Nova Scotia Apprenticeship Agency / Nova Scotia Community College Stewardship Report

2016-2017 Academic Year





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Strategic Alignment

Apprenticeship is an industry-based training system that leads to post-secondary certification in a designated trade. In the 2012 review of the apprenticeship system, industry identified a need for greater influence on the relevance of pre-apprenticeship programs and a stronger connection between pre-apprenticeship and apprenticeship technical training. Industry also recommended assessing the current allocation of resources across the pre-apprenticeship and apprenticeship systems and determine the most effective utilization of resources across the entire apprenticeship system.

The creation of the Nova Scotia Apprenticeship Agency ("Agency") in 2014 involved significant amendments to the *Apprenticeship and Trades Qualifications Act* and the *Community Colleges Act* to pave the way for fuller, more coherent industry engagement across the trades training system. It was clarified in the *Apprenticeship and Trades Qualifications Act* that the apprenticeship system includes pre-apprenticeship programs as well as youth and equity programs where recognized training is delivered. As a measure to ensure that the relationship between Nova Scotia Community College ("College") and the Agency meets the objective of enabling consistent industry advice across the system, the amended *Apprenticeship and Trades Qualifications Act* names the NSCC Vice-President, Academic as a member of the Apprenticeship Board.

The amended *Community Colleges Act* enables Agency input to new programs and alterations to existing programs that pertain to the designated trades. The Board of Governors of NSCC is required to collaborate with the Agency to establish the guidelines on the evaluation of programs of study that pertain to the designated trades. In addition, where NSCC would have established Program Advisory Committees for programs that pertain to designated trades, it will instead use the Agency's Trade Advisory Committees (TACs) for this purpose. TACs are composed of industry representatives who are appointed by the Apprenticeship Board to enable a coherent industry voice across the trades training system. The Operating Charter of the Agency further states that TACs shall provide advice and make recommendations to the NSCC Board of Governors concerning pre-employment programs associated with designated trades, including appropriate prerequisites to entry.

This report is a fulfillment of the legislative requirement for the NSCC President and the NSAA Chief Executive Officer to jointly prepare an annual stewardship report to the Minister concerning trades and related matters that are within the mandate of both the College and the Agency.

Joint Stewardship Initiative

In August 2016, the respective board chairs of the NSCC Board of Governors and the NSAA Board established the Joint Stewardship Initiative with shared outcomes, strategies and results. The basis of the initiative is the understanding that the two organizations are joint stewards of the trades training system, neither controlling the budgets of the other but charged with jointly stewarding the system and advising the Minister. The initiative was presented at a joint meeting of the two Boards in December 2016.

Shared outcomes

Increasing:

- labour market alignment where stakeholders feel authentically engaged, the agency and the college have a common understanding of labour market information, and the programs offered match the needs of the labour market;
- student success where students understand the certification pathway, student access the best program for their interests and aptitudes, and students develop the skills employers need; and
- apprentice completion rates where students transition from pre-apprenticeship to apprenticeship and apprenticeship technical training meets the industry standard.

Shared Strategies

Co-developing and implementing:

- ✓ Training Quality Framework
- ✓ Diversity and Inclusion Plan
- ✓ Transition Task Force Recommendations
- ✓ Program Decision Matrix and Approval Process
- ✓ Strategic Program Plan and longer-term vision
- ✓ Trade Advisory Coordination Plan
- ✓ Apprentice Technical Training Plan
- ✓ Special Initiatives (i.e., Aboriginal Pathways to Shipbuilding)

Shared Results

Government and General Public

- creating a process for program decision making and interaction with the LAE Program Review Committee and NSCC Board of Governor Program Committee
- identifying opportunities to leverage marketing and promotion activities
- beginning dialogue on resource optimization across the trades training continuum

Students and Apprentices

- planning for an increased number of NSCC graduates to transition into apprenticeship
- ensuring NSCC information accurately reflects the apprenticeship journey

Employers and Industry Stakeholders

- joint industry outreach and enabling industry to advise on the full trades training system
- sharing data and examining approaches to labour market information to enable evidenced-based program decisions supported by both parties

The NSAA and NSCC have created a joint leadership team to oversee the joint stewardship initiative. This team is co-led by the NSAA Chief Executive Officer and NSCC Vice President-Academic. The team met nine times during the 2016-2017 reporting period and participated in a one-day strategic planning session in July.

