic programs are very different from the skills required for trades programs, and admission tests should be assessing skills that are relevant to the applicant's program of choice. Jodie Lane, Director of Education with Nunatsiavut Government, asked, "What is the benefit to the college of finding out if a student is good in a broad range of

areas if they only need a few to be successful in a program?" A CNA interviewee felt that, "for example, just because my math skills are not great, that shouldn't prevent me from pursuing a career in something that has less focus on math." Admission tests should have appropriate content, difficulty level, and length for the program an applicant is applying to.

Last, but certainly not least, participants told us that it is important for tests to consider those whose primary language is not English (perhaps by offering translation for key words or having an Innu-speaking liaison available for translation of some questions), and to allow for accommodations for those with disabilities, those with learning exceptionalities, and those who may not have access to a reliable internet connection.

A need to increase options at CNA

One of the secondary findings of our consultations is that CNA lacks options for adults who need to upgrade their skills. Aside from industry-specific contract training programs, there is currently only one program at CNA that does not require a high school diploma or equivalent: Comprehensive Arts and Science-Trades (CAS Trades). CAS Trades has been offered at the Happy Valley-Goose Bay campus for two years, and many are hopeful it will become a regular program. Students who complete the program are eligible for most industrial trades programs at CNA. While CAS Trades can eventually lead to non-trades programs at CNA (after completing an additional upgrading program), it is not an ideal option for a person who is not interested in trades. Two separate, but related options for upgrading skills were discussed by participants: a high school equivalency program and preparatory/access programs.

> *In Sheshatshiu, about half of students have English as their second language, which forces them to do general courses instead of academic courses. CNA's access programs give these students the chance to upgrade.*
> *- Tim Jack, MTIE*

High school equivalency programs. People from all stakeholder groups identified a need for CNA to offer a high school equivalency program. Many felt this was a serious gap in CNA program offerings, since one of the challenges some Indigenous adults face in accessing post-secondary training is not having a high school diploma. We heard that ABE was very good when CNA offered it. Now ABE is offered in fewer communities, but many Indigenous adults still need to complete ABE before they can enroll in college programs. Additionally, one interviewee told us that current ABE offerings at private colleges do not meet the needs of those who must upgrade their basic skills, as level 1 ABE (the level which focuses on basic skills) is not offered very frequently, if at all, at private colleges. One representative from an Indigenous government asked, "Why does CNA come to [our community] to advertise its programs when it does not offer ABE?" Importantly, some participants pointed out that if CNA offered a high school equivalency program, it would never have to say 'no' to any applicant; instead, when necessary, it could recommend mature student applicants to start with a high school equivalency program

first as a ‘feeder program.’ CNA could offer mature students the flexibility of either completing the full high school equivalency program, or key pre-requisite courses, before enrolling in a post-secondary program.

Increase options for high school non-graduates. Preparatory and access programs allow students to complete pre-requisite courses needed for their program of choice without obtaining high school equivalency. Some advisory committee members felt that CNA access programs are great for some of their students. Tim Jack, Community Director of Education with MTIE, told us, “In Sheshatshiu, about half of students have English as their second language, which forces them to do general courses instead of academic courses. CNA’s access programs give these students the chance to upgrade.” But many people from all groups felt current program offerings are insufficient, and there is a need to offer more programs at more campuses that do not require a high school diploma as a pre-requisite. One CNA interviewee commented, “In an ideal situation, we would have several levels of readiness courses, in multiple subject areas, and students would have the option of building their skills accordingly.” Another said, “. . . [CNA] programs are set up to be very much sequential. It doesn’t lend itself to being part-time or adding in these foundation math courses . . . that is going to be a big paradigm shift if we ever did move down that road.” Mature students who have been out of school for a long time could benefit from a short program to help get them back up to speed in math, English, or other subjects, and help acclimate them to college life. Some participants suggested that mini trial programs could be created as part of the mature student admission process to help demonstrate applicant abilities and skills, and identify which supports, if any, applicants may benefit from.

