In May 2017, Governor Inslee created the CCW Task Force (composed of leaders from business, labor, government, nonprofits, and education). The taskforce:

- Concluded that while WA has many excellent CCL programs, it lacked systemic supports to achieve the scale needed to have a transformative impact
- Recommended an inclusive planning process to develop a strategic plan including policy recommendations to overcome the barriers to scale and expansion with quality
- CCW system design effort builds off NGA work-based learning policy academy and 11 regional pilots (launched in May 2017)

CCW scope includes:

- Young adults up to age 29
- CCL opportunities in K-12, postsecondary (2 and 4-year)
- Registered Apprenticeships and other high-quality CCL programs

CCW plan was built with input from students, parents and many other key stakeholders

Budget and associated legislation was released in December 2018 and January 2019, respectively, with goal to seek legislative approval during 2019 legislative session.
Career Connect Washington Plan

i. Career Connected Learning Today

ii. Career Connect Washington System

iii. Implementing Career Connect Washington

Appendices
The Problem: Students lack sufficient pathways to great careers

What people think:\n\begin{itemize}
\item \textbf{87\%} believe that an \textit{education beyond high school is necessary today}.
\item \textbf{82\%} believe \textit{schools alone do not do enough to prepare students for the real world}.
\item \textbf{75\%} believe \textit{Career Connected Learning programs should be expanded}.
\end{itemize}

…and they’re right:
\begin{itemize}
\item \textbf{740K} New jobs to be created by 2021 in Washington – most \textit{needing a credential beyond high school}.
\item \textbf{40\%} Total of Washington students gaining a credential or degree beyond high school.
\end{itemize}

…students and parents want more pathways:
\begin{itemize}
\item \textit{“I like the idea of giving young people an opportunity to get their hands dirty. You can only learn so much in a classroom.”}
\item \textit{“I’m not the kind of person who can sit down and study a textbook and memorize its contents. I learn better when I have problems in front of me to get done.”}
\end{itemize}

Goal: Connect young people to great careers while advancing their education

1. FM3 Research, survey of 602 likely November 2020 voters; 2. FM3 Research, Survey of 835 registered voters, 9/26-10/4/18
Finding a Solution: Plan was built with the help of thousands of our citizens

Education

• Students & Parents
• Teachers & Counselors
• Superintendents
• 4-Year and Community College Presidents

Business & Industry Leaders

Government/State Agency Staff

Labor Leaders

Community Leaders and Nonprofits

Regional Leaders
The Reality Today: Disconnected pathways between education and employment

Education
(K-12 and Postsecondary)

Employment

Consequences for students
- One dominant way to learn; few “hands-on” opportunities
- 70% of WA jobs require a credential post high school, but only 40% of WA students achieve this
- High youth unemployment (14%), worse among underserved groups

Consequences for employers
- Employers not finding talent that meets their needs (jobs going unfilled)
- Employers forced to hire many from out of state (costing them time and money)
- Employers have trouble finding diverse candidates
**The Solution:** Career Connect Learning is a braided pathway that connects students to the career opportunities around them, starting early in their schooling.

**Benefits for students**
- Applied, hands-on, learning opportunity
- Provides real life, paid, work experience
- Earn post-high school credit and credentials
- Supports equitable access jobs for all students

**Benefits for employers**
- Develops robust talent pipeline
- Reduces hiring costs
- Increases retention through strong student connections
- Adds diversity to candidate pool
The Solution: Connected pathways require a connected system

Government

Industry

Employers

Labor

CCW can provide the connective tissue to grow CCL programs statewide

K12 & Postsecondary Systems

(incl. K12, CTC, 4-Year)

Educators
Career Connect Washington Plan

i. Career Connected Learning Today

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Appendices
Vision for career connected learning in Washington

Every young adult in Washington will have multiple pathways toward economic self-sufficiency and fulfillment, strengthened by a comprehensive state-wide system for career connected learning.
Each type of CCL continuum is essential to launching students into their careers and ongoing education.

