

Teri Gardner 2-21-25

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## **APPLICATION FOR WSATC RECOGNITION OF AN APPRENTICESHIP PREPARATION PROGRAM**

*Recognized Apprenticeship Preparation Programs are education and training programs which maintain formal articulation agreement(s) with one or more registered apprenticeship program sponsors. The purpose of the recognized preparation programs is to prepare participants for successful entry into registered apprenticeship programs. Preparatory programs are designed to increase the participation of underrepresented populations in registered apprenticeship. (WSATC Policy 2012-03 Sec. I B).*

*An apprenticeship preparation program may apply for recognition or continuing recognition from the WSATC. The WSATC may grant initial recognition for a period of up to 18 months, and continuing recognition for a period of up to three years. To apply for initial recognition, programs must have participants enrolled in training at the time of application, and provide individualized demographic data for the first/current cohort of participants. The cost to program participants may be considered as a factor when evaluating for recognition and continued recognition. (WSATC Policy 2012-03 Sec. III).*

### **SECTION 1: CONTACT INFORMATION AND PROGRAM SUMMARY**

**Name of Apprenticeship Preparation Program:**

Vancouver Public Schools Building Construction Trades

**Name of parent organization/organization that will administer the program:**

Vancouver Public Schools, Department of Career and College Readiness

**Contact Information:**

**Individual Authorized to Represent the Program**

Name: Mark Wreath

Organization: Vancouver Public Schools

Title: Director of Career and College Readiness

Phone: 360-313-1356

Email: mark.wreath@vansd.org

Mailing Address: 2901 Falk Road, Vancouver WA 98661

Physical Address: 2901 Falk Road, Vancouver WA 98661

### **Point of Contact for Outreach and Enrollment**

*Name: Nancy Duncan*

*Organization: Vancouver Public Schools*

*Title: CTE Teacher on Special Assignment (TOSA)*

*Phone: 360-313-1354*

*Email: nancy.duncan@vansd.org*

*Mailing Address: 2901 Falk Road, Vancouver WA 98661*

*Physical Address: 2901 Falk Road, Vancouver WA 98661*

### **Primary User of Apprentice Registration and Tracking System (ARTS) Portal**

*Name: Nancy Duncan*

*Organization: Vancouver Public Schools/ CTE*

*Title: Career and Technical Education Teacher on Special Assignment*

*Phone: 360-313-1354*

*Email: Nancy.duncan@vansd.org*

*Mailing Address: 2901 Falk Road, Vancouver WA 98661*

*Physical Address: 2901 Falk Road, Vancouver WA 98661*

### **Summary of Preparatory Program**

**Please briefly summarize the following in three pages or less within Appendix A.**

- 1. Describe the organization that will be operating the preparatory training. If this is an existing organization, briefly describe its history and mission, and why apprenticeship preparation is a good fit.*
- 2. Describe how the program will be funded. If the program's start-up is grant funded, describe your sustainability plan once the grant ends.*
- 3. Describe the primary needs you have identified in your service area the program will address.*

4. *Describe the target populations and geographical area.*
5. *Describe the program. Please include the following:*
  - a. *The structure of preparatory program including the anticipated number of participants/cohorts per year, approximate duration of the program, and cost of the program to participants;*
  - b. *How the program will be staffed (i.e., instructors, administration, etc);*
  - c. *Participant support/resources during program; and*
  - d. *Apprenticeship navigation and articulation plan.*
6. *Describe the program outcomes. Please include the following if applicable.*
  - a. *Successful completion (required)*
  - b. *Industry recognized certificate(s)/certification(s)*
  - c. *Educational credit*
  - d. *Target articulation rate (required).*
7. *Please provide additional details, if any, you would like to share about your program (i.e. positive outcomes other than registered apprenticeship articulation, etc.)*

**SECTION 2: PROGRAM PARTICIPANTS AND OUTCOMES - (WSATC Policy 2012-03 Sec. II B)**

*A minimum apprenticeship articulation goal, which shall be at least 15% of graduates. Articulation shall be measured at six months following the date program participants graduate, with the following exceptions:*

- a. Programs serving actively enrolled K-12 participants may request articulation be measured at 12 months following the date of apprenticeship preparation program graduation; OR*
- b. Programs serving currently incarcerated individuals may request articulation be measured at 18 months following the date of apprenticeship preparation program graduation.*

*The anticipated number of participants who will enroll in the preparatory program annually.*

*The specific requirements to complete the program (i.e., attendance, grades, test scores, skill demonstrations, certificate attainment, etc.).*

*The specific apprenticeship, industries and/or occupations program graduates will be prepared to enter.*

**Please respond in full to the questions below regarding your program's participants and outcomes.**

- 1. Occupations Trained: Please describe the specific apprenticeship, industries and/or occupations program graduates will be prepared to enter:*

*All program completers will have basic skills aligned with ALL registered apprenticeship programs CORE curriculum. Laborers, Carpenters, Electricians, Plumbers and HVAC programs.*

- 2. Target Articulation Rate: Approximately what percentage of program graduates do you expect to enter into a registered apprenticeship following completion of your program?*

We will work to transition 15% of program completers to enter into one of our partner Registered Apprenticeship programs.

3. Target Participant Population and Successful Articulation Timeframe: Please select the option which best characterizes your program participant successful articulation timeframe. Please describe.

**6 Months**

**12 Months** (program serving actively enrolled K-12 participants)

**18 Months** (program serving currently incarcerated individuals)

*We chose 12 months as we are serving K-12 participants*

4. *How many participants do you anticipate enrolling in each cohort and how many cohorts per year?*

Each cohort has 30 students at 1 cohort per year.

