1Program Review: One-Year Follow-Up Report Heavy Duty Mechanical

Faculty Name	Byron Beaupre, Matt Wheatly, Kyle Ward
Date Submitted	5/4/2026
Submitted by	David Johns, Trades Consultant, Center for Teaching and Learning Innovation

A. Overview

The Heavy Mechanical department has been busy teaching 1x Foundations, 2x Level 1 apprenticeship, 3x Level 2 apprenticeship, 2x Level 3 apprenticeship, and 2x Level 4 apprenticeship classes over the 2026 academic year. Throughout this time multiple action items identified within program review have moved forward.

B. Impacts on Program Structures

The program structure has remained largely consistent over the past academic year. While several initiatives and discussions have taken place following the program review, these have primarily supported existing delivery models rather than resulting in structural changes. The current framework continues to align with provincial requirements and established scheduling practices, allowing the program to operate as intended.

C. Impacts on Teaching and Learning Practices

The program review process prompted valuable reflection on teaching and learning practices across the department. Faculty have engaged with a variety of perspectives through professional development, collaboration, and institutional supports. Implementation of new approaches has varied by instructor and course context, with changes occurring incrementally as faculty assess what is most effective within their existing delivery models. These conversations remain ongoing.

D. Impacts on the Student Experience

The actions completed this year have contributed to modest improvements in the student experience, primarily through enhanced organization of materials and more efficient administrative processes. These changes have supported instructional delivery; however, the overall student experience continues to be shaped by the established program structure. As such, impacts have been incremental rather than transformative.

E. Impacts on Approaches to Indigenization

Through the program review process, indigenization was discussed and unpacked in regard to the college mission and local community. Several of the faculty members in the carpentry department planned specific indigenous related professional development activities in their yearly plan. These included third-party courses, books, and exploring the Teaching and Learning website. In addition, some faculty members participated in the campus-wide, NIC-sponsored professional development day at the beginning of May 2026.

All Heavy Mechanical faculty members completed the 4–8 hour *201 Indigenous Awareness Certification* course delivered by Indigenous Awareness Canada. This information-rich online training provided essential

foundational knowledge, historical context, and perspectives to faculty, and was assigned as a mandatory requirement within the School of Trades and Technology over the 2025/26 school year.

Each faculty member has come away from these learning experiences with new perspectives and ideas for classroom application. Steps to indigenize the class, course and program are done so thoughtfully by each faculty member based on their level of comfort. The different initiatives practiced by faculty have included sharing circles at the beginning of class, being sensitive to indigenous cultural norms, and demonstrating respectful discourse.

In addition, Healthy Trades initiatives have provided opportunities for students and faculty to voluntarily participate in indigenous centered activities.