What are the offerings that bring these experiences to life?

- Registered Apprenticeships
  - Credential beyond HS only
- Youth Registered Apprenticeships
  - HS diploma and cred. beyond HS
- CTC programs with required work-based learning
- CTE that meets credential and work-based learning req’s
- 4 year programs with required work-based learning
- Other Career Launch programs

Career Launch
- Postsecondary credential, paid work experience, career connection

Comprehensive Internship
- Pre-apprenticeship
- 90 hour on-site internship
- Cooperative worksite learning
- CTE concentrators
- CTC programs without required work-based learning
- Other Career Preparation

Career Preparation
- Academic credit, career connection

Career Awareness & Exploration
- Early exposure to careers and career options

- Career fairs
- Worksite tours
- Career Presentations
- Work based problem solving
- Job shadowing / preparation events
- Networking events

Source: WA STEM Career Connected Learning Framework
Career Launch Programs: Positioning young adults for promising careers

Meaningful, high quality on-the-job experience

- At worksite
- Paid and academic credit
- Occupation-aligned
- Employer supervisor at ratio typical of occupation
- Defined competencies and skills gained
- Full compliance with existing legal regulations

Aligned classroom learning

- Open-source curriculum and program requirements developed in partnership with employers and industry
- Aligned with academic and employer standards
- Qualified instructors
- Dedicated student support (academic and career)

Competitive candidate

- Able to continue in employment OR successfully compete for jobs leading to financially-sustainable and fulfilling careers

Valuable credential beyond high school diploma

- Credential attained
- Significant progress (at least one year) towards a 2 or 4 year credential
Career Launch: Building work-ready skills while earning a post-high school credential

Programs that provide meaningful on-the-job experience and aligned classroom learning

Health Care: Medical Assistant Pathway
- Aiming for first cohort in 2019
- 12-18 month program, 2,000 paid OTJ hours
- Could serve multiple employers
- Developing in partnership with SEIU
- Medical assistant first of potentially several jobs to be developed as a registered apprenticeship in healthcare

Additional examples detailed in appendix

Source: WA STEM Career Connected Learning Framework; Kaiser Permanente, SEIU
**Career Preparation:** Preparing students to launch

*Education or work experiences to gain **hands-on skills and knowledge***

**Manufacturing: Transferrable Skill Dvlp**
- Career and technical education program
- Two-year commitment:
  - Year 1: ~540 hours of basic transferrable skill sets (Core)
  - Year 2: ~540 hours of occupation-specific skill sets (Plus)
- Serves ~1,500 students per year

"Most of the time I have no idea why I’m learning something in math class, but I understand the math here because I have to apply it to my project. It just makes more sense to me."

Junior, Granite Falls

---

Source: WA STEM Career Connected Learning Framework; CorePlus Website
Career Awareness and Exploration: Building early exposure to careers

Opportunities for early exposure to careers and career options

DiscoverU Worksite Tours
- Week-long postsecondary and career exploration for South King Co. students
- Programming builds awareness from Pre-K through high school
- ~50 employers involved in worksite tours including work simulation and panel with employees from across the employer

“I can create things that no other people have created yet…. Career-wise, I’m learning that I could actually be influential by finding ideas that could change a lot of things in this world.
-- Jasmine, Lindbergh High School

Source: WA STEM Career Connected Learning Framework; DiscoverU website
**Ambition:** Enable all WA young adults to experience career connected learning

