



Washington State Apprenticeship & Training Council

First Quarter 2021 Report January - March

April 15-16, 2021

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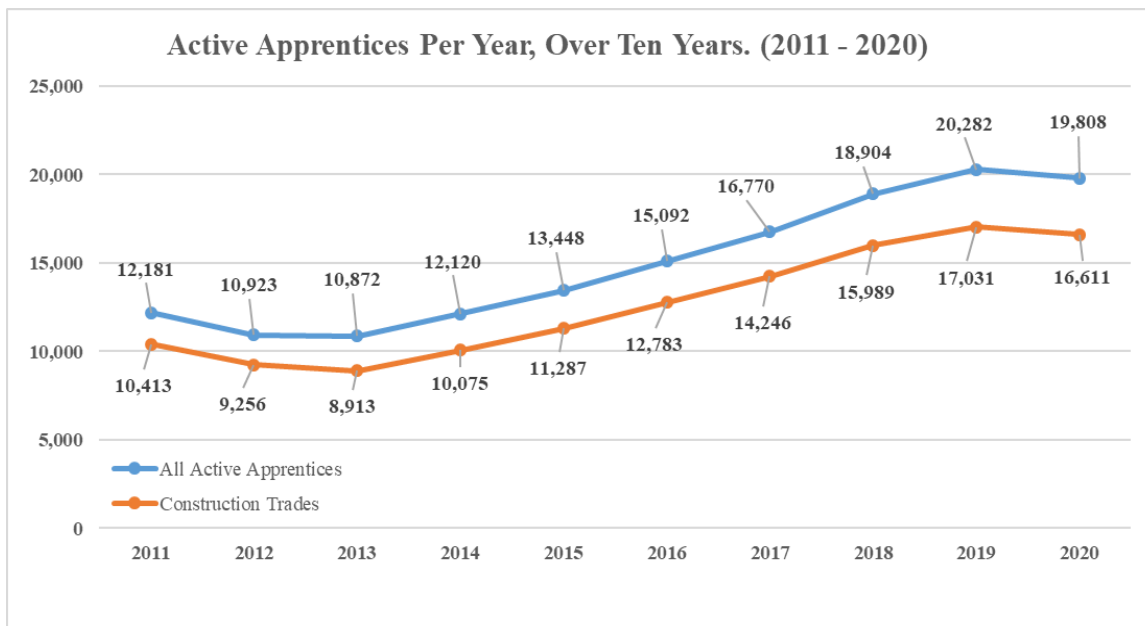
Highlights from the January 2021 WSATC Meeting

NEW STANDARDS (PERMANENT REGISTRATION):

<u>Healthcare Apprenticeship Consortium</u>		
Medical Assistant	31-9092.00	2,000 Hours
Central Sterile Processing Technician	31-9093.00	2,000 Hours
Pharmacy Technician	29-2052.00	2,000 Hours