5. *Please describe the requirements to complete the program (i.e., attendance, grades, test scores, skill demonstrations, certificate attainment, etc.).*

As this program is held within a public high school, completion follows an A-F grading model. Students earn grades based on their performance in meeting expected learning outcomes. Each unit is assessed using a skills-based evaluation. Students who complete all required work and earn a grade of C or better receive a Core Plus Certification.

Grades are assigned based on the level of proficiency demonstrated:

**A (Excellent Proficiency)** – Exceeds expectations, demonstrates advanced skills, and applies knowledge with high accuracy and independence.

**B (Proficient)** – Meets expectations, demonstrates solid understanding, and applies skills with minimal errors.

**C (Basic Proficiency)** – Meets minimum competency, demonstrates foundational understanding, and applies skills with some support needed.

**SECTION 3: ARTICULATIONS AND PARTNERSHIPS - (WSATC Policy 2012-03 Sec. II E, Sec. I E)**

*Apprenticeship preparation programs training participants for a specific occupation must provide at least one articulation agreement at the time of application. Preparatory programs training individuals in multiple occupations must provide a minimum of two articulation agreements at the time of application. Articulation agreements must contain the following components:*

*The names of the organizations entering into the agreement (Apprenticeship Preparation Program and Registered Apprenticeship Program).*

*The specific apprenticeship program and occupation(s) that the apprenticeship prep program graduates will be prepared to enter.*

*One or more of the following considerations for graduates of the prep program:*

- a. A preferred entry clause;*
- b. An advanced standing or credit clause;*
- c. Additional point(s) awarded in the application/interview process; or*
- d. Guaranteed interview with registered apprenticeship program.*

*Be executed or renewed no more than three months prior to the date of application.*

**Please select the option which best characterizes your program.**

**Registered Apprenticeship Program specific apprenticeship preparation** *(goal is preparation of apprentices for one specific registered apprenticeship)*

**General apprenticeship preparation program** *(goal is preparation and support to succeed in a variety of apprenticeships)*

**Please complete the chart below with the requested information for each registered apprenticeship with which your program has a formal articulation agreement. A copy of each articulation agreement must be attached to this application. A Memorandum of Agreement/Understanding, a formal contract, or a signed letter of commitment are acceptable forms of articulation agreements.**

Apprentice-ship Program Name	Articulating Occupation (s)	Articulation Type <i>(select all that apply)</i>			
		Preferr ed Entry	Advanced Standing or Credit	Additional Points on Application/Interview	Guaranteed Interview
Northwest Laborers-Employers Training Trust Fund	Laborer	X		X	X
Construction Industry Training Council of Washington (CITC)	Carpenter	X		X	X

Please list any other organizations, if any, which have endorsed your program or otherwise partnered with you to develop or administer this program.

Program or Organization Name	Role(s) <i>(eg: training provider, Advisory Board member, industry consultant, supportive services provider, etc.)</i>
BIA of SW Washington	Advisory, host Career Fair, Annual Hiring Event
SW Contractors Association	Advisory, Youth Contractors Forum, Annual Hiring Event, Education Committee
AGC of Oregon and SW Washington	Summer Internships, Advisory
Careers in Construction	Advisory, Year 13 Hiring Event, New building Construction Consultant
WorkSource SW Washington	Advisory, Career Fairs

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## **SECTION 4: CURRICULUM - (WSATC Policy 2012-03 Sec. II C)**

*Curriculum should be developed in consultation with apprenticeship partners and subject matter experts to ensure it aligns with current industry standards and prepares graduates to meet or exceed the minimum qualifications for entry into an apprenticeship. To ensure recognized Apprenticeship Preparation Programs are adequately preparing participants to enter Registered Apprenticeship and be successful apprentices, preparatory training curriculum must meet the following requirements:*

- a. Be a minimum of 80 hours in duration;*
- b. Employability skill development shall not exceed 50% of curriculum hours. Employability skill development shall be defined as general employment skills (communication, professionalism, work ethic, etc.);*
- c. Industry/trade specific skills and knowledge shall constitute at least 50% of curriculum hours. Industry/trade specific skills and knowledge shall be defined as hands-on training to develop manual, mechanical, or technical skills relevant to the occupation(s) the preparatory participant(s) are training to successfully enter, and which does not displace paid employees; and*
- d. Industry/occupation specific safety training and education.*

**In one to two paragraphs, please provide a brief summary of the program's curriculum describing the total number of hours, topics covered, method of delivery, etc.**

The VPS Building Construction programs final year include 360 hours of instruction. Outcomes are listed and assessed as part of the Core Plus Construction as well as the Career Connections curriculum that was developed by the International Brotherhood of Carpenters. Successful completion of each year of the program is recognized with a completion certification through CorePlus as well as a certificate through the Carpenters training institutes national database. In addition to specific and more advanced areas, student participants gain proficiency in the following areas:

- Workshop/Worksite Safety
- Quality Principles
- Measurement and Inspection
- Blueprint Reading and Schematics
- Use of Hand and Power Tools
- Wall Framing
- Plumbing
- Electrical
- Foundations
- Leadership

**Please respond in full to the questions below.**

1. *Please describe your program's working relationship with one or more registered apprenticeship programs in the development of elements such as curriculum, class activities, evaluation methods, and teaching techniques.*

Our program advisory included representation from LiUNA Local 335, IBEW, SMW Local, Carpenters Apprenticeship and CITC. These advisors meet on a regular basis and provide input on curriculum (annual review of standards), enrichment activities, and industry certifications. Members also support students in Skills USA competitions, Career Fairs and frequently visit classrooms to provide demonstrations and promote apprenticeship applications.

2. *Please identify the program's instructor(s) and provide a brief summary of their qualifications.*

**Erik Gunderson:** 10 year paint business owner, 2 year plumbing business manager/operator, 2 year electrical helper, 2 year house build: framing, electrical, plumbing, sheeting, roofing, insulation, flooring,, 14 years High School math teaching (alg, Geo, AP Stats, applied algebra), 10 yr National Board Certified teacher, 4 year Construction teacher

**Eric Saueracker:** 19 years of teaching Math, Engineering, Physics. 10 years experience in Residential remodel and 2 years in new home construction.