<table>
<thead>
<tr>
<th>System Goals</th>
<th>Leading Indicators</th>
<th>Long-Term Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Launch (CL)</td>
<td>Career Launch completion rate</td>
<td>WA % unemployment (relative to other states)</td>
</tr>
<tr>
<td></td>
<td>Completion by sub-group (e.g. region, industry, demographic)</td>
<td>70% credential attainment (for Class of 2030)</td>
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<tr>
<td></td>
<td>No. of young adults enrolled</td>
<td>x2 growth in registered apprenticeships</td>
</tr>
<tr>
<td></td>
<td>No. of employers participating</td>
<td>WA median wage increase</td>
</tr>
<tr>
<td>Career Preparation (CP)</td>
<td>CP, CA completion rate</td>
<td>WA GDP increase</td>
</tr>
<tr>
<td></td>
<td>Completion by sub-group (e.g. region, industry, demographic)</td>
<td></td>
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<tr>
<td></td>
<td>No. of young adult experiences (including by experience type)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of employers participating</td>
<td></td>
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<tr>
<td>Career Awareness &amp; Exploration (CA)</td>
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</table>

CL completion for Class of 2030:
- Career Launch (CL): 60%
- Career Preparation (CP): 100%
- Career Awareness & Exploration (CA): 100%
CCW pilots launched in 2018 point to success

CCW pilot details:

- **Goals:**
  - Create CCL opportunities for **15,000 WA youth**
  - Of which, **1,500 comprehensive employer internships or youth reg. apprenticeships**
  - Pilot funding from 2014 WIOA

**Sample CCW pilot programs (non-exhaustive)**

**Central Washington partnerships**
- Expanded advanced manufacturing Reg. Youth Apprenticeship to include Magic Metals in partnership with West Valley High (Yakima)
- Wenatchee SD partnership to develop standards for Computer Technology Reg. Youth Apprenticeship

**New maritime and construction industry programs**
- New standards developed for Marine Quality Assurance Tester Reg. Apprenticeship w/ Nichols Brothers
- 365 students in hands-on apprenticeship / vocational exploration activities

**Opportunity Youth Job Fair**
- 50+ national companies
- 1,200 youth in attendance
- 209 interviews and 103 job offers

**Expansion, founding of new King County CCL programs**
- AJAC – Renton SD partnership for product tech Reg. Youth Apprenticeship
- FareStart partnership to create new Reg. Apprenticeship standards for Sous Chef and Café Manager occupations

Source: Employment Security Department; all apprenticeships are registered apprenticeships or youth registered apprenticeships; **Final registered apprenticeship approval pending decisions by apprenticeship council**

![Bar chart showing registered apprenticeships, comprehensive internships, and CCL experiences for 2018 Q1 and Q2.](chart.png)
To hit goals, CCW needs to increase access while controlling quality

Many great programs exist but WA needs to grow 3x to hit goal

<table>
<thead>
<tr>
<th>Current</th>
<th>60K Students Served</th>
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</thead>
<tbody>
<tr>
<td>Room for growth in program size and number</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Future</th>
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</thead>
<tbody>
<tr>
<td>~20K Students Served</td>
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</table>

Approach to Scaling

- **System and Not a Program:** Launch CCL programs in K-12, 2-year, and 4-year system and through registered apprenticeships

- **Regionally–Driven:** Develop and execute strategy to meet local needs

- **Leveraging Intermediaries:** Develop and scale programs with educators and industry

- **Sustained Leadership and Accountability:** CCW implementation team with cross-sector advisors

Estimated "Career Launch-like" programs today

Estimated 100,000 students in HS Class of 2030
Approach: Career Connect WA is a system and not disconnected programs

The state offers many strong but disconnected programs…

An ideal future state includes larger, well-connected programs

“There are individual efforts all over the state, but they don’t build on what the others have already started… We need to tap into existing support systems to accelerate.”

-- Executive, Healthcare Company
To reach our vision and ambition, we need a comprehensive system that follows a set of core principles

**SYSTEM DESIGN PRINCIPLES**

- **Easy to Navigate**: Easy for employers & young adults to engage in career-connected learning.
- **Built From The Best**: Build off of and learn from what exists.
- **Built For The State**: Tailored to the region.
- **Dynamic & Innovative**: Constantly responding to changing industry needs.
- **Scalable**: System allows for continued expansion of programs and number of people served.
- **Equitable**: Young adults must be provided equitable access to experiences.
- **Permeable**: Pathways must be permeable and not stick young adults into non-flexible tracks.
- **‘And’ Not ‘Or’**: System can be inclusive of college (2 year, 4 year, etc.) not opposed.
- **And Program Design Principles**
  - Provide positive ROI for employers; built on skills and competencies defined by industry.
  - Be high-quality and lead to positive outcomes for young adults.
  - Leverage modern digitally-connected tools.
**This is not a “one size fits all” approach:** Regional networks are the key