F. Completed Action Items

#	Desired Outcome	Completed Actions	Challenges, Successes, and Impacts
	What did you want to achieve?	*What actions have been taken to achieve the desired outcome?*	*What challenges have you encountered, what successes have the change brought, and/or what impacts have the changes had on the student's learning experience?*
1	**Strengthen connections with manufacturers and industry**	*-significant time has been spent on increasing the membership of the local PAC* *-PAC meetings continue to be hosted by NIC, further developing relationships & partnerships* *-Recently one foundation group was able to take a field trip to the local Finning dealer in Campbell River* *-Two field trip were organized for level 4 cohorts to experience T-mar hybrid electric grapple yarder designed and manufactured in Campbell River* *-Two filed trips were organized to BC ferries include community involvement as well as tour of the hybrid electric ferry architecture. This is a local ferry that commutes from Campbell River to Quadra.* *-Two Heavy Mech apprenticeship students participated in the BC regional skills competition in Abbottsford. Employers were quick to support travel costs for these competitors when approached by NIC for financial support.*	*Strengthening connections with manufacturers and industry partners has required sustained effort in engagement and coordination, particularly in building participation within the Program Advisory Committee (PAC) and maintaining consistent communication with external stakeholders. Scheduling meetings, securing industry involvement, and aligning opportunities with program timelines can present ongoing challenges.* *These developments positively impact the student learning experience by increasing exposure to industry environments, expectations, and opportunities. Participation in field trips and competitions helps contextualize learning and build student confidence, while stronger industry relationships support pathways to employment and reinforce the relevance of training within the program.*
2	**Expand School District/industry/community collaborations**	*-an additional foundations cohort is planned for Sept 2026 for dual credit students* *-The Trades coordinator has been pivotal in connecting with community members to establish robust and engaging events that showcase trades here at NIC. This has included several open house/expo type events at local high schools including Georges P. Vanier (Comox) and Timberline (CR). These initiatives have enabled NIC to realize significant exposure to student groups, and directly connected employers to faculty and interested students.*	*These efforts contribute to the student learning experience by increasing access to trades programming and strengthening pathways into post-secondary education. Early exposure to training opportunities and direct interaction with industry partners help students make more informed decisions, while also supporting a more connected and engaged learning environment within the program.*
3	**Research provincial progress and support**	*-Coordinator is actively participating on trades training provider board, so-as to provide input to processes for greater efficiency & sustainability*	*Advancing efforts related to pre-registration and program access has involved coordination across institutional systems and external bodies, which can present challenges in aligning processes, timelines, and communication. Working with the registrar's office to refine enrollment and waitlist procedures, while also contributing to broader*

	the development of methods to pre-register students interested in taking apprenticeship training in future years	*-Department continues to work with NIC register to provide appropriate processes for trades programming enrollment & waitlists* *-NIC website now accurately reflects the program offerings in the heavy mech trades*	*provincial discussions through training provider boards, requires ongoing attention to detail and collaboration across multiple levels.* *Despite these challenges, progress has been made in strengthening processes that support future student access to apprenticeship training. Active participation on provincial training boards has provided opportunities to contribute to discussions around efficiency and sustainability, while ongoing work with the registrar has supported improvements in program enrollment and waitlist management. Updates to the NIC website have also enhanced the accuracy and clarity of program information, particularly within the heavy mechanical trades.*
4	**Review program changes as formalized by STBC.**	*-Major changes from last program outline update have been completed.* *-Further updating is ongoing as technology and learning resources change*	*Time continues to be a challenge for faculty to ensure all materials and updates are completed in a timely manner. All changes made to course materials benefit the learner by having more up to date resources.*
5	**Enhance practices to increase student retention and long-term learning**	*-There have been numerous training acquired for the heavy mech trade over the last year. These include:* *-Hybrid electric vehicle training* *-Train the trainer* *-TRAI trades instructor certificate* *-PIDP training by instructors* *-Instructor involvement with multiple industry training webinars*	*New training aids help fill the gap between textbook learning and active modes of delivery that permit students to see the real-world application.*
6	**Investigate opportunities to enhance work-integrated learning while exploring the relevancy and value of a COOP model**	*-Work experience has been streamlined in large part thanks to the trades coordinator.* *-Students in the foundations program connect with local employers and participate in work experience one day a week* *-There is no further consideration to adjusting this model to a COOP*	*These changes have enabled the work experience system to operate more efficiently, ensuring quality student experiences.*
7	**Review consistency across all program and apprenticeship levels**	*-Faculty are continuing to fine tune courses to provide a consistent approach to the learner experience* *-The department is continuing to consider the advantages inherent to the CDX Moodle platform, and the local NIC Brightspace* *-CTLI has assisted in moving hundreds of Moodle CDX questions over the Brightspace for several of the courses. This has assisted*	*There are multiple challenges in the movement or adoption of Brightspace LMS for this program, as the 3rd party publisher provides minimal support-but has a highly robust resource structure. Work continues to develop in this area to ensure an efficient use of resources and instructor time.*