3. *What, if any, post-secondary credit do program participants receive?*

Students enrolled in Applied Algebra, receive articulated college credit to Math through Clark College in Vancouver WA.

Students who complete and Internship receive articulate college credit for Personal Finance through Clark College.

**Please complete Appendix B – Curriculum Outline.**

**SECTION 5: PARTICIPANT RECRUITMENT AND RETENTION - (WSATC Policy 2012-03 Sec. II D)**

*Preparatory program recruitment and retention plans must contain the following elements:*

*The target demographics of the population their enrollees will be drawn from;*

*The specific tools and activities used to recruit and retain participants, with an emphasis on recruitment of underrepresented populations; and*

*The cost of the program to participants.*

**Please respond to the following questions regarding your programs recruiting and retention plans.**

- 1. Please describe the general demographics of the intended program participants (i.e., age, gender, race/ethnicity, geographic area, etc.). Is the program limited to a specific population (i.e., students at a particular high school, veterans, WIOA-eligible, etc.)? If so, explain:*

Any student attending Vancouver Public Schools is able to attend. Currently there are 21,951 students enrolled in K-12 programs. Participants specifically in this program will range from 10-12 grade (15 - 18 years of age).

Vancouver Public Schools - [Demographics](#)

- 51.5% White
- 28.1% Hispanic/Latino
- 3.0% Asian or Asian/Pacific Islander
- 3.3% Black or African American
- 3.6% Native Hawaiian or other Pacific Islander
- 10.1% two or more races

- 2. Please describe the tools and activities which will be utilized to recruit students, and describe how underrepresented populations will be encouraged to enroll in the program.*

VPS Career and Technical Education seeks students who are truly interested in furthering the opportunities that a Career and Technical Education can offer. VPS CTE

will offer a Pre-Apprenticeship Program to students who are seeking education with a purpose.

VPS CTE successfully propels students into post-secondary apprenticeships, or first jobs with companies who support registered apprenticeships, with the chance to learn in a hands-on environment, build a solid knowledge foundation for the apprenticeship they are seeking, and acquire employability skills that will make them successful workers.

The VPS CTE yearly recruitment process includes:

- Scheduled visits both to and from area high schools
- Campus highlights where current students show off current projects created and performed within the Pre-Apprenticeship program
- Career Night for prospective students to visit program instructors and students, and participate in a class project
- 8th Grade Career Showcase for future students interested in a career in the trades

VPS CTE encourages young women to explore a career in the trades and will host a series of workshops targeted to young women and students of color.

3. *Please describe the tools, processes, and resources your program will utilize to retain participants through graduation.*

VPS CTE is focusing on students' long term career goals. The VPS Apprenticeship Preparation Program will create many opportunities for students to see fast-track career and financial enhancement an apprenticeship program can offer. Second year students and first year seniors will be given the chance to participate in job shadows and internships with various apprenticeship programs in our area. Through these opportunities, students experience the benefits of pursuing and successfully completing an apprenticeship.

As part of a public K-12 system, all students receive support to enhance success in this program. Things such as transportation, breakfast and lunch (if needed) and other services offered in the building. Each school and program has access to counseling, tutoring, and any other personal support the student may need.

VPS CTE Apprenticeship Preparation program will schedule employer advisory members to visit classrooms for both a hands on skills demonstration and to provide information

on all the different trades programs. Information provided by advisory members will include employment opportunities, tips on application process, starting wage and progressions, as well as sharing their personal career paths. VPS will work with partners to bring in presenters who are non-traditional to the specific trade.

- 4. Please describe the services that will be provided to graduates and current participants to assist in their successful application and articulation into registered apprenticeship programs.*

Students who have completed two years of this program will be enrolled their senior year in a Core Plus-Special Projects course which will include opportunities to research requirements and apply for apprenticeship programs. This will be both teacher and High-School career specialist supported. In addition, individuals committed to our regional advisory team have stated their willingness to guide and support our students through this application process. Finally, we have a strong relationship with the Building Industry Association of Clark County who offers tool ‘scholarships’ for graduates to assist with the purchase of necessary supplies for students to begin their careers.

- 5. Please describe the cost of the program to participants and describe how the program helps mitigate the cost to participants (i.e., scholarships, grants, financial aid, etc.), if applicable.*

Students accepted and enrolled in the VPS Construction Trades Apprenticeship Preparation program participate at NO COST to the student or the family. They may be asked to fundraise to support student activities and competitions, but basic education and training are covered by the Vancouver School District.

## **SECTION 6: ADMINISTRATIVE REQUIREMENTS - (WSATC Policy 2012-03 Sec. II A)**

*Recognized Apprenticeship preparation programs shall commit to reporting the following information to L&I via the Apprenticeship Registration Tracking System (ARTS) system on a semi-annual basis, unless granted an exception\* by the WSATC:*

### *New participant demographics*

- a. First and Last Names*
- b. Birth Date*
- c. Gender*
- d. Race/ Ethnicity*
- e. Veteran Status*
- f. Social Security Number\**

### *Outcome measures (Individual-level Information)*

- a. Participant graduation(s)/ completions*
- b. Participant withdrawals*
- c. Graduates who have entered into Registered Apprenticeship*

**Please describe the tools and processes your program will utilize to successfully meet the administrative requirements listed above.**