**Key roles**

- Develop regional plans to grow CCL that fit the unique needs of the region
- Serve as CCL navigators for region (to industry, educators, counselors)
- Work with educators and industry to develop and scale programs
- Consolidate regional data and report key learnings to state-level
- Convene regional players including employers, labor, education, workforce council, intermediaries, relevant non-profit organizations

**Leadership**

Regional network leads can take many forms including:

- Regional Workforce Boards
- Local STEM networks
- Chambers of Commerce
- Educational Service Districts
- Economic Development Councils

**Support**

Policy proposal will include requests for regional resources and support

- Fund network director
- Fund career navigators
- Support for equipment costs (CTE, CTC)
- Support for Centers of Excellence
**Approach:** Program intermediaries will bridge connections between industry and educators and help create and scale programs

**Key roles**

- Convene industry and educators to define CCL opportunities and align on needs
- Facilitate creation of curriculum to meet industry and educator requirements
- Generate demand with young adults and families

**Many can play this role**

Program intermediaries can take many forms including:

- Industry associations
- Joint Labor Management Councils
- Centers of Excellence
- Chambers of Commerce
- STEM organizations
- Non-profit organizations
- Others

**Support**

CCW policy proposal will include financial support for program intermediaries

- Design grants to develop curriculum to create high quality new and scale existing CCL programs

Photo credit: Flikr
Gov/Ed Agencies will play a critical role in CCW implementation (non-exhaustive)

Champion of CCL system
Ambassador for WA on national stage
Partner on business engagement and equity

Engine to drive CL program creation and implementation
Share best practices across CTC system (incl. CoEs)
Partner in CL endorsement process design

Champion Career Awareness, Exploration and Prep programs (and increasingly CL programs)
Adopt philosophy of counseling multiple pathways

Share best practices from across WA and US
Assist with CCL data coordination
Assess existing student support services, identify gaps to ensure equitable access for all

Advise CCW implementation to ensure access to CCL for all students (incl. those with disabilities)
Assist program intermediaries with incorporation of UDL principles

Champion of registered apprenticeships and pre-apprenticeships
Expert advisor in creating Career Launch programs with labor groups and regional / industry intermediaries

Help design and support CCW implementation granting process
Help design and support regional network RFP process
Champion Career Prep

Partner to create CCL experiences for the education sector
Educate paraeducators to support CCL instruction
Ensure that educators are prepared to counsel multiple pathways

Pilot new Career Launch programs in high demand pathways
Assist with endorsement standards creation
Forge new and strengthen existing industry relationships

Communicate opportunities for CCL programs within 24-credit system
Promote Career Awareness, Exploration and Preparation
Provide sample curriculum for soft skill work to bolster student readiness for CCL

*Non-Exhaustive List of groups contributing to CCW implementation
Multiple stakeholder groups to continue to advise CCW Implementation Team

- Employers & Industry Associations
- Students & Families
- Philanthropic Organizations
- Labor Groups
- Government Agencies (e.g. L&I, WTB, OSPI, SBCTC, Council of Presidents, ICW, SBE, PESB, WASC, OFM, DSHS, WSRC)
- Legislators & Staff
Career Connect Washington Plan

i. Career Connected Learning Today

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Appendices
# Strategies to grow access to high-quality Career Connected Learning