Apprenticeship by the Numbers

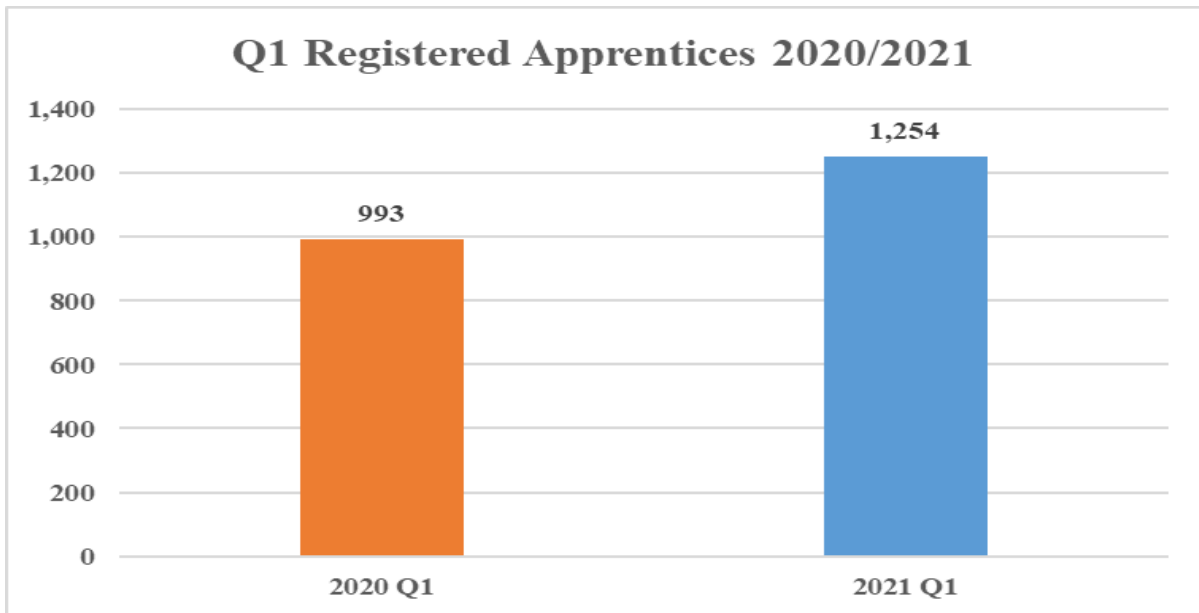
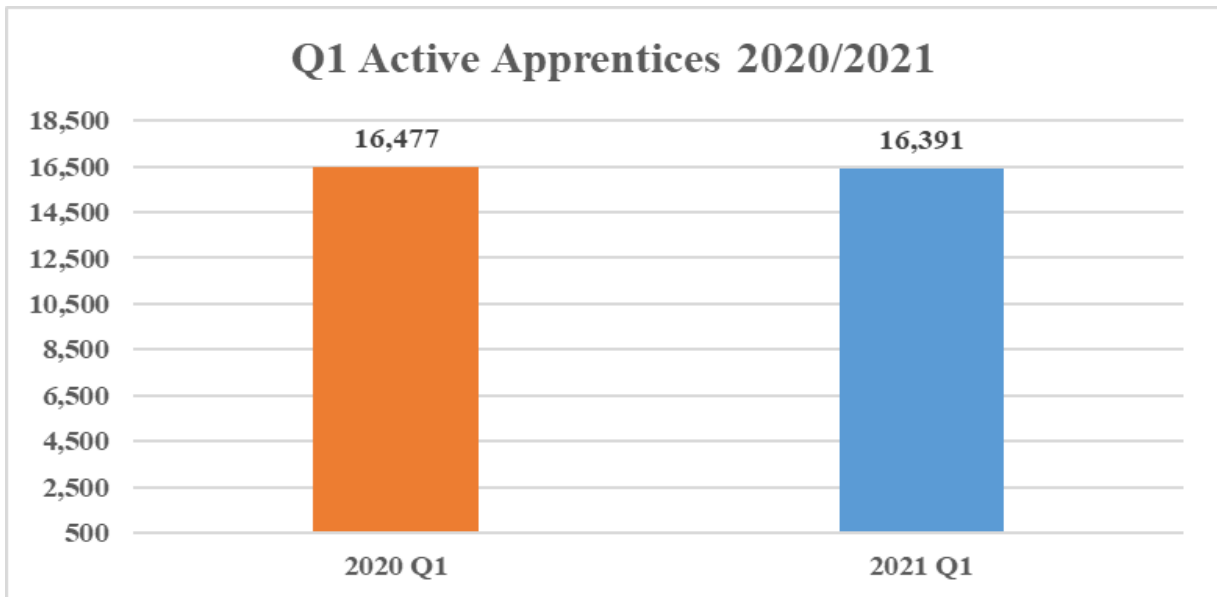
There were **19,950** active apprentices for the 12-month time period from 04/01/2020 to 03/31/2021. **2,228** were female and **6,405** were minority. Over the last quarter (January-March 2021), there were **16,391** active apprentices. All data valid as of 04/12/2021.