VPS will be using Appendix C to share data

**Please complete Appendix C – Administrative Requirements Spreadsheet.**

## **SECTION 7: APPENDICES**

**Please complete and submit appendices with the application packet as separate files.**

**Appendices include the following:**

*Appendix A – Program Summary*

*Appendix B – Curriculum Outline*

*Appendix C – Administrative Requirements Spreadsheet*

*Appendix D – Articulation Agreement(s)*

*\*Submitted by program as individual documents*

## **SUBMISSION INSTRUCTIONS**

***Applications are due no later than 60 days prior to the scheduled quarterly meeting of the Washington State Apprenticeship and Training Council. It is strongly recommended that you submit your application 2 weeks prior to the deadline for pre-review, to ensure that your application is complete. Contact Rio Frame for questions or assistance.***

***Please submit your completed application via email to:***

*Rio Brunsch, Management Analyst  
Dept. of Labor & Industries, Apprenticeship Section  
FRAV235@LNI.WA.GOV  
509-426-0985*

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## **APPENDIX A – PROGRAM SUMMARY**

**Please briefly summarize the preparatory program according to the requirements listed in Section 1 “Summary of Preparatory Program” in three pages or less.**

### **About the Program**

The Apprenticeship Preparation program is housed at Hudson's Bay high school, in the Vancouver School District. Students meet every school day and instruction is based on the OSPI Core Plus approved instruction framework for a two period block for the full year and receive 360 hours of instruction. Students are in their third year of the program, and can be placed in an internship or work experience outside of the school day to gain even more exposure to the Building Construction Trades.

Through utilization of the Core Plus frameworks (aligned with NCCER curriculum/Career Connections), students will learn about occupational safety, how to interpret drawings and schematics; how to take measurements and analyze data; the properties of common materials used in the building trades; hand-on in-demand skills in foundations, wall framing, plumbing and electrical as well as the quality principles and terminology employed in modern industry.

The two instructors for this program have an average of 15 years of teaching experience as well as years of exposure to the Construction trades. Instructors have expertise in Civil Engineering, Commercial Construction, residential construction as well as specific knowledge in plumbing, basic electrical and some sheet metal work.

### **Employment Needs**

Vancouver School District's implementation of a Construction Trades program is a strategic response to the significant demand for skilled labor in the local construction industry. By 2021, Clark County's construction sector employed approximately 16,600 individuals, reflecting a robust recovery from earlier economic downturns. ([employment security dept - Clark County Profile 2022](#))

Despite this growth, the industry faces persistent labor shortages. In 2024, reports highlight that local construction companies struggled to fill positions as workers retire ([The Columbian](#)). A [second report](#) published Jan. 29, 2025 stated that 4,000 new construction jobs were created in Washington State between Dec. 2023 and Dec. 2024. This is higher than any of the other 37 states that saw construction job growth during this time frame.

Projections indicate that over the next decade, more than 13,000 new construction jobs are expected in the region, further amplifying the demand for trained tradespeople. ([workforce sw.org](#)) By establishing a Construction Trades program, the Vancouver School District aims to equip students with the necessary skills to enter this high-demand field, thereby addressing the labor shortage and supporting the local economy.

### **Funding**

All VPS CTE programs, including the Construction Trades Apprenticeship Preparation program, arrive through the Washington Office of the Superintendent of Public Instruction and are funded based on student participation. This funding allows sustainability as well as enhanced funding to support teacher salary and benefit, some consumable materials, educator training, and equipment.

### **Recruitment/Targeted Populations**

VPS Career and Technical Education seeks students who are truly interested in furthering the

opportunities that a Career and Technical Education can offer. VPS CTE will offer a Pre-Apprenticeship Program to students who are seeking education with a purpose.

VPS CTE successfully propels students into post-secondary apprenticeships, or first jobs with companies who support registered apprenticeships, with the chance to learn in a hands-on environment, build a solid knowledge foundation for the apprenticeship they are seeking, and acquire employability skills that will make them successful workers.

The VPS CTE yearly recruitment process includes:

- Scheduled visits from to and visits from area high schools
- Campus highlights where current students show off current projects created and performed within the Pre-Apprenticeship program
- Career Night for prospective students to visit program instructors and students, and participate in a class project
- 8th Grade Career Showcase for future students interested in a career in the trades

VPS CTE encourages young women to explore a career in the trades and will host a series of workshops targeted to young women and students of color.

### **Retainment**

VPS CTE is focusing on students' long term career goals. The VPS Apprenticeship Preparation Program will create many opportunities for students to see fast-track career and financial enhancement an apprenticeship program can offer. Second year students and first year seniors will be given the chance to participate in job shadows and internships with various apprenticeship programs in our area. Through these opportunities, students experience the benefits of pursuing and successfully completing an apprenticeship.

VPS CTE Apprenticeship Preparation program will schedule employer advisory members to visit classrooms for both a hands on skills demonstration and to provide information on all the different trades programs. Information provided by advisory members will include employment opportunities, tips on application process, starting wage and progressions, as well as sharing their personal career paths. VPS will work with partners to bring in presenters who are non-traditional to the specific trade.

### **Safety Training**

Safety is the very first unit covered at the beginning of each year and reinforced throughout the year with a safety briefing to begin each day of instruction. General Safety consists of 40 hours of lecture with reinforcement of safety principles throughout the remainder of the course. This course is an introduction to OSHA along with the basic principles. It also covers heat and cold stress safety, stairway and ladder safety, hazard identification, control of hazardous materials, the Hazard Communication Program, job hazard analysis, personal protective equipment, lockout/tagout, ergonomics in the workplace, electrical safety and fire prevention. When these subjects have been covered, the students complete a final test on them.

### **Employability Skills**

This program, as well as all CTE programs in Vancouver Public Schools, is required to address leadership and 21<sup>st</sup> Century employability skills during the program. This is accomplished through a variety of ways. The Building Construction program uses an end of course technical skills assessment to measure understanding of 21<sup>st</sup> Century Skills through Precision Exams. Skills covered throughout the course range from critical thinking to technology literacy and everything in between.