Team composition from the NSAA includes the CEO; Director, Programs & Operations; Director, Partnership and Innovation; Manager, Industry Relations; Manager, Programs; Manager, Programs Standards; Team Lead, Program Development.

Team composition from the NSCC includes the V.P. Academic; V.P. Organizational Development; Associate V.P. Planning and Services; Dean, Trades and Technology; Academic Chair, Hospitality; Manager, Apprenticeship; Curriculum Consultant.

The leadership team has established four sub-committees and confirmed a fifth pre-existing subcommittee to come under the Joint Stewardship Initiative. The five committees are: Joint Inclusion Committee; Joint Market and Co-Branding Committee; Trade Advisory Co-ordinating Committee; Labour Marketing Information Analysis Partnership and Technical Training Committee. Work accomplished during the reporting period under the initiative are reported below.

In 2016-2017, the NSCC submitted a revised two-year Culinary Management Diploma program to the Minister for approval. This proposal came to the Agency for review. To ensure future programs were submitted to the Agency prior to going to the Minister for approval, it was agreed to bring these types of requests to the Joint Stewardship Leadership Team. The team then developed a joint program approval process.

Effective Collaboration – Diversity and Inclusion

NSAA-NSCC Inclusion Committee

A committee terms of reference has been developed and reviewed by the NSAA Chief of Diversity and NSCC Director of Diversity. An initial meeting has taken place between the co-chairs. The College is hiring a new Diversity Director and meetings of the full committee will begin when this is completed. Activities underway of relevance to the committee include:

Diversity and Inclusion Supports

As per the Agency's Diversity and Inclusion Framework: *Building More Equitable Pathways*, a Chief Diversity Officer position has been designated and filled by the Agency. This position is responsible for implementing the Framework. Diversity & inclusion has become a standing item at joint NSAA/NSCC professional development days (2 per year). This year the focus was on Cultural Proficiency, power, privilege, and entitlement, and what this means for classroom practices. The Agency is providing support in diversity training as needed to NSCC, including a full-day session with Aboriginal funders and NSCC Student Services staff from around the province, in order to find ways to work more collaboratively.

Disability Services Committee

The Disability Services Committee at NSCC was formed to address the needs of apprentices with self-identified disabilities entering and/or continuing technical training at the College.

The committee has worked to clarify and document services offered for apprentices with disabilities. As part of a new 2016 service-delivery model, Disability Services are now primarily delivered through a Learning Strategist at each of the 13 NSCC campuses. Services include processes for students to self-identify, provide information, participate in individualized accommodation planning, and seek the supports necessary to meet their personal responsibilities in the process of accommodation planning. Accomplishments to date include identifying the many

different barriers a student may have to learning which may include a disability, gaps in academic history or limited literacy skills and, in addition, mapping services available at key stages of the apprentice career path. While working to identify the roles and responsibilities of an apprentice seeking assistance from Disability Services, NSCC's Learning Strategists and NSAA's training consultants, the committee will continue to seek to identify potential partners and any projects that will address service gaps. This committee is planned to be expanded to include various Disability networks and organizations throughout the province.

Pathways to Shipbuilding

The first year of the Pathways to Shipbuilding has been completed with 17 students completing the program. Pathways to Shipbuilding is a joint collaboration between the NSAA, NSCC, Irving Shipbuilding Inc., Indigenous and Northern Affairs Canada, Employment and Social Development Canada and the Mi'kmaq Native Friendship Centre. The cohort-based pilot program integrates education, industry and community partnerships to develop a model that successfully creates pathways for Indigenous Canadians to enter the shipbuilding industry. Over the course of the two-year program, participants are given the opportunity to learn and work together, and be mentored and coached by community and industry supporters, including Indigenous employees working at the Halifax Shipyard. As part of a culturally responsive approach by NSCC, the Centre of Excellence employed an Elder to assist and connect with the students in the program, helping to ensure continued success.