APPRENTICESHIP QUARTERLY REPORT

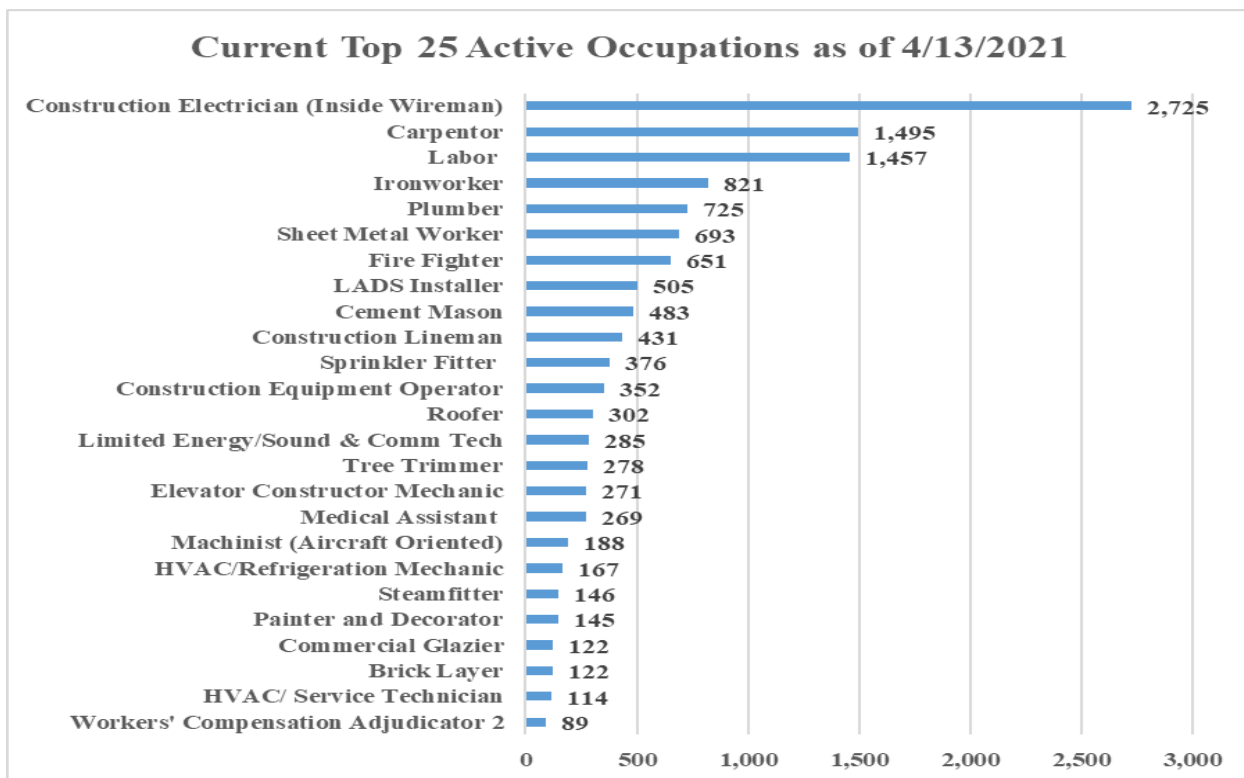
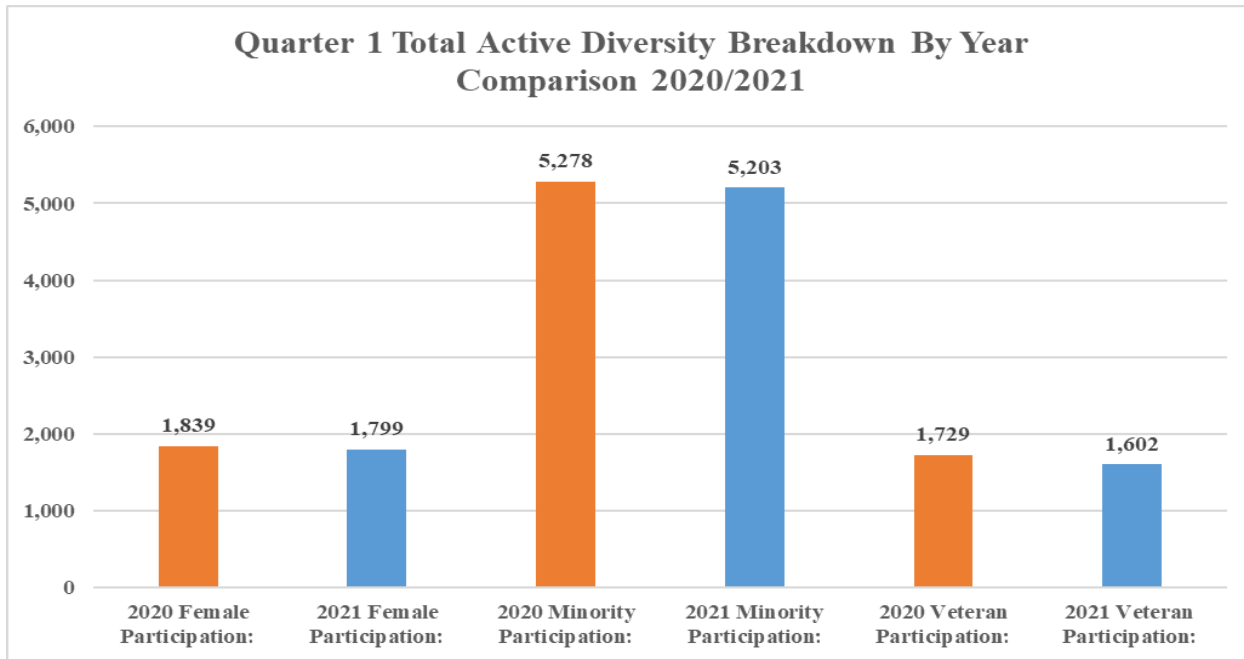
APPRENTICE ACTIVITY (FROM 01/01/2021 – 04/31/2021):