> *[CNA] doesn’t lend itself to being part-time or adding in these foundation math courses . . . that is going to be a big paradigm shift if we ever did move down that road.*
> *- CNA faculty/staff*

We also heard there is a need to offer customized programs that lead to employment and do not require high school graduation, such as a janitorial skills or retail skills program. Ideally, these programs would be tailored to the needs of Indigenous communities, enabling students who complete the program to work in or near their home community. Some participants felt that some regular CNA programs, such as Aboriginal Bridging Program and select trades programs, could likely be suitable for some high school non-graduates. These participants felt that requiring applicants to meet a higher academic standard than is needed for success in a program is an unnecessary barrier. One Indigenous alumnus told us that they completed a trade program with a grade 11

> *If [CNA] lowered their expectancy to maybe grade 10, grade 11, for the trades itself, they could . . . potentially have very successful people.*
> *- CNA student/alumnus*

education level, “so if [CNA] lowered their expectancy to maybe grade 10, grade 11, for the trades itself, they could . . . potentially have very successful people.”

Indigenous community outreach and collaboration

Another secondary finding from our consultations is there is an opportunity for CNA to increase collaboration and strengthen its relationship with Indigenous communities and governments in Newfoundland and Labrador. This is also supported by our literature review and environmental scan (see Dowden & Williams, 2019 and Dowden & Williams, 2020) as a good practice to help increase Indigenous adult participation in post-secondary education and the work force. Two general themes discussed include more focused recruitment efforts for Indigenous adults, and general outreach and collaboration with Indigenous governments and communities.

***More information sessions and workshops*.** CNA visits high schools in Indigenous communities to provide information about course offerings, the application process, and to answer any student questions. We heard from our consultations that there is a need for CNA to visit communities much more frequently to increase awareness about programs, related careers, and entrance requirements. Our participants told us that in addition to visiting high schools, CNA could also visit junior high schools and hold general community information sessions and application workshops. Increasing community visits could not only result in increased enrollment of Indigenous adults in CNA programs, but could also help increase feelings of cultural safety once Indigenous adults arrive on campus, as they will have at least one familiar, friendly face. In the words of one participant, “. . . if you’ve got somebody from CNA that’s going out into the community that potential applicants can meet with, once you’ve made those connections, that will really help the student when they get at the campus.” Participants also told us that more thought should be placed into how to advertise community and school information sessions. For example, creating posters, and placing ads on community Facebook pages and radio stations will help increase awareness of information sessions. Prize giveaways, games, and other fun things will help to draw more people to community sessions.

In addition to information sessions and workshops, we heard there is a need for CNA to collaborate with Indigenous communities on a deeper level. For example, we heard that the Happy Valley-Goose Bay campus has an opportunity to consult with communities to learn where their skills gaps are, and then offer programs that fill these gaps and meet community employment needs. This will help to increase Indigenous adult admission and retention and enable Indigenous CNA alumni to finding gainful employment in or near their home communities. Jodie Lane, Director of Education, Nunatsiavut Government, told us, “Options for people who do not want to do trades are very limited at the Goose Bay campus. CNA could look at offering additional programs such as Early Childhood Education, Finance, Human Resources, and more at the Goose Bay campus.”

Options for people who do not want to do trades are very limited at the Goose Bay campus.
- Jodie Lane, Nunatsiavut Government

They suggested that CNA could alternate different programs in different years. We also heard there is a need for more CNA satellite campuses in smaller communities. Community-based programs can have high numbers of applicants, high attendance and retention rates, and can help transition students to larger campuses. Satellite campuses could also provide a space for community members to access computers and assist those interested in applying to CNA. Having a presence in the community will help community members become more familiar with CNA, and hopefully encourage more people to apply to CNA programs.

Limitations

The Indigenous students and alumni we spoke with were from Innu First Nation or beneficiaries of Nunatsiavut Government or NunatuKavut Community Council. We had scheduled trips to the west coast and central Newfoundland to speak with students from Qalipu First Nation and Miawpukek First Nation; however, due to restrictions imposed by COVID-19 we were unable to do campus and community visits and had to cancel our trip. We kept the possibility open to hold phone interviews with interested students, but there was a lot of uncertainty due to the virus, and students needed to adjust to completing the rest of their semester online, so the timing was not appropriate. We included representatives from Miawpukek First Nation and Qalipu First Nation in our advisory committee, which enabled us to capture perspectives from those groups in other discussions.

Another important limitation is that we were unable to speak with Indigenous adults who have applied to CNA but were never accepted into a program, or Indigenous adults who were accepted into a program but were unable to complete it. These two groups are critical to hear from, as they have been unable to overcome barriers to completing post-secondary training programs. We mitigated this as much as we could by hearing some of their stories from representatives of Indigenous governments and organizations, and by hearing stories of CNA alumni or students who had been denied admission in the past but were ultimately able to gain admission. While this gives us some important information, we are still missing the full perspective of Indigenous adults who have been unable to overcome barriers to post-secondary education.