Students who complete the assessment with a score of 80% or better are awarded a state recognized industry certification signed by the state superintendent and our local superintendent.

A student Career and Technical Education Student Leadership Organization (CTSO) is also part of each of the VPS programs. Building Construction students are members of Skills USA and use curriculum embedded in the instructional framework to cover lessons addressing 21<sup>st</sup> century skills as well as construction related employability skills. Students are also coached to compete in both leadership and technical skills competitions regionally each year.

Finally, we have members of our advisory committee participate in classroom instruction through project demonstrations, information sharing on opportunities in each of the skilled trades, mock interviews and resume workshops. The success of our program hinges on participation from our employer base to both share technical knowledge and inform students of opportunities.

### **Participant Population**

The Building Construction program is a district wide magnet program, so all students in our district can transfer into the host school. Below are the current statistics in our program. We track student demographics each year and focus recruitment to increase both female and non-dominant race students.

Average Class Headcount: 24

Students of color: 43%

Free and Reduced Lunch: 80%

Gender: Male 78%, Female 12% (note: National average is 9% female)

### **Formal agreements with Registered Apprenticeship Programs**

The VPS Building Construction program has formal MOUS with the following:

- Northwest Laborers Union/District Council of Laborers (Attached)
- Construction Industry Training Council (CITC) (Attached)

### **Program Outcomes**

The VPS Building Construction program of study has three years of instruction, with the first year an introduction to all of the Building Trades and the next two years focused on construction. Outcomes are listed and assessed as part of the Washington State approved CorePlus Framework and Career Connections curriculum that was developed by the International Brotherhood of Carpenters. In addition to specific and more advanced areas, student participants gain proficiency in the following areas:

- Workshop/Worksite Safety, Quality Principles, Measurement and Inspection, Blueprint Reading and Schematics, Use of Hand and Power Tools, Wall Framing, Plumbing, Electrical, Foundations, and Leadership

A student who successfully completed this program will maintain a C or better average, 90% attendance and earn the following certificates:

- OSHA 10, CPR/First Aid, Basic Forklift, PNCI Career Connections Certificates

### **Program Articulation Plans**

The instructor, TOSA, Administrator and our CTE Partnerships Lead all have relationships with local apprenticeship programs and employers. We all intentionally promote registered apprenticeship programs through site visits, classroom visits, event participation and include representatives from these groups on our Advisory. Students who show interest are supported in resume development, employment information as well as mock interviews to prepare them. Our goal continues to be 15% articulation rate of program completers into Registered Apprenticeship programs.

## **APPENDIX B – CURRICULUM OUTLINE**

Curriculum should be developed in consultation with apprenticeship partners and subject matter experts to ensure it aligns with current industry standards and prepares graduates to meet or exceed the minimum qualifications for entry into an apprenticeship. To ensure recognized Apprenticeship Preparation Programs are adequately preparing participants to enter Registered Apprenticeship and be successful apprentices, preparatory training curriculum must meet the following requirements:

- a. Be a minimum of 80 hours in duration.
- b. Employability skill development shall not exceed 50% of curriculum hours. Employability skill development shall be defined as general employment skills (communication, professionalism, work ethic, etc.);
- c. Industry/trade specific skills and knowledge shall constitute at least 50% of curriculum hours. Industry/trade specific skills and knowledge shall be defined as hands-on training to develop manual, mechanical, or technical skills relevant to the occupation(s) the preparatory participant(s) are training to successfully enter, and which does not displace paid employees; and
- d. Industry/occupation specific safety training and education. (WSATC Policy 2012-03 Sec. II C)

**Please use the format below for the program’s curriculum outline. Identify all curriculum elements and provide primary learning objectives that apply to each course.**

**Please copy and paste the format below to add additional course sections and/or primary learning objectives as needed.**

### **1. Safety – 40 Hours**

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

The curriculum will focus on the use of PPE, completing OSHA 10 Certification, and overall safety practices within a construction workspace. Students will review safety plans, shop safety and material safety data sheets (MSDS). Students will be familiarized with first aid (and become CPR certified) and understand Standard Operating Procedures (SOPs) overall in a work environment. Use of PPE, OSHA 10, MSDS, First Aid & CPR, SOPs

Students will gain hands-on experience in safety regulations and practice. Students will learn how to work collaboratively and safely while using troubleshooting and problem-solving skills. Students will learn how to work as part of a team while maintaining safe practices.

- a. Students will learn proper use of personal protective equipment
- b. Students will understand OSHA regulations and MSDS paperwork

- c. Students will learn first aid and CPR
- d. Students will learn proper lifting techniques and fall protection measures

## 2. Tool & Equipment Identification and Safe Usage – 20 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

In this unit, students will be able to identify the name and purpose of a large variety of hand and power tools. In addition, students will learn the appropriate and safe use of each tool, as well as understand the maintenance required. Students will use tools to build a small project (toolboxes OR paper towel holders, for example) to better understand the correct usage and maintenance needed for each tool/equipment used.

Students will be able to explain personal choices that reduce the risk of safety hazards. Students will be able to wear PPE appropriately for the tool/equipment item used. Students will be able to identify common risks found with each tool used. Tools/Equipment will range from hammers and hand saws to circular and chop saws, drills, nail guns to CNC machines.

Students will gain hands-on experience in safety regulations and practice. Students will learn how to work collaboratively and safely while using troubleshooting and problem-solving skills. Students will demonstrate the ability to work effectively and respectfully with others. In addition, they will have the opportunity to incorporate feedback effectively and deal positively with praise, setbacks and criticism.