- **16,391** Active apprentices during the time period
- **1,254** Individuals were registered as apprentices
- **457** Individuals were issued completion certificates
- **557** Individuals were cancelled



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MINORITY, FEMALE AND VETERAN PARTICIPATION & TOP 25 OCCUPATIONS FOR 4TH QUARTER 2020.



Quarterly News and Events

Graduation in Apprenti's First Quarter

Last month, in recognition of apprenticeship completions between November 2020 and March 2021, 143 apprentices graduated from the Apprenti program, via a virtual ceremony. Fifty of those apprentices were based here in the state of Washington.

These apprentices trained in a variety of occupations, including IT Business Analyst, Cloud Operations Specialist, and Network Operations Developer, and represented 20 different hiring partners in 10 different areas of the country.

One apprentice who was highlighted during the festivities was Nathalie Vega, a Software Engineer at JP Morgan Chase in Ohio. She spoke about the other apprentices in her cohort and the diversity of their backgrounds, including a recently-separated military veteran, a former steelworker, and an Über driver. Of her own background, she said: "I was born in Colombia and I moved to the States when I was nine years old. I remember every day stopping by church on our way home and praying as a young child for God to change my life. My mom was a cleaning lady and working trying to make ends meet for my family." Before joining Apprenti, Nathalie served in the US Air Force, and then got a degree in English Literature before teaching herself to code. Apprenti was what allowed her to turn her self-taught love of coding into a career.

Apprenti also took time to recognize one of our longstanding hiring partners, Amazon, and awarded our first Industry Partner Championship award to Nick Curry, Amazon's Manager of AWS Military Initiatives. In a short speech, Nick invoked Amazon's leadership principles to advise graduating apprentices to "learn and be curious. We fundamentally believe that leaders are never done learning and always seek to improve themselves. I challenge all of you to continue to be curious about new possibilities and act to explore them in a manner you can."

Utah had its first ever group of Apprenti graduates. Melisa Stark, Utah's Commissioner of Apprenticeship Programs, addressed the unusual circumstances in which this group of apprentices had undergone their apprenticeships: many of them had begun training in-person prior to the COVID-19 pandemic and had concluded training remotely. She connected this to the idea of adaptability as part of the future of work, saying: "We have decades of history that shows the way we've been doing business isn't the way we can take them in the future and so this is just another opportunity that we can continue to build on." For her work with our program in Utah, Melisa was awarded the Government Partnership Champion Award.

AJAC Disburses First WCG-A Grants to Apprentices

In March, the Washington Student Achievement Council disbursed its first Washington College Grants for Apprenticeship (WCG-A) to Aerospace Joint Apprenticeship Committee (AJAC). AJAC is the first sponsor approved to participate in WCG-A, awarding grants to qualified individuals in their apprenticeship programs. Apprentices may receive up to \$2,500 this fiscal year, depending on income and family size.

To be eligible to participate in WCG-A, potential sponsors must submit the application found on WSAC's website at wsac.wa.gov/sponsors. Applications are reviewed by a committee once all requested documentation is received. Currently WSAC has approved one sponsor (AJAC) and is finalizing two additional sponsors' applications for approval.

For additional information, please contact WSAC via email at apprenticeship@wsac.wa.gov.