Conclusion

Mature student applicants to CNA could benefit from a holistic approach to admissions. Admission decisions that consider the whole person, including their literacy and numeracy skills, previous work and learning experiences, life experiences, and motivation level, will provide a more complete picture than decisions that rely primarily on test scores. Further to this, many of the challenges faced by Indigenous applicants during the application process could be mitigated by supports, including discussions on program offerings and entrance requirements, expected careers, assistance filling out the application form, and guidance on how to obtain documents required for admission. We heard that a holistic admission approach,

combined with application supports, is an appropriate admission pathway to CNA for Indigenous mature student applicants, and could assist with improving feelings of cultural safety.

Most people we spoke with supported the use of tests when necessary to determine whether an applicant has the literacy and numeracy skills necessary to be successful in their program of choice. For a test to be appropriate for Indigenous adults, it must be culturally relevant, program-specific, and have a difficulty level appropriate for the program applied to. Many believed that a test can be developed to be culturally relevant for both Indigenous and non-Indigenous people in Newfoundland and Labrador. This is important, because some people we spoke with indicated that the mature student admission process should be updated for *all* students, holding the opinion the CAAT is not appropriate for anyone.

While participants recognized the Happy Valley-Goose Bay campus provides a wealth of supports for Indigenous students, they also recognized a need to expand these supports to additional campuses. Key supports include a safe gathering space for Indigenous students and an Indigenous navigator. Additionally, mature students at CNA could benefit from more program options, including a high school equivalency program, more preparatory programs that do not require a high school diploma or equivalent as a pre-requisite, and some regular programs that do not require a high school diploma.

References

Assembly of First Nations. (2018, July). *First Nations Post-Secondary Education Review: Interim Report 2018.* Ottawa, ON: Author.

Association of Canadian Community Colleges. (2010). *Colleges Serving Aboriginal Learners and Communities 2010 Environmental Scan: Trends, Programs, Services, Partnerships, Challenges and Lessons Learned.* Retrieved from https://www.afn.ca/uploads/files/accc-communities.pdf

Atlantic Aboriginal Economic Development Integrated Research Program. (2016). *Making Connections: Key Economic Drivers in Aboriginal Rural and Remote Communities – Aboriginal Youth, Colleges and Industries*. Retrieved from https://www.apcfnc.ca/images/uploads/Making_Connections_FINAL_May_2_2017.pdf

Battiste, M. and Henderson, J.Y. (2009). Naturalizing Indigenous knowledge in Eurocentric education. *Canadian Journal of Native Education*, 32(1), 5-18.

Choi, A.N., Flowers, S.K., and Heldenbrand, S.D. (2018). Becoming more holistic: a literature review of nonacademic factors in the admissions process of colleges and schools of pharmacy and other health professions. *Currents in Pharmacy Teaching and Learning*, 10, 1429-1437.

College of the North Atlantic. (2019, April). Operational Procedure. Topic: Admission. Procedure No. AC-102-PR. Retrieved from https://www.cna.nl.ca/About/pdfs/policies-and-procedures/Academic/Admission/2Procedure/AC-102-PR_Admission.pdf

Colleges and Institutes Canada (May, 2018). Department *of Indigenous Services Canada federal engagement on Indigenous post-secondary review with Colleges and Institutes Canada member institutions*. Facilitated conference call. Ottawa, ON.

Doutrich, D., Arcus, K., Dekker, L., Spuck, J., and Pollock-Robinson, C. (2012). Cultural safety in New Zealand and the United States: looking at a way forward together. *Journal of* Transcultural *Nursing* 23(2), 143 – 150.

Dowden, A. and Williams, F. (2019). *Considerations for the Admission of Indigenous Mature Student Applicants to Post-Secondary Institutions: A Review of the Literature*. St. John's, NL: College of the North Atlantic.

Dowden, A. and Williams, F. (2020). *Alternate Admissions Policies and Supports for Indigenous Students: An Environmental Scan of Select Canadian Colleges.* St. John's, NL: College of the North Atlantic.

Fowler, J.P. (1997). *Report of an Educational Psychology Internship at Cabot College of Applied Arts, Technology and Continuing Education, Including a Research Report on the Effectiveness of the Canadian Adult Achievement Test in Predicting College Grade Point Average for Mature Students* (Master's thesis). Available from the National Library of Canada Acquisitions and Bibliographic Services. (Document ID 0-612-23135-6).