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activate Industry</strong></td>
<td>Ensuring industry is central to, has resources to support, and is co-investor in a high-quality Career Launch programs</td>
</tr>
<tr>
<td><strong>Ensure High-Quality</strong></td>
<td>Rigorous standards for Career Launch and an Educator and Industry-validated endorsement process</td>
</tr>
<tr>
<td><strong>Provide Equitable Access</strong></td>
<td>Reducing barriers to ensure all students have access to high-quality Career Connected Learning</td>
</tr>
<tr>
<td><strong>Spread the Word</strong></td>
<td>Communicate the vision to legislators and influencers, then connect with students, parents, and educators</td>
</tr>
<tr>
<td><strong>Scale and connect the system</strong></td>
<td>System changes needed to grow Career Launch and expand student access to Career Connected Learning (including regional and intermediary supports)</td>
</tr>
</tbody>
</table>
**Activating Industry:** Industry is essential to success of CCW

“We need business and industry at the table to make this work. We need business to be engaged and truly excited about helping create these opportunities.”

Perry England, MacDonald-Miller

**What industry will contribute**

- Help set the CCL strategy – *Leadership*
- Create and participate in CCL programs – *Producer of talent and not consumer*
- Provide training, supervision, and wages for students – *Invest in new talent*
- Work together to create industry-wide programs – *System not programs*

**What industry will need**

- Intermediary support – *Help working with education to create programs*
- Navigation support and clear points of contact – *Make it simple to engage*
- Communication support – *Spread the word to students and parents*

**Overwhelming engagement and support for CCL throughout plan development**
Industry Engagement: We’ve engaged ten high-growth industries in our efforts

- Healthcare
- Utilities
- Maritime*
- IT
- Life Sciences
- Agriculture
- Advanced Manufacturing
- Construction
- Aerospace
- Education*

82 Employers
140 Attendees

In Partnership with Labor, Education, Regional Networks and Government

*Workshops and next steps in development
**Life Sciences workshop example:** Industry-identified opportunities to scale

**Industries enablers & supports:**
- Tuition reimbursement programs

**Career Launch**
- AGC program in development
- Seattle Genetics Fellowship
- PNRI Work Study
- Shoreline programs
- CellNetix certification programs

**Career Preparation**
- High School Internships
  - UW Medical School, Novo Nordisk, Fred Hutch, Adaptive, Just
- College internships
  - Seattle Genetics, AGC, Fred Hutch, Just
- PLTW capstone projects
- Edmonds District CTE programs
- Shoreline Project Biotech summer camp
- Juno awareness building with Shoreline
- Novo Nordisk partnership with UW
- Project Lead the Way K12 curriculum

**Career Awareness & Exploration**
- AGC program in development
- Seattle Genetics Fellowship
- PNRI Work Study
- Shoreline programs
- CellNetix certification programs

*Additional examples detailed in appendix*
**Industry:** several CCL programs in-development or ready to scale across multiple high growth industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Innovative programs to scale</th>
<th>Innovative programs in development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>WACMAC Medical Assistant Reg. Apprenticeship (Career Launch)</td>
<td>Healthcare Consortium / SEIU training fund reg. apprenticeships</td>
</tr>
<tr>
<td>IT</td>
<td>Apprenti (Career Launch)</td>
<td>Tech Academy (P-TECH or similar)</td>
</tr>
<tr>
<td>Advanced Manufacturing</td>
<td>SEH IWL Internship (Career Preparation)</td>
<td>SEH Advanced Manufacturing Career Launch</td>
</tr>
<tr>
<td>Utilities</td>
<td>Energy Pathways (Avista) (Career Preparation)</td>
<td>Regional partnership for recruiting and training apprentices</td>
</tr>
<tr>
<td>Life Sciences</td>
<td><em>In decision making: ideas for all 3 types of CCL</em></td>
<td>AGC Biologics Career Launch</td>
</tr>
<tr>
<td>Construction</td>
<td>Pre-Apprenticeship Afterschool Programs (modeled after Heavy Highway program) (Career Preparation)</td>
<td>Youth &amp; Associate Controls Reg. Apprenticeships (MacDonald-Miller) (Career Launch)</td>
</tr>
<tr>
<td>Maritime</td>
<td>Workshop Upcoming</td>
<td>Workshop Upcoming</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4H and FFA (Career Awareness and Exploration)</td>
<td>Joint communications and pipeline development effort</td>
</tr>
<tr>
<td>Aerospace</td>
<td>CorePlus Marketing (Career Preparation)</td>
<td>Aircraft Maintenance Technician Career Launch program</td>
</tr>
<tr>
<td>Education</td>
<td><em>Details forthcoming</em></td>
<td><em>Details forthcoming</em></td>
</tr>
</tbody>
</table>
Quality Control: Industry and Education-Led endorsement process for CL

Career Launch Programs will be endorsed in a rigorous CCW-led process including:

- Industry-validated (e.g. students work-ready, critical mass of employers participating, valued across industry, high-potential career pathway)

- Academically-validated (e.g. state-wide recognition and transferability, aligned with high-quality academic standards)

- Endorsement will be reviewed periodically based on student outcomes

Only endorsed Career Launch Programs will have access to increased support (including capacity funding) and count towards CCW goal
**Equity:** Career Connected Learning must be available to ALL students

**Context:** Equity must be central to quality career education

- Traditional career-focused education has been used to “track” students perceived as not fit for postsecondary education (often historically underserved students)
- As career education has been “rebooted”, many states struggle with the new challenge of ensuring that traditionally underserved students have access to high-quality programs

> “We’re seeing that many states are facing the “opposite challenge” now. As new high-quality programs are being created, we find they are being filled by higher-income students.”
> - Funder

**Vision:** Career Connected Learning can be a powerful vehicle to create opportunity for underserved young adults

- CCL creates multiple pathways while preserving high expectations for all young adults
- CCL helps counteract barriers to postsecondary and career (e.g. lack of social capital, inability to “earn” while they learn, resources required to support postsecondary and career)
- A CCL system ensures that opportunity isn’t concentrated in higher-income communities

> “Access to the social capital and work experience that give students a critical leg-up is too often allocated based on family connections or zip code. This has huge equity implications. Intentional CCL has the potential to shift that paradigm” - Researcher

**CCW system design must be intentional about creating a strategy for ensuring equity**
**Equity: Career Connect Washington Equity Strategy**

---

**Supports**

- **Community**: Rural broadband, support for intermediaries that work with underserved young adults
- **Individual**: Grants for transportation, equipment, fee/tuition waivers, reasonable accommodations, etc.

---

**Data**

- **Disaggregated data**: Progress and outcomes tracked by underserved groups
- **CCL Directory**: Will include resources available for students in their communities

---

**Grant Process**

- **Implementation grants**: Criteria will include how programs will ensure equitable access
- **Regional networks**: Criteria will include how to ensure community voices represented in CCW

---

**Next Steps**

Short-term study of what existing resources are available to support underserved student pursuing CCL, identifying gaps in services, and making recommendations about how best to close them
Marketing and Branding: Build a Career Launch Brand in Phases

The Challenge: Lack of awareness of CCL programs

- Parents and students are hungry for more pathways to jobs & careers
- But there is a lack of awareness of current options
- Language matters in showing diversity of options
- Perception amongst some about having to make a choice between college and a career connected pathway (false dichotomy)

Phase I: Selling the “vision”

**Audience:** Influencers, Legislators

- Media outreach
  - Includes editorial boards, op-eds
- Messaging “kit” for key stakeholders
  - E.g. Counselors, Teachers, Administrators, Employers, etc.
- Social media campaign
- Events
- Videos
- Website

Phase II: CL & CCW

**Audience:** Students, Parent, Educators

- Create an “umbrella” brand for Career Launch
- Program-specific marketing at student-level
- Launch statewide CCL directory
- Arm the regional networks and navigators to spread the word to CTC and K-12 counselors
Policy: Focus in Olympia on passing CCW bill and associated $110M budget

BUILDING STRONG CAREER CONNECTED PROGRAMS – $33 MILLION
High quality, career-connected learning programs that support the needs of business and industry across Washington give young adults multiple pathways to a great career. The Career Connect Washington proposal sets up a competitive grant program to create new career-connected learning programs to expose students to and prepare them for high-demand jobs.