AJAC Launches New CNC Programmer Apprenticeship



The Aerospace Joint Apprenticeship Committee (AJAC) is excited to offer a new [CNC Programmer Apprenticeship](#) this spring! This program combines on-the-job training (OJT) with evening classes one night a week. AJAC apprentices will take 1 class per quarter, 3 quarters per year, for 3 years (45 total credits). **If you have not completed AJAC's 4-year machinist apprenticeship program, this is a 3-year, 6,000 hour program.** This program is accredited through a local community or technical college giving you the opportunity to earn college credits.

Become A Journey-Level Programmer

Students in the AJAC CNC Programmer Apprenticeship will learn to use CAD and CAM fundamentals to design for manufacturability (develop tooling). Students will gain a thorough understanding of the underlying manufacturing processes that are essential to developing a part program; they will know how to build a part and will understand the role of the CNC Programmer in a team and an organization. In Year 3, students will learn 2-axis, 3-axis, and 4-axis CAM tool paths for mill and lathe as well as advanced CNC Programming techniques.

Apprentice Eligibility

This program is designed as a training for journey level [Machinists](#) with two entry points. It has been structured as a 4,000 hour program for journey-level machinist graduates or those with a college certificate/degree.

For individuals with at least 5 years of proven machining experience, this is a 6,000 hour program to accommodate experienced Machinists achieving their journey level status through work experience but lacking formal academic preparation.

Based on subject matter experts and employer recommendations, the following is the candidate eligibility criteria:

1. **Industry Trained | 5+ Years of Proven Machining Experience.** Eligible for participation includes requirement to take all 9 classes and complete 6,000 hours of OJT.
2. **College Certificate or Degree + Industry Trained | 5 Years of Experience/Certificate or Degree.** Credit for up to 3 classes of the first year's coursework and 2,000 OJT Hours.
3. **Apprenticeship Completion: Journey-Level Machinist.** Automatically awarded first year course work (3 classes) and 2,000 OJT Hours.

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CNC Programmer Entry Points

The following table is a breakdown of required (X) RSI Classes for each eligible participant category. View a PDF version of this table [here](#).

RSI Class	Apprenticeship Completion	Industry Trained	College + Industry Trained
YEAR 1			
APM 103 Engineering Drawings		☒	TBD
APM 122 Applied Geometry & Trigonometry		☒	TBD
APM 201 Geometric Dimensioning & Tolerancing		☒	TBD
YEAR 2			
CNC 201 CAD Fundamentals	☒	☒	☒
CNC 202 Design for Manufacturability	☒	☒	☒
CNC 203 Manufacturing Processes Related to Project Management	☒	☒	☒
YEAR 3			
CNC 301 Basic Tool Path for Mill & Lathe	☒	☒	☒
CNC 302 Multi Axis/Indexing	☒	☒	☒
CNC 303 Advanced CNC Programming Techniques	☒	☒	☒
TOTAL RSI HOURS: 450			

Related Supplemental Instruction

CNC Programmer apprentices will take up to 9 college-level classes (450) hours designed by AJAC's subject matter experts. Class is held one night a week for 4 hours during the fall, winter, and spring (summers off). Classes will vary between in-person and online learning. Each class is worth 5 college credits totaling up to 45 credits upon completion.

CNC Programmer Classes

This apprenticeship provides students the opportunity to learn critical programming skills covering the following subject areas:

- Technical Drawings, GD&T, and Precision Fits
- Shop Algebra, Applied Geometry and Trigonometry
- CAD Fundamentals & Design for Manufacturability
- Manufacturing Process Related to Project Management
- Basic Tool Path for Mill & Lathe
- Multi Axis/Indexing

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- Advanced CNC Programming Techniques

On-the-Job Training Competencies Learned



The graphic above is a **guide** of tasks and hours for the on-the-job training portion of the program. The 6,000 hours will be completed over the course of the apprenticeship.

We understand this may not be a full-time role for apprentices, as they will be splitting their time between shop and programming. Apprentices have flexibility over the course of the program to complete the guide of tasks and hours. The apprentice shall be instructed and trained in all operations and methods customarily used on the various machines.

Cost & College Tuition

In Washington State, when you engage in apprenticeship, college tuition is reduced by 50%. In most cases that means classes cost around \$275 per quarter, 9 classes total. Roughly \$2,475 out-of-pocket cost per apprentice for the entirety of the program.

For AJAC machinist graduates, the cost will be around \$1,650.

Enroll Today!

To reserve your spot in AJAC's first CNC Programmer Apprenticeship, please complete our [online application](#). After you have submitted your information, an AJAC representative will contact you for next steps.