		in piloting delivery in this different platform.	
8	**Research opportunities to update aging equipment**	*-There have been several pieces of equipment acquired by the department. These include:* *-Hybrid electric training car* *-Hybrid electric boards* *-3D printed Differential steep models/planetary models/ hydraulic valve models* *-Designated Hybrid electric tooling* *-Industry donations*	*These new training aids ensure students are able to work on real-world applications. Administration was instrumental in finding resources to make these purchase a reality, in addition to manufacture & business donations*
9	**Refine methods of documenting and tracking equipment use and repairs, and required tooling**	*-This is an ongoing task that has involved the collaboration between faculty and tool crib attendants.* *-Additional space in the tool crib would make this process easier to manage and organize*	*Refining how equipment use and repairs are documented and tracked—along with improved organization in the tool crib—creates a more reliable and accessible learning environment. For learners, this means less time spent searching for tools or dealing with unavailable or malfunctioning equipment, and more time actively engaged in hands-on tasks.*
10	**Research Heavy Mechanical electronic tooling requirements**	*-Significant time has been spent on resolving multiple issues.* *-IT has committed time and persons in creating a final solution that has leveraged the current Microsoft institutional license. Students now have access to password enabled 3rd party vendor sites, without sacrificing site security through password dispersion.* *-16x Additional laptops were purchased and are stored in the tool crib in dedicated charging/storage locker*	*This was a very long process that took 3 years to fully implement, starting from the initial meetings surrounding the electronic tooling challenges in the department. The Heavy Mechanical trade has changed significantly since the 1980's. Ongoing assistance will be required in this area as equipment, software & hardware age-out.*
11	**Review opportunities to schedule non-instructional days to support the development of instruction aids, curricula, and applied labs.**	*-Administration has moved forward with the scheduling of non-instructional days between cohorts for most courses in all trades. This has created some of the time necessary to ensure faculty are able to adequately prepare for upcoming courses, and also to engage in additional learning aid development and shop tasks*	*This step has assisted in providing <u>some</u> of the time necessary for instructors to create meaningful, quality 6hr instructional days for students. Prep, lesson plans, handouts, projects, material, equipment, and connections of learning objectives all take time to create in a coherent manner.*

12	**Review program sub-needs, considerations and options for expansion.**	*-Substitution continues to be a challenge in this department, as qualified individuals are in short supply locally.* *-There have been some successes in finding individuals to assist from the retirement pool*	*Reviewing program sub-needs and options for expansion has highlighted ongoing challenges related to staffing capacity, particularly in securing qualified substitute instructors. Limited availability of experienced trades professionals within the local area has made it difficult to consistently support instructional coverage, which can impact scheduling flexibility and program responsiveness.*
13	**Explore the opportunity to expand APP programming streams**	*-Truck Transport mechanic was scheduled and heavily promoted in the past year, but student numbers did not support running this offering.* *-There is always the possibility to expand programming offered if funding is present and student numbers are sufficient.*	*Exploring opportunities to expand apprenticeship programming streams has highlighted challenges related to student demand, resource allocation, and program viability. While new offerings such as the Truck and Trailer Mechanic program were scheduled and promoted, enrollment levels were not sufficient to support delivery. Aligning program expansion with sustainable student numbers and available funding remains a key consideration moving forward.*
14	**Explore Ways for Expansion of Future, Current and Past Student and Public Awareness**	*-The trades department has been using a 3D printer to create custom trade-branded swag* *-This swag is utilized at open houses, tours and other opportunities when engaging with the public* *-Two heavy mechanical students were recently competing in the BC skilled trades regionals.*	*Exploring new approaches to public awareness and program visibility has involved balancing creative initiatives with available resources and time. Developing materials such as custom trade-branded items and integrating them into outreach activities requires coordination and ongoing effort to ensure they are used effectively and align with broader engagement strategies. Additionally, identifying opportunities that meaningfully connect with the public while supporting program goals remains an evolving process.*
15	**Explore the options and value of Red Seal Exam Prep**	*-After considering the implications on shop space, curriculum design, faculty realities and time, it has been decided that proceeding towards the full development of this type of offering is not in the best interest of the department*	*N/A*