Gender Equality Network

Women Unlimited is partnering with the NSAA and the NSCC to provide supports for women who pursue training and careers in the skilled trades. An inaugural Women in Trades symposium was held March 7, 2017 where 75 certified trades women and apprentices came together to share their experiences and ideas for improving support across the continuum, including in classrooms and in the workplace. The Executive Director of Women Unlimited, CEO of the Agency and NSCC Vice-President of Organizational Development are participating in a nation-wide initiative to improve gender equality through this three-year project with the Status of Women.

Effective Collaboration - Marketing and Awareness

NSAA/NSCC Marketing and Co-Branding Committee

The purpose of the NSAA/NSCC Marketing and Co-Branding Committee is to ensure that common or shared aspects of the trades training system, when advertised, displayed and/or marketed, are clearly and equally identified by both organizations with respect to their role in the system. The Committee will also ensure that the common or shared aspects of the trades training system are identified and that the quality of the products meet the standards of the NSCC and the agency. The Committee will report to the Joint Stewardship Committee.

The Committee is co-led by the NSCC Dean, Trades and Technology and the NSAA Director, Partnership and Innovation. The committee also consists of the NSCC Manager, Apprenticeship; Manager, Student Engagement and Awards; Manager of Branding and Advertising and the NSAA Manager, Programs.

The Committee will be identifying target audiences, a shared marketing and communications strategy; key messages and materials, programs, activities, events, and opportunities for strategy implementation.

Career Exploration and Awareness

The Agency and the College work jointly to promote the skilled trades and apprenticeship training, including as founding sponsors of Techsploration and presenting partners of Skills Canada-Nova Scotia. The College provides safety training for youth participants in the NSAA's summer youth apprenticeship program, specifically for Building Futures for Youth (BFY) in the construction sector and Automotive Test Drive in the motive power sector. These programs provide a combination of industry-based classroom safety instruction and on-the-job, paid work experience in the trades for eligible Grade 10 and 11 students in the public school system. Classroom instructional time is delivered at NSCC campuses across the Province.

This year, the BFY and Test Drive programs had a total of 90 students participate in summer youth programs. Building Futures for Youth accepted 80 participants and 73 completed all aspects of the program; those 73 students were employed for the summer by 52 individual employers. In the TestDrive program, 17 students were accepted and completed all aspects of the program, including the work placement component which engaged 17 employers to host the students. As a requirement of the programs, NSCC provided 80 hours of safety training to all 97 participants before students entered job sites.

Effective Collaboration – Industry Engagement

NSAA/NSCC—Trade Advisory Coordination Committee

The Trade Advisory Committees provide advice on the trades training system, including preapprenticeship and apprenticeship programming. The Coordinating Committee determines the annual needs for program review, recommends appropriate employer engagement, defines the processes for establishing Trade Advisory Committees that need to carry out such reviews and clarifies the roles and participation in TACs. The Committee is co-chaired by the Agency's Director of Partnership and Innovation and the College's Dean of Trades and Technology.

In the reporting period, the TACC created a program decision-making matrix which is a tool to assist both organizations in identifying what decisions need to be made, by whom and with what level of industry input. The decision-making matrix captures key activities including: Employer Engagement; Marketing and Communication; Labour Market Information; Pre-apprenticeship and New Program Development; Apprenticeship Technical Training; Customized Learning; Pathways Strategy; Program Quality; Curriculum Changes; and Trade Development. Recent programs reviewed through the matrix include: Carpentery LINK; Wagmatcook enhanced direct-entry; Motor Vehicle Body Repairer enhanced direct-entry and the Culinary one and two-year programs.

The TACC has identified the NSCC pre-apprenticeship programs that align with the designated trades and developed a schedule of Trade Advisory Committees that are required based on NSCC pre-apprenticeship programs that need to be reviewed. It has also developed the Trade Advisory Program Review Process and options for when the NSCC needs to consult with stakeholders regarding programs that pertain to the designated trades, for which no TAC exists or is planned.

Provincial Trade Advisory Committees

Trade Advisory Committees (TACs) established by the NSAA Board often include NSCC representatives as ex-officio members. The Agency and the College work together when a TAC reviews a pre-apprenticeship program and additional resource staff are provided by both organizations, as needed. Currently there are 13 active TACS meeting on a regular basis.

Trade	NSCC Program	NSAA TAC	Review Year
Automotive Service Technician	Automotive Service and Repair	Automotive Service Technician	2017-2018
Construction Electrician	Electrical Construction and Industrial Certificate	Construction Electrician	2017-2018
	Electrical Construction and Industrial Diploma	Construction Electrician	2017-2018
	Electrical Technician	Construction Electrician	2017-2018
Heavy Duty Equipment Technician/Truck and Transport Mechanic	Heavy Duty Equipment/Truck and Transport Repair Certificate	Truck and Transport Mechanic/Heavy Duty Truck & Transport Tech	Initiated in 2016-17
	Heavy Duty Equipment/Truck and Transport Repair Diploma	Mechanic/Heavy Duty Truck & Transport Tech	Initiated in 2016-17
Industrial Electrician	Electrical Construction and Industrial Certificate	Industrial Electrician	2017-2018
	Electrical Technician	Industrial Electrician	2017-2018
	Electrical Construction and Industrial Diploma	Industrial Electrician	2017-2018
Instrumentation Control Technician	Industrial Instrumentation Diploma		2017-2018
Industrial Mechanic (Millwright)	Industrial Mechanical Certificate		2016-2017
Machinist	Machining Diploma		2017-2018
Metal Fabricator (Fitter)	Metal Fabrication Diploma		Initiated in 2016-17
Plumber	Plumbing Certificate	Plumber	2017-2018
Steamfitter/ Pipefitter	Steamfitting Certificate	Steamfitter	2017-2018
Steamfitter/ Pipefitter & Plumber	Pipe Trades Diploma	Plumber, Steamfitter	2017-2018
Power Engineer	Power Engineering Technology		2017-2018
Powerline Technician	Utility Line Worker		Initiated in 2015-16
Refrigeration and Air Conditioning Mechanic	Refrigeration and Air Conditioning Certificate		2017-2018
	Refrigeration and Air Conditioning-Geothermal Certificate		2017-2018
	Building Systems Technician (HVAC&R) Diploma		2017-2018
Welder	Certified Welding Cert of Accomplishment		Initiated in 2016-17
	Welding Diploma		Pending

Review of NSCC Pre-Apprenticeship Programs

Effective Collaboration – Evidenced-based Decision Making

Labour Market Information Analysis Partnership

The purpose of the Labour Market Information Analysis Partnership (LMIAP) is to provide a forum where LAE, NSAA and NSCC can research, share, and assess labour market information sources and systems used to make evidence-based decisions related to apprenticeship training and certification for the designated trades, including:

- Increase the effectiveness and align NSCC and NSAA resources to enhance system decisionmaking using an agreed upon set of labour market data;
- Improve the linkages between existing programs, the transition into apprenticeship from college programs, and the completion of apprenticeship for underserved and underrepresented groups; and
- Improve completion rates for apprentices by ensuring that resources are allocated to appropriate trades within the system.

The LMIAP is led by the NSCC Dean of Trades and Technology and the NSAA Director, Partnership and Innovation. The team is made up of Labour Market Analysts and staff with relevant expertise from the NSCC, NSAA and Department of Labour and Advanced Education.

Both institutions use a combination of information resources to acquire LMI on a timely basis. NSCC has invested in an economic modelling software called, *EMSI Desktop Analyst* and NSAA is working with the Atlantic Apprenticeship Council and *PRISM Economics and Analysis* to develop an Atlantic database which will fulfill Agency requirements for LMI data. Sharing labour market reports and data will help both organizations gain a better understanding of industry labour market realities and areas of potential training needs. Data needs to be looked at more closely to ensure course offerings are in line with labour market needs.

To this end, the LMIAP has developed a strategy and is piloting it with the Construction Electrician trade. The strategy includes agreed-upon labour market sources and variables. Work on the pilot is expected to conclude in 2018.

Effective Collaboration – Learning Success

NSAA/NSCC—Apprenticeship Technical Training Committee

The joint Apprenticeship Technical Training Committee is responsible for the coordination, and implementation of the delivery of technical training. The committee researches best practices in training and develops implementation strategies for renewed and harmonized training standards, identifies curriculum development needs and resources, explores challenges facing apprentices, and seeks opportunities for flexible training delivery options. Flexible training methodologies helps to ensure equitable access to all apprentices. This committee is made up of representatives from the College and the Agency with responsibility for the delivery of technical training. It is co-chaired by the Manager of Apprenticeship at NSCC and the Manager of Programs and Operations at the Agency.

The College and the Agency make a significant effort to plan each year's training schedule to accommodate the needs of employers and apprentices. A Training Sales Agreement is signed between the College and the Agency, setting out the conditions under which the College is to provide the training and the Agency is to communicate its needs, and giving the associated cost structure.

Currently this agreement represents over four million dollars in funding. The committee also works to align curriculum and credit transfer between the College's pre-apprenticeship and the Agency's apprenticeship programs. In the Spring, the committee organized an initial one-day conference between Agency staff and College staff/apprenticeship faculty to build understanding and identify ways to support apprentices in the classroom.

Apprenticeship Technical Training

Apprenticeship technical training is that portion of the certification requirement in a designated trade in which the apprentice receives formal instruction, including theoretical aspects. NSCC is the Agency's primary service provider for technical training and other trades-related training (e.g., refreshers, certification renewal, and safety). Training is offered through NSCC, at various locations, for the following 26 designated trades:

Automotive Service Technician (AST)	Machinist			
AST (Service Station Mechanic)	Metal Fabricator (Fitter)			
Boilermaker	Motor Vehicle Body Repairer (Metal and Paint)			
Bricklayer	Oil Heat System Technician			
Carpenter	Plumber			
Construction Electrician	Power Engineer			
Cook	Powerline Technician			
Gas Fitter	Refrigeration and Air Conditioning Mechanic			
Heavy Duty Equipment Technician	Roofer			
Industrial Electrician	Sheet Metal Worker			
Industrial Mechanic (Millwright)	Steamfitter/Pipefitter			
Instrumentation and Control Technician	Truck and Transport Mechanic			
Ironworker	Welder			

During the 2016-2017 academic year and through the NSCC, the Agency offered a total of 1186 weeks of in-class technical training (194 sections) to 1975 apprentices at the following locations:

Campus	Weeks	of		Campus	Weeks of	
	Training		apprentices		Training	apprentices
Akerley	407		754	Pictou	88	136
Burridge	58		65	Shelburne	5	4
IT	167		290	Strait Area	13	17
Kingstec	21		33	Truro	14	30
Lunenburg	5		7	lvany	205	365
Marconi	203		274			

Credit Transfer

The Nova Scotia Apprenticeship Agency awards NSCC graduates who have completed preemployment programs in designated Nova Scotia trades with credits toward apprenticeship following an approved transfer credit agreement with the College. This is possible because the NSCC has incorporated the industry training standard for the trade into the applicable program. Programs are reviewed annually and credits are given in 37 College pre-employment programs.

Flexible Technical Training for Construction and Industrial Electrician Apprentices

This multi-year project, funded by Human Resources and Skills Development Canada, is managed by a joint NSAA/NSCC Project Management Team. A Joint Advisory Committee, comprised of employers, faculty, and apprentices, also advises the Project Management Committee on the on the initiative.

The Flexible Technical Training for Construction and Industrial Electrician Apprentices Project (FIATT) consists of objectives and outcomes, which are designed to introduce, test, and promote innovative alternatives to traditional in-class training methods for up to 75-80 apprentices using the Mobile Learning Centre, mobile training simulators, on-line learning courses and web-based broadcast tool. The project is in the final stage of tool development.

The Training Simulators prototypes are complete, and are being constructed by an Apprentice. A diverse team has been involved in the Training Simulator Build, including; Faculty, CAD Designer, Subject Matter Expert, Curriculum Consultant, Instructional Designer and D2L Animation/Gamification Expert to ensure quality, relevancy and a smooth integration as additional resource content for the e-learning platform. The entire team including the Manager of Apprenticeship training, Academic Chair, Project Coordinator and NSAA staff have facilitated three hands-on interactive design workshops with a focus on curriculum and labs to enhance the practical use and learning of the training simulators. The build will be complete by February 2018. To date, over 240 Apprentices have used the completed training simulators to augment their theory courses.

The Instructional Designer, Subject Matter Expert and related on-line support staff have completed and activated 28 of the 33 Theory Courses in the Desire to Learn (D2L) web-based platform. The web-based broadcast tool is being utilized to develop content for the D2L courses and is available for use with employers and faculty. Currently twenty-six students are enrolled in Level 2 and 3 courses and the Mobile Learning Centre has served 13 apprentices in Burridge, in levels 2, 3 and 4. Four Apprentices successfully achieved their Red Seal designation.

Atlantic Trades Business Seal

The purpose of the Atlantic Trades Business Seal (ATBS) is to provide business skills and knowledge to journeypersons who either currently, or would like to, manage or own a skilled-trades company. The ATBS was a multi-phase project that included all four Atlantic Apprenticeship authorities. In March 2017, NSAA and NSCC launched the first of five courses to be delivered in Atlantic Canada in the Halifax/Dartmouth area. Seventeen journeypersons, representing diverse communities and eleven trades, assembled at the NSCC IT Campus for their first class on March 21, 2017. The Agency's Director, Partnership and Innovation provided remarks on behalf of the Agency to note the inaugural program. The journeypersons were enthusiastic to begin the first steps towards obtaining the ATBS.

Looking Forward

The ideas and concepts of joint stewardship and collaboration, while there has been success in defining them, will take time to be fully established and recognized. As identified in the One Nova Scotia report, resolutions to complex issues will be more easily identified and achieved when distinct organizations can build on what is common, contribute their unique assets to the collective and lead their teams to see a new, better reality. When two individual organizations such as ours come together to implement a shared mandate, we are learning it takes thoughtful effort and cooperation to find ways that individual missions, value sets, and brands can co-exist while moving forward together. We must keep our sights on the prize - a skilled workforce with full participation by all groups that wisely uses the resources available to it and supports economic growth for the province. To achieve this goal as joint stewards, we will need to continue the work started to base program decisions on common labour market information, sound research and proven statistics.

In addition, it is incumbent upon us to be responsive to employers and apprentices with quality training and delivery options. We will find ways to support our front-line staff and faculty in providing the best service and learning experience we can, advance better learning conditions for women and other equityseeking groups and continue to apply innovations in training development and alternate delivery to future trades programs.

In the spirit of inclusivity, cultural competency, and culturally responsiveness, both the Agency and NSCC, while continuing to foster the relationship within the Joint Stewardship Initiative, will make it a priority to include diverse groups in decisions that directly affect them. Through collaborative decision-making, multiple perspectives are utilized, and sound decisions with input from affected groups are reached.

Sincerely submitted,

Don Bureaux, President NSCC

Marjorie Davison, CEO NSAA