Blue Origin Apprentice Talks Manufacturing Academy & Apprenticeship

Nyck Davis spent his afternoons measuring objects around his house. The COVID-19 pandemic forced Nyck to reimagine himself, not as a former automotive technician at Mercedes Benz, but as a future employee of Blue Origin.

Nyck's fortune was waiting to be told. He heard about the [Manufacturing Academy](#) from a friend who recently graduated from AJAC's pre-apprenticeship program. He encouraged him to apply since he needed a new direction—a new skillset—that could attract some of the top aerospace companies in the state.

"I knew you could always make some crazy things being a machinist. It blows my mind knowing how much work goes into machining. You have to study the blueprints, do all the math, figure out how to set-up the machine and what cutters to use," Davis said.

The Manufacturing Academy provided Nyck with a creative outlet to hone his skills and understand how things are made from raw materials.

Troy Ironmonger, AJAC's Manufacturing Academy instructor worked with Nyck and his peers to prepare them for a career in advanced manufacturing, "Nyck's drive to become a machinist was evident from the first day. He was able to build on the skills he learned in his high school shop class, as an automotive technician, and apply those to our class," Ironmonger said.

As the Manufacturing Academy program came to a close, Nyck began his employment search, looking for companies that could elevate his foundational machining knowledge.

His sights were set on one company—[Blue Origin](#). "I applied to eight or nine different positions and eventually landed on apprentice machinist. Luckily, it was announced the last week of class that Blue Origin is now a sponsor of the AJAC program," Davis said. "Timing wise, I got extremely lucky and I ended up landing the apprentice machinist job."

Six weeks after becoming a full-time employee at Blue Origin, Nyck was ready to begin his career as an [AJAC machinist apprentice](#). His first two quarters covered engineering drawings and shop algebra, two concepts Nyck became familiar with in the Manufacturing Academy. Now in his third quarter, Nyck is learning the theory behind precision machining, including manual machining, tolerances, speeds and feeds, and parts finishing.

Looking back on his journey from becoming unemployed, to landing his dream job, Nyck is humbled by those who gave their time to grow his craft, "I am super excited to be a part of this program. I keep saying it and I'll never stop saying it, I will never have the job I have now without the AJAC program. If you're thinking about getting into the AJAC apprenticeship, I would say do it! It's completely worth it. If you have what you want to do in mind and you work hard to get there, you will not regret it!"

To watch the full interview, please visit: <https://www.ajactraining.org/blog/blue-origin-apprentice-talks-manufacturing-academy-apprenticeship/>

To learn more about AJAC's Manufacturing Academy program, please visit: www.ManufacturingAcademy.org.

Hands-on instruction in the COVID age is something to savor

EVERETT — Brent Delfel is accustomed to an auto shop full of students wanting to learn about diesel engines.

These days, when he shouts instructions his words ricochet off the walls and car parts lining the work space: "Don't force it! Loosen up the thumb wheel!"

On a late January morning, Delfel was supervising three students as they worked together to adjust a set of truck wheel bearings, a repair he finds rewarding to teach because it requires precision at every step. In this era of COVID-19 restrictions, they were the privileged few allowed into the classroom that day.

Delfel teaches diesel power technology at Sno-Isle Tech Skills Center, a public school that offers dozens of technical training programs to local high school students.

For Sean Kelly, one of Delfel's students, this hands-on challenge comes as a refreshing escape from the emotional drain of virtual learning.

"It's been super nice to actually get into a class, have the teacher physically talk to you and do physical work — instead of just Zoom," Kelly said in an interview. "I have a hard time focusing with online classes, and it's not fun."

A senior at Everett High School, Kelly spends the majority of his school time slumped over a computer keyboard.

But the 2½-hour block he gets to spend in the shop twice a month provides an opportunity to stretch both his body and mind. It is a time to be savored.

"My favorite part of class is being able to work hands-on, crawl around inside of cars and learn how everything works inside their systems," he said.

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Kelly is one of 950 students at Sno-Isle Tech who come from 14 districts and 44 high schools in Snohomish and Island counties. The school has taught students online since the onset of the pandemic, but it also offers limited face-to-face education. Since September, students have enrolled in classes on campus in 12 of the 22 programs, including diesel power technology, welding and culinary arts.

Right now, these windows allow four students to meet one teacher on the Sno-Isle campus at 9001 Airport Way in Everett.

Starting Feb. 16, the school plans to increase group sizes to eight students apiece who will meet 2½ hours once a week, Sno-Isle director Wes Allen said. Attending in person will still be optional. Students are only graded on remote work.



Bob Throndsen, instructor of welding and metal fabrication, talks about the challenges of teaching online for a hands-on trade Thursday morning at Sno-Isle Tech in Everett. (Kevin Clark / The Herald)

“We can teach and assess theory online, but when they (the students) get here, they want to touch the equipment,” said Bob Throndsen, a Sno-Isle teacher known as “Welder Bob” to his students. “The social aspect of being here on the school’s campus is tremendous. We are the

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reason kids get out of bed in the morning, and we make changes in their lives that we hear about all the time from parents, grandparents and guardians.”

Throndsen loves seeing students learn to be patient as they seek to master technical subjects.

For Kelly, keeping track of every detail in a repair is a challenge – but its good practice that has helped him at his current job at FS AutoWorx, a diesel engine repair shop in Monroe.

“I wasn’t the most confident kid my first year, and I knew nothing about cars,” he said. “This year I’ve felt a lot better and have been doing things on my own.”

Sno-Isle Tech is one of 17 skills centers in Washington that provide job-specific training, certification and post-secondary credit.

“We’re teaching these kids how to sell themselves and be a better asset to society,” Throndsen said. “We’re trying to give them the skills on the tool belts that they can use in the future to be job-ready.”



Daniel Kolodich, a senior at Everett High School, works through an assignment Thursday morning at Sno-Isle Tech in Everett. (Kevin Clark / The Herald)

Upcoming Events

May 31, 2021

Last day for "Requests for Revision of Committee/Standards" or "Request for New Committee/Standards" forms to be submitted for the July 2021 Washington State Apprenticeship and Training Council Meeting.

Union Building Trades Apprenticeship Programs Informational Session

Date: June, 4, 2021

Time: 9:30 - 11 a.m.

Location: Zoom

Meeting ID: 85767313845

Meeting Passcode: 015876

Compliance Review & Retention Subcommittee Meeting

Date: July 14, 2021

Time: 10 a.m. - Noon

Location: Zoom (Link to be announced)

Washington State Apprenticeship Coordinators Association Meeting/ JRRC

Date: July 14, 2021

Time: 1 – 3:15 p.m.

Location: Zoom (Link to be announced)

Community and Technical College (CTC) Apprenticeship Coordinators Meeting

Date: July 14, 2021

Time: 3 – 4:30 p.m.

Location: WebEx (Link to be announced)

Washington State Apprenticeship and Training Council Quarterly Meeting

Date: July 15, 2020

Time: 9 a.m. – 5 p.m. or until adjourned

Location: Zoom (Link to be announced)

September 6, 2021

Last day for "Requests for Revision of Committee/Standards" or "Request for New Committee/Standards" forms to be submitted for the October 2021 Washington State Apprenticeship and Training Council Meeting.

Union Building Trades Apprenticeship Programs Informational Session

Date: September, 3, 2021

Time: 9:30 - 11 a.m.

Location: Zoom

Meeting ID: 85767313845

Meeting Passcode: 015876

Compliance Review & Retention Subcommittee Meeting

Date: October 20, 2021

Time: 10 a.m. - Noon

Location: Zoom (Link to be announced)

**Washington State Apprenticeship Coordinators Association Meeting/
JRRC**

Date: October 20, 2021

Time: 1 – 3:15 p.m.

Location: Zoom (Link to be announced)

Community and Technical College (CTC) Apprenticeship Coordinators Meeting

Date: October 20, 2021

Time: 3 – 4:30 p.m.

Location: WebEx (Link to be announced)

Washington State Apprenticeship and Training Council Quarterly Meeting

October 21, 2021

9 a.m. – 5 p.m. or until adjourned

Location: Zoom (Link to be announced)

November 29, 2021

Last day for "Requests for Revision of Committee/Standards" or "Request for New Committee/Standards" forms to be submitted for the January 2022 Washington State Apprenticeship and Training Council Meeting.

Union Building Trades Apprenticeship Programs Informational Session

Date: December, 3, 2021

Time: 9:30 - 11 a.m.

Location: Zoom

Meeting ID: 85767313845

Meeting Passcode: 015876