SCALING STUDENT ENROLLMENTS AND SUPPORTS – $30 MILLION
To expand career-connected learning programs, the proposal includes funding for K-12 and higher education partners to support student enrollment in dual credit and career and technical education courses, registered apprenticeships, and state work study and career launch programs.

BETTER EQUIPPING CAREER AND TECHNICAL EDUCATION – $18 MILLION
Students need access to the latest tools and equipment to prepare for the careers of today and the future. The governor’s capital budget includes a competitive grant program for high schools, skill centers and community colleges to purchase and install equipment for career-connected learning programs.

SUPPORTING WORKFORCE INITIATIVES – $16 MILLION
The proposal includes funding for customized worker training for current and future employees and creates new apprenticeship opportunities in health care, information technology, aerospace and construction trades.

STRENGTHENING SYSTEM INFRASTRUCTURE – $13 MILLION
A coordinated approach across state agencies and education systems is key to successfully offering career-connected learning opportunities, as are student recruitment campaigns and robust data systems. The proposal funds credit equivalencies and portability for career-connected programs. It also funds marketing and communications to students, families and educators, and data systems to measure and report on student outcomes.
Join WA students & families to support expanded Career Connected Learning opportunities and realize a new vision for our state

Voters say CCL programs should be expanded…

Do you think Career Connected Learning programs in Washington should be expanded, kept at their current level, or reduced?

- 75% Expanded
- 8% Kept at current level
- 2% Reduced
- 15% Don’t know / NA

...with strong majorities saying not enough being done today

I am going to read you a list of types of educational experiences students can have after high school. I’d like you to tell me whether too much is being done, not enough is being done, or the right amount is being done to make these opportunities available in Washington state.

- Exposing students to different types of on-the-job learning opportunities: 75% Not enough, 25% Too much
- Trade schools or apprenticeships: 70% Not enough, 30% Too much
- Certificate programs in fields like medicine, manufacturing, and technology: 59% Not enough, 39% Too much
- Certificate programs in fields like medicine, manufacturing, and technology and technology: 42% Not enough, 56% Too much
- Community college: 37% Not enough, 60% Too much
- Four-year college or university: 30% Not enough, 52% Too much, 18% Not enough

Source: FM3 Research, Survey of 835 registered voters, 9/26-10/4/18; 1. split sample 2. % saying not enough is being done to expose students to different types of on-the-job learnings: Democrats 70%, Independents 78%, Republicans 79%

Voter attitudes shared across political parties, regions, genders, income levels, and demographics

Detailed polling data posted separately
The journey continues…

**Goal:** Set the stage for CCW implementation while pursuing legislative action

### Communications & marketing
- Continue to spread the word: speaking events, targeted outreach to build support for plan
- Prepare a robust marketing and branding campaign around the “Career Launch” concept; pursue related technology to make this accessible to students
- Begin planning for CCL directory

### Create new pathways
- Support and fund work emerging from the industry workshops held as part of the planning process
- Provide support resources to regions and program intermediaries to create new career connected opportunities
- Begin to build the endorsement process engaging agencies and colleges and universities in the process

### Project leadership
- Prepare for implementation of the CCW plan with the partnership of the stakeholders already engaged in the CCW strategic planning effort
- Assign specific roles & responsibilities for each stakeholder within CCW
- Regularly convene the stakeholder groups (including Gov & Ed, BPL, labor) engaged in the process; providing updates and seeking guidance on key issues

### Ensuring success for all
- Create robust student facing portal of all current supportive services available to them, localized to be relevant

### Educate & advocate
- Work closely with legislators as they consider the Governor’s proposals; evaluate and address alternatives that arise

### Track success
- Work with ERDC to implement data enclave proposal
Career Connect Washington plan

Appendices

i. Additional Plan Details

ii. Policy Details

iii. Industry Career Connected Learning