Friesen, J.B., and Ezeife, A.N. (2009). Making science assessment culturally valid for Aboriginal students. *Canadian Journal of Native Education,* 32(2), 24-37.

Gallop, C.J. and Bastien, N. (2016). Supporting success: Aboriginal students in higher education. *Canadian Journal of Higher Education,* 46(2), 206 – 224.

Garneau, A. B., and Pepin, J. (2015). Cultural competence: a constructivist definition. *Journal of Transcultural Nursing*, 26(1), 9-15.

Gerlach, A.J. (2012). A critical reflection on the concept of cultural safety. *Canadian Journal of Occupational Therapy*, 79, 151-158.

Grove, A. (2019, September 29). *What Are* Holistic *Admissions?* Retrieved from https://www.thoughtco.com/what-are-holistic-admissions-788426

Hunt, E. (2013). Cultural safety in university teaching and learning. *Procedia - Social and Behavioral Science*, 106, 767-776.

Karpinsky, V. (2016, April). *Admissions Indicators and Practices Leading to the Success of Mature Students.* Vancouver, BC: British Columbia Council on Admissions & Transfers.

Kim, M. (2017). Indigenous knowledge in Canadian science curricula: cases from western Canada. *Cultural Studies of Science Education*, 12, 605-613.

McQuarrie, F. (2013, October). *Mature Students: Admissions Policies in BC.* Vancouver, BC: British Columbia Council on Admissions & Transfers.

Munroe, E.A., Lunney Borden, L., Murray Orr, A., Toney, D. and Meader, J. (2013). Decolonizing Aboriginal education in the 21st century. *McGill Journal of Education*, 48(2), 317-337.

Niessen, A.S.M., and Meijer, R.R. (2017). On the use of broadened admission criteria in higher education. *Perspectives on Psychological Science*, 12(3), 436-448.

Pechenkina, E., and Anderson, I. (2011). Consultation paper on Indigenous Australian higher education: trends, initiatives and policy implications. *Department of Education, Employment, and Workplace Relations, Australian Government.* Retrieved from https://docs.education.gov.au/system/files/doc/other/pechenkina_and_anderson_2011.pdf

Restoule, J-P., Mashford-Pringle, A., Chacaby, M., Smillie, C., Brunette, C., and Russel, G. (2013). Supporting successful transitions to post-secondary education for Indigenous students: lessons from an institutional ethnography in Ontario, Canada. *The International Indigenous Policy Journal,* 4(4), Art. 4.

Sandlin, M. (2019). And admissions/enrollment imperative for predicting student success. *College and University*, 4(2), 2-11.

Seston, D., Talijan, Z., and Aitchison, C. (2018). *Policy Paper: Mature Students.* Toronto, ON: Ontario Undergraduate Student Alliance.

Youmens, S., Godden, L., and Hummell, F. (2017, June). *Phase One Part B: An Environmental Scan of Adult and Continuing Education in the Eastern Ontario Region.* Kingston. ON: Eastern Regional Partnership for Adult Education.

Warren, E. and Miller, J. (2013). Young Australian Indigenous students; effective engagement in mathematics: the role of language, patterns, and structure. *Mathematics Education Research Journal,* 25, 151 – 171.

Appendix A: Sample Interview and Group Discussion Guides

Interview Guide:
CNA Applicants and Students

Introductio

1). Why did you become interested in applying to CNA?

Follow-up Questions:
- What did you know about the program before you applied?
- What kinds of supports, if any, did you have when considering and exploring college options?

Current Admissions

2). Could you tell us about your experience applying to CNA?

Follow-up Questions:
- Did you go through the mature student process?
- What was involved in the application process?
- Did the process make sense to you, or did you find it confusing?
- How easy or difficult did you find the process?
- How did it feel to go through the application process? (acceptance/rejection letters?)
- Did you speak with someone from CNA before you applied? If so, how was that experience?
- Did you have to write a test? If so, how long did it take? How did you prepare for it? How did it feel to write the test?

3). What parts of the process did you feel were easy to complete? What parts did you find challenging?

Follow-up Questions:
- What could CNA have done differently to make this process easier for you?
- Did anything get in the way of completing the application process?
- Did you receive support during the application process? If so, from who?

Needs of Indigenous

4). I'd like to find out about cultural safety and our admission process. The basic idea of cultural safety is that it's safe, respectful, and free of discrimination. Do you feel that the admission process is culturally safe? How so?

