

Program Review

Final Report and Action Plan

Plumbing Trades

Foundation and Apprenticeship Harmonized



Trades and Technical Programs

North Island College

April 2025

Submitted to
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Preamble

As we continue working through the process of program review and renewal we are guided by the college's overarching, interwoven strategic plans, **BUILD 2026**, **Widening Our Doorways**, and **Working Together – the NIC Indigenization Plan**. The recommendations put forth (and the action items detailed in the accompanying Action Plan) align with commitments articulated in the guiding documents and are part of our continued effort to meet the needs of our diverse community of learners.

A. Summary

The Plumbing & Piping Trades program area engaged in the program review process. The outcome of this document is an action plan that details the upcoming work to enhance the program.

B. Background

In accordance with North Island College's Policy 3-11, the department undertook the program review process. This final report synthesizes recommendations and next steps from the department's self-study and the external review report.

The self-study was completed in January 2025 and submitted to the dean of Trades and Technical Programs, Cheryl O'Connell. Survey data from current students, alumni, and faculty were included to support the conclusions and recommendations shared in the self-study.

The external review visit was conducted on March 12 & 13, 2025.

The external review team consisted of:

- Paul Mottershead, Associate Dean, Trades and Applied Technology, Vancouver Island University
- David Dunn, Associate Dean, Building Design and Construction Trades, British Columbia Institute of Technology
- Mark Overgaard, Instructor, Plumbing and Piping, British Columbia Institute of Technology
- Steve Giles, Department Head, Plumbing and Piping, British Columbia Institute of Technology
- Erik Hardin, Instructor, Carpentry Programs, North Island College

The external review team, in fulfillment of its responsibilities, met with:

- Vice-President Academic: Tony Bellavia
- Dean, Trades and Technical Programs: Cheryl O'Connell
- Faculty
- Students and Alumni

This final report is based on the program self-study, the external review report, and responses from program faculty.

C. Program Overview

Mission

To prepare students during their apprenticeship to be successful in the plumbing trade and make a positive impact in the industries that rely on their skill and ingenuity. NIC is a pillar of support within the community, working with contractors to develop skilled trades workers by providing students with knowledge, experience and confidence necessary to succeed in the plumbing trade.

Vision

To be an accessible, welcoming and supportive, high quality, and advanced training option for students on Vancouver Island and throughout British Columbia. We strive to meet and adapt to the needs of continually changing work environments and uphold the highest standards of safety, craftsmanship, and professional development.

Purpose

The purpose of the plumbing programs at North Island College is to deliver the technical training as outlined by SkilledTradesBC and prepare students for success in plumbing and piping by providing the most current and comprehensive training for becoming competent problem solvers and successful trades people. We are committed to building passions in students and promoting a reflective practice forming students who are dedicated to a career of continuous life-long learning.

North Island College is committed to delivering up to date and comprehensive programming in both our Foundations and Apprenticeship pathways, supporting the students in their journey through their chosen program.

Foundations program allows students to begin with the basics which gives them the skills and knowledge to then decide which apprenticeship pathway to take. The apprenticeship program leads to students writing their Red Seal or Trades Qualification exams at the end of their apprenticeship in Plumbing, ultimately setting them up for success with employable skills and abilities.

We believe that preparing students means not just delivering the curriculum content contained in the courses but also teaching students to be successful tradespeople and competent problem solvers.

Program Structure

Applicants must be SkilledTradesBC registered apprentices to enter the apprentice pathway. Apprentices enrolling in technical training must take their training in sequential order: levels 1, 2, 3 and 4. Apprentices must complete all levels of technical training to be eligible to write the Interprovincial (Red Seal) examination: [Plumbing Apprenticeship Program Details](#)

Applicants entering the Plumbing and Piping Foundation level learn essential workplace skills in addition to earning the Level 1 training credit and work-based training hours towards the Interprovincial certification when registered as an apprentice. See: [Plumbing and Piping Trades Foundation Certificate details](#) (including entrance, course and completion requirements).

D. Summary of Strengths and Challenges

Identified Strengths of the Program

From current and past student surveys inputs from student support groups and a current student focus group, the following strengths were raised:

- Students appreciate the practical shop work and immediate feedback, finding it crucial for retention and application of concepts. It was noted that anything hands-on is helpful to learn. Just reading in a book alone doesn't stick as well as practical applications.
- Students praise the instructors for their passion, knowledge, guidance, support, and ability to connect personally with students. The variety offered by having two instructors with distinct teaching styles was also well received.
- Students appreciate the use of technology like projectors and document cameras to enhance learning. They also highlight the value of instructors physically demonstrating concepts and materials.
- Students experience active learning opportunities in a safe learning environment and great community. Instructors are committed to grow, learn, and stay current on topics in the field.
- There is a strong network of academic and non-academic supports and resources provided by the Library & Learning Commons.
- The Plumbing Trades programs have an active Program Advisory Committee (PAC) providing input and guidance to the department.