## 3. Construction Career Exploration – 30 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

Students will learn about the various types of career pathways in the construction industry. Guest speakers attend at least every two weeks and represent a variety of career choices including: roofing, electrician, plumber, carpenter, concrete finisher, construction manager, sheet metal workers, surveyor, heavy equipment operator, general contractor, masonry, ect. Within these presentations, safety procedures will be discussed at each place of work. Students will also attend various construction pathway field trips (Dozer Days, Young Contractors Forums, local hiring events) where they can meet industry professionals and explore various career options. Students will build and refine resumes and participate in mock interviews. Students will also discuss the need to be work ready (driver's license and transportation, basic tools/clothing requirements).

Students will be exposed to a variety of safety procedures through guest speaker presentations. Students will work independently to create their resume, while interacting effectively with others through guest speaker conversation as well as mock interviews. Students will know when it's appropriate to listen and when to speak and how to conduct themselves in a respectable, professional manner.

- a. Students will create a construction path related resume
- b. Students will be able to discuss a variety of career options including some general duties of what is performed in each role and requirements for employment

#### 4. **Construction Measurement/Construction BluePrints- 40 Hours**

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

In every construction related unit, students will practice how to use a measuring tape to the 1/16th inch appropriately. In addition, students will calculate using fractions, decimals (as well as convert fractions to decimals), use and report measurements correctly, find level, plumb and square and calculate area, perimeter, surface area, volume and utilize Pythagorean theorem. Students will also be able to read blueprints effectively including understanding scale as well as the symbols and nomenclature of these drawings. Finally, students will understand specifications on construction drawings.

Students will be able to use a variety of measuring tools safely including measure tapes, squares, levels and surveying equipment. Students will learn a variety of in-demand skills including appropriate and accurate calculations while correctly utilizing measuring tapes, framing squares and levels. In addition, students will be able to read and interpret a simple blueprint, including building to specifications, items included on blueprints, evaluate their own accuracy and troubleshoot how to improve and correct potential errors

Students will need to utilize critical thinking skills, reason effectively, use systems thinking, reflect critically on work completed, and solve problems on their work, as needed.

- a. Students will be able to perform accurate measurements and apply those to classroom construction activities
- b. Students will be able to accurately add, subtract, divide and multiply decimals and fractions, calculate area, perimeter, surface area and volume
- c. Students will be able to recognize and interpret elements and symbols of blueprints, drawings and specifications
- d. Students can work alone or in groups to apply print reading activities classroom construction projects

#### 5. **Footings & Concrete Block Foundation - 40 Hours**

Curriculum Elements:

- Industry/occupation specific safety training and education

- Employability skill development
- Industry/trade specific skills and knowledge

Students will be able to calculate the volume of concrete and rebar needed to build a specified retaining wall. Students will also be able to draw a picture of a retaining wall with dimensions included and describe what is included in a footing. Students will also continue their mathematical practice of perimeter, volume, and geometrical calculations.

Students will be able to identify potential hazards associated with footing and concrete block foundation work. In addition, they will understand the importance of personal protective equipment (PPE), including hard hats, gloves, safety boots, and eye protection. Students will learn safe lifting techniques, proper storage and how to prevent skin burns or eye irritation.

Students will work collaboratively with peers to solve problem problems, be a systems thinker, demonstrate attention to detail and view failure as an opportunity to learn.

- a. Students will be able to explain the purpose and importance of footings in foundation instruction
- b. Students will demonstrate how to properly measure and mark out a foundation footprint
- c. Students will be able to calculate width, length, square footage and depth of a concrete slab.
- d. Students will be able to calculate the amount of concrete needed.

## 6. Wall Framing - 60 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

- a. Students will build the skills necessary to successfully read plans and then lay out, assemble, erect and brace exterior walls for frame building. This work will be additionally emphasized through local SkillsUSA carpentry competitions. Students will learn the correct terminology related to installation of wood frame walls and ceilings, can locate codes and specifications related to framing of walls and ceilings, and identify common materials used. Students will be able to cut and install ceiling joists on a wood frame building and estimate the materials required to frame walls and ceilings.
- b. Students will be able to identify common hazards associated with wall framing, including falls, tool-related injuries and material handling risks. Students will also understand the importance of wearing appropriate PPE and demonstrate the proper handling of hand and power tools.
- c. Students will set and meet goals and prioritize, plan and manage work to achieve the intended outcomes. In addition, students will need to employ critical thinking and work positively while being accountable for their results.
- d. Students will be able to utilize a blueprint/construction plan to cut, layout and build a wood framed wall.

- e. Students will be able to evaluate walls for quality, layout, square, flush, level and include appropriate nailing

## 7. Plumbing -50 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

Students will perform plumbing rough-ins, install plumbing fixtures such as supply stops, traps, faucets, valves and drain assemblies. Students will learn to choose the right mounting system, know how to turn off water supply, utilize the appropriate PVC pipes and fittings, secure the toilet to a wall frame and install a waste drain pipe. Students will be able to read and interpret an architect's scale, develop an isometric sketch of a plumbing system, and understand what is essential for a safe plumbing work environment. This work will be further emphasized through SkillsUSA competitions.

Students will be able to identify common hazards in plumbing work, such as water pressure risks, sharp tools and chemical exposure. In addition, students will understand the importance of PPE equipment and recognize OSHA safety guidelines. Students will be able to demonstrate proper handling of hand tools and power tools (pipe wrenches, pliers, drills, saws, torches). Students will be familiar with how to shut off water supply lines and discuss emergency procedures for burst pipes.

Students will be able to use various types of reasoning and systems thinking. Upon evaluation of their work, they will need to use high level analytical skills to appropriately complete assigned tasks.

- a. Students will be able to identify common plumbing tools, materials and equipment.
- b. Students will be able to describe the components of of water supply systems (pipes, valves, fixtures, fittings)
- c. Students will understand drainage, waste and vent (DWV) systems and their functions
- d. Students will be able to identify different types of pipes and how to modify and utilize them.
- e. Students will be able to install various plumbing fixtures.

## 8. Electrical -40 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

Students will be able to wire a 3-way switch, wire a switched quad receptacle, wire a GFCI outlet and use conduit for appropriate installation. Students will learn about Ohm's Law, Joules Law and Series/parallel Formulas and practice calculations and will become familiarized with wire size and amp ratings. Finally, students will be able to describe single pole switches, 3-way switches, lamp

socket mounts, standard duplex and quad receptacle, GFCI receptacle, 240 V/20A outlet, various residential wiring and a panel box. Throughout this unit students will learn the correct usage of electrical and hand tools, understand the effects of electrical currents on the human body, utilize the appropriate PPE, learn to keep work areas dry and avoid working alone on live electrical components, understand proper grounding of tools and equipment and be familiar with the National Electrical Code (NEC).

Students will be able to define and apply safety rules and practices in electrical construction wiring according to NEC standards.

Students will work collaboratively to ensure wiring projects are done to code standards. Using systems thinking, students will ensure work is done safely and accurately.

- a. Students will be able to successfully wire a 3-way switch, quad receptacle and GFCI outlet
- b. Students will be able successfully complete various electrical calculations
- c. Students will be familiar with the National Electrical Code

## 9. Employability Skills -40 Hours

Curriculum Elements:

- Industry/occupation specific safety training and education
- Employability skill development
- Industry/trade specific skills and knowledge

Through active participation in SkillsUSA, students will have numerous opportunities to develop essential leadership skills. They will train and compete in Carpentry, Electrical and Plumbing SkillsUSA events, gaining hands-on experience in their respective trades. Additionally, SkillsUSA fosters teamwork, collaboration, time management, and self-evaluation. Students will also compete in employment-related events, such as résumé writing and job interviews, as well as extemporaneous speaking and job skill demonstration.

Community service is another vital aspect of this program, exemplified by our elementary Toolbox program. High school students will visit local elementary schools to guide 4th and 5th graders in building their own toolboxes. These high school students will prepare kits, lead events, and mentor young students, strengthening their communication, instructional, and leadership skills while giving them back to the community.

As students' progress through the program, they will be provided opportunities to work independently or in small groups on real-world projects. Past projects include constructing a pitching cage for the high school baseball team and redesigning a video production classroom. These experiences allow students to plan, create supply lists, negotiate with clients, and complete projects, further honing their technical, professional and leadership skills.

Through instruction received in this class and preparation for competitions, students will be prepared to recognize and mitigate common hazards in carpentry, electrical and plumbing. In addition, students will practice consistently wearing appropriate PPE and always use tools safely. Students will be increasing their communication and collaboration skills, as well as quick problem solving and independent thinking. In addition, they will receive both positive and constructive feedback and will practice how to use this feedback to inform future work.

- a. Students will demonstrate effective communication, teamwork, and collaboration in group settings.
- b. Students will develop confidence in public speaking through presentations and competition events.

- c. Students will exhibit professionalism, integrity, and responsibility in all activities.

Preparatory Program Name: Vancouver Public Schools Building Construction Trades	Total Number of Participants: 27	
Reporting Period, Earliest Date: 8/30/2023	Total Participant Graduates: 8	
Reporting Period, Latest Date: 9/30/2024	Total Withdrawals/Incomplete: 0	
	Total Grad's Articulated into Reg' Apprenticeship: 0	

\*Please refer to the instructions tab for information on how to properly complete this document.

Participant Information - Total of Cohorts										Registered Apprenticeship Articulation Information			
Name	Name	YYYY/MM/DD	M,F,X	A,B,W,NI,H,AN,M,O,X	H,N,X	Yes,No	YYYY/MM/DD	A,W,C	YYYY/MM/DD	Apprenticeship Name	Occupation	Registration	ID Number
27	27	27	27	27	27	27	27	27	8	0	0	0	0

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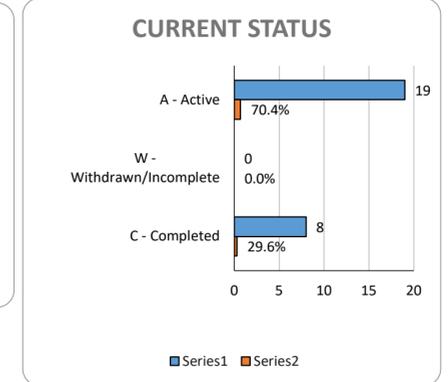
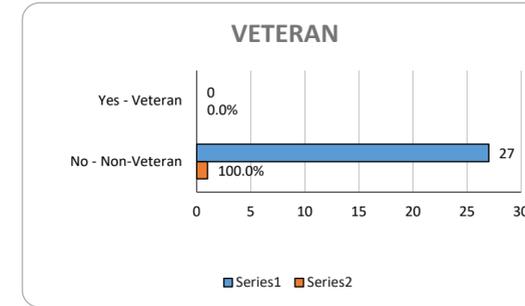
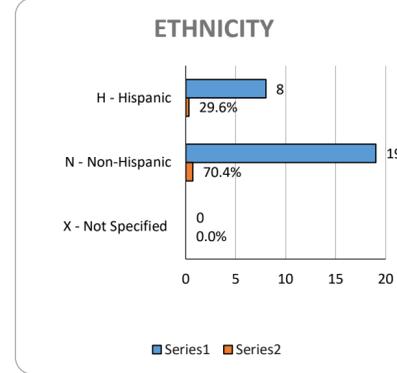
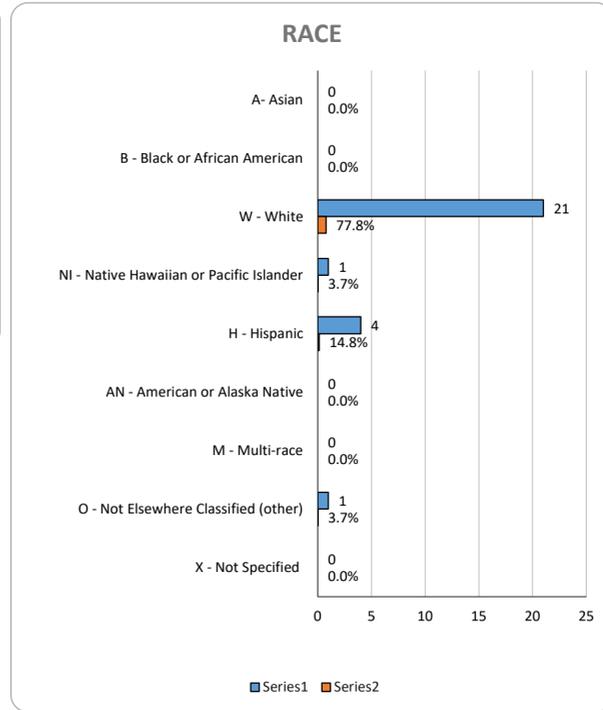
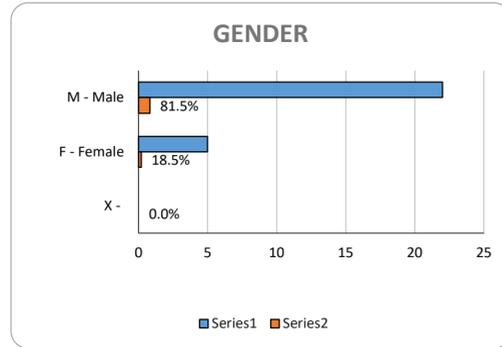
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Articulation Rate

0.00%



2/14/25 MN

Teri Gardner 2-14-25



February 12, 2025

To Whom It May Concern:

This letter serves as support and an articulation agreement between Hudson Bay High School's Carpentry Program and the Construction Industry Training Council of Washington. This Memorandum of Understanding (MOU) provides the linkage between the Construction Industry Training Council of WA (CITC) Carpentry Apprenticeship Program and the Hudson Bay High School's Carpentry Program. These organizations are committed to providing training opportunities for future carpenters. The parties to this MOU will work together to provide current and future graduates for the Hudson Bay High School's Carpentry Program an opportunity to enter the CITC Carpentry Apprenticeship Program.

I. SCHOOL DISTRICT RESPONSIBILITIES

- A. Offer a solid foundational career pathway to students that increase a student's knowledge of the educational pathways and career options available to them in the industry.
- B. Allow CITC staff to evaluate the carpentry program at least once yearly

II. CITC RESPONSIBILITIES

- A. Regularly visit carpentry classes to observe instruction, provide information about CITC and construction careers, and provide guidance to students interested in applying to the CITC carpentry apprenticeship program.
- B. Offer preferred entry to graduates of the Hudson Bay High School's Carpentry Program for entry into CITC's Carpentry apprenticeship program by adding 20 points to their ranking interview.

This MOU remains in effect unless cancelled by either party. The agreement shall not conflict with CITC Standards of Apprenticeship, CITC Vocational Licensing or CITC's NCCER Accreditation.

Sincerely,

Halene Sigmund, President  
Construction Industry Training Council of Washington

Cc: Adriana Gamboa, V.P. of Apprenticeship – CITC  
file

2/14/25 MN

Teri Gardner 2-14-25



MEMORANDUM OF UNDERSTANDING BETWEEN VANCOUVER PUBLIC SCHOOLS (VPS)  
CONSTRUCTION PROGRAM AND NORTHWEST LABORERS' EMPLOYERS TRAINING TRUST  
(NWLETT)

- The VPS Instructor will contact the NWLETT representative (Coordinator/ Director/ Administrator) who will go to VPS and present an overview of the NWLETT apprenticeship program to the students of the VPS Program.
- VPS Instructors will determine which Students are interested in taking part in the NWLETT application process.
- VPS Instructors will email the NWLETT Apprenticeship Coordinator a list of Students interested in applying and utilizing the preferred status upon successful completion.
- The NWLETT representative may sit on the VPS Advisory board.

VPS Preferred Applicant

- Preferred applicants will need to have completed a VPS Construction Program with a C or better grade and received an official Certification.
- Preferred applicants will be awarded 10 points in the Technical/Trade Related section on the NWLETT Apprenticeship application to help with the ranked eligibility lists.
- Preferred applicants will receive a guaranteed interview upon completion of the NWLETT apprenticeship application.

Steps a Qualified Student Must Take- NWLETT Apprenticeship Application Process

July 9, 2024



**KINGSTON**  
27055 Ohio Avenue NE  
Kingston, WA 98346  
360.297.3035

**DES MOINES**  
22323 Pacific Hwy S  
Des Moines, WA 98198  
206.424.2770

**SPOKANE**  
3921 E. Francis  
Spokane, WA 99217  
509.467.5239

**SATSOP**  
116 Tower Boulevard  
Elma, WA 98541

**UTAH**  
5667 W. Dannon Way  
West Jordan, UT 84041  
801.280.7195



- The student must contact NWLETT Apprenticeship Coordinator for information on the next orientation.
- The student must meet the minimum requirements of the NWLETT Apprenticeship as shown in the Northwest Laborers Apprenticeship Committee Apprenticeship Program Standards (<https://lni.wa.gov/licensing-permits/apprenticeship/docs/0071.pdf>)
- The student must attend an Orientation and interview with the NWLETT Apprenticeship Coordinator.
- The student Must follow the application check in procedure until they are selected for the apprenticeship or are no longer interested in starting the program.

**Approved by:**

X 

Brandon Jordan  
Training Director

X 

Name  
Title

**Either party, for any reason, may terminate this MOU by giving 30 days written notice.**

July 9, 2024



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