Follow-up Questions:

- What do you think could make the admission process more culturally safe?

5). What do you think would help future Indigenous applicants become successful in gaining entry to a CNA program?

Follow-up Questions:

- Do you think there is a need for additional supports for Indigenous students when applying to and attending CNA? If so, what kinds of supports?

Readiness

6). If someone does not already have the entrance requirements for a program, what do you think would be a good or fair way for CNA to figure out if that person could be successful in the program?

Follow-up Questions:

- What other things should be taken into consideration?
- If a test were to be used, how can the test be better for Indigenous adults?

Wrap-

7). Before we go, is there anything you would like to add? Do you have any comments on the questions, or is there anything we missed?

Interview Guide:
CNA Faculty and Staff

Introductio

1). Thank you for making the time to chat with us. Before we begin, do you have any questions?

Current Admissions

2). What is your experience with the admission process at College of the North Atlantic?

Follow-up Question:
- How long have you played a role in this process?

3). Can you briefly explain the process and options currently available to Indigenous adults applying as a mature student at your campus?

4). In your opinion, is this process appropriate for mature Indigenous adults? Why or why not?

5). What aspects of the mature student admission process do you think work well for Indigenous applicants? What needs to be improved or changed?

Follow-up Question:
- What resources are available to help Indigenous adults during the application

Needs of Indigenous

6). What do you think helps Indigenous adults when applying to CNA? What do you think gets in their way?

Follow-up Question:
- What do you think would help future Indigenous applicants become successful in gaining entry to CNA?

7). What characteristics could a new admission process for mature students have to best meet the needs of Indigenous adults?

Follow-up Questions:

- What supports do you think Indigenous adults need during the application process?
- What would make an admission process more culturally safe for all Indigenous groups in NL? By culturally safe, we mean ensuring the individual feels safe,

Readiness

8). What are the needs of CNA when it comes to assessing readiness for mature students?

Follow-up Questions:

- How do you know whether or not capable applicants are being screened out?
- How do you know when someone may need upgrading before they can be

9). What do you think a readiness assessment could look like in order to be appropriate for Indigenous applicants?

Follow-up Question:

- What elements could an assessment have in order to become culturally relevant?

10). Overall, what improvements could be made to the mature student application process for any student?

Wrap-

11). Before we go, is there anything you would like to add? Do you have any comments on the questions, or is there anything we missed?

Discussion Guide:
Advisory Committee / Elders

1). Welcome and introductions

2). With the overall goal for people to find meaningful work or careers, what are the educational needs of adults in your community who have not completed high school?

Follow-up questions:
- What do you think could help this group attend college or university?
- What role could CNA play?

3). How does CNA's mature student admission process impact Indigenous applicants? Their families? Communities?

Follow-up questions:
- Do you feel the admission process is appropriate? Why or why not?

4). We want to learn about cultural safety with respect to CNA's admission process. The basic idea of cultural safety is that it's safe, respectful, and free of discrimination. Do you feel that the admission process is culturally safe? How so?

Follow-up questions:
- What do you think could make the admission process more culturally safe?

5). If someone does not already have the entrance requirements for a program, what do you think would be a good or fair way for CNA to figure out if that person could be successful in the program?

Follow-up questions:
- If a test were to be used, how can the test be better for Indigenous adults?
- How do Inuit, Innu, and Mi'kmaq schools achieve cultural relevance when testing students' knowledge? How could CNA achieve this with diverse Indigenous cultures?
- What other things should be taken into consideration?
- There is debate about whether post-secondary schools should admit all mature student applicants (for example, based on age), or just those who demonstrate they could be successful. Based on your experience working with students, what are your thoughts on this?

6). When people apply for post-secondary funding through your organization, how do you determine who is ready for post-secondary education?

Follow-up questions:

- What are the formal and informal ways that you do this?

7). Based on information from the literature review and environmental scan, is there anything that sounds particularly interesting or promising?

8). Before we move on, is there anything you would like to add? Do you have any comments on the questions, or is there anything we missed?

9). Summary of recommendations

6.4 Dissemination Plan

Activity	Jan	Feb	March	April	May	June
Advisory Committee Final Presentation and Consultation on Findings						
Academic Team Presentation of Findings						
Counselling Team Presentation of Findings						
Presentation and Consultation Action Plan for Recommendations						
Advisory Committee Update on Actions						