Current students have meaningful learning experiences and former students go on to achieve success in the community and convey that the program did a good job in preparing them for the workforce. The program and its instructors have been successful in providing students with a comprehensive base of knowledge and skill development resulting in gainful employment.

Gaps and Weaknesses of the Program

Instructors acknowledge some gaps in the program as follows:

- Insufficient time for curriculum development
- Job placements/job employer connections need enhancement
- Building shop exemplars for students to use for concept development and exploration
- Continue to refine practicals to coincide with evolving technologies with the piping trades and improve student learning experience.

E. Summary of Key Findings from the External Reviewers

The external review team felt the quality of the instruction in the North Island College Plumbing programs were very good and aligned with SkilledTradesBC curriculum expectations.

Throughout this report, the external review team provides recommendations, insights, and suggestions for enhancement in areas such as:

- enhance the student learning experience with greater breadth and depth of instructional skills, particularly in assessment and evaluation
- further engage in professional development through internal CTLI workshops and courses, department PD, Indigenous learning, department plans etc.
- build stronger relationships and more frequent engagement with industry for work-integrated learning, demos and talks, program advisory committee and job fair enhancements
- develop more relationships within North Island College and externally with other post-secondary institutions
- expand the impact of work experiences by considering ideas such as requiring work experience of all Foundations students

F. Program Response to External Reviewers' Recommendations

This section outlines the recommendations made by the external review team and our department responses.

Theme 1: Enhancing Relationships and Connections

Focus should be placed on enhancing the relationships and connections the NIC Plumbing and Piping department has with industry and within NIC as an institution.

Recommendation 1: Explore Experiences Outside the NIC Shops

- Tour other trades shops at NIC, including the shops in Campbell River and Port Alberni
- Connect with other Plumbing and Piping programs at other institutions and schedule a visit to tour their shops. This will provide the opportunity to forge new connections and see how other programs are approaching teaching and learning.
- Instructors should be encouraged to participate in annual articulation meetings where they have an opportunity to network with other instructors and be a part of the evolution of trades education.

Recommendation 2: Engage with Local Communities More

- Conduct more fieldtrips to see in-community projects. This will provide students with an opportunity to experience what live projects look like and observe Indigenous ways of learning and being.

Recommendation 3: Engage with Local Communities More

- The dean and associate dean should have a visible presence at the Trades Training Centre in Comox Valley, engaging with students and faculty. This would allow for deeper relationships to be formed between administration and instructors and for the dean and associate dean to have a current understanding of student experiences and needs.
- The dean's office should consider more instructor recognition, acknowledging the good work they are doing.

Theme 2: Enhancing and growing the Plumbing and Piping Program

It was evident that the NIC Plumbing and Piping program is already quite successful. The instructors are dedicated to their teaching practices and provide an excellent learning experience for their students. Looking ahead to the growth and further enhancement of the program is a good next step.

Recommendation 1: Consider how to Expand the Plumbing Program Further

- Explore how more out-of-region students could be recruited to the program. Plumbing and Piping is only offered at NIC and the South Island, so there is an opportunity there to capture more of the mid-island audience.
- Ensure that there will be student housing available for trades students. This will be appealing to out-of-region students who need to find short-term accommodation.
- Consider adding a third instructor to the department so more offerings can be achieved each year.

Recommendation 2: Increase Shop Time for all Levels

- Incorporate more time in the shop for all levels, but especially Foundations. Examine how theoretical content can be better paired with practical lessons in the shop so the shop isn't sitting empty for large blocks of time.

Recommendation 3: Expand Instructional Pedagogy for Theory

- There is room for instructors to expand their pedagogical approaches in the delivery of the theoretical components of the program. Integrating more advanced and robust methods would lead to a more optimized learning experience for students.
- Explore new ways to engage students in the learning process while moving towards the required outcomes.
- Consider innovative delivery formats and teaching strategies.

Recommendation 4: Expand the Integration of Online Components

- Explore digital assessment practices using Brightspace, especially for the SLE's and ongoing course quizzes.
- Enhance resources and content on Brightspace so it can be integrated into content delivery more effectively.
- When evaluating and refining the shop rubrics, ensure that changes are introduced that lead to more efficient grading processes.

G. Indigenization of Teaching and Learning Experiences

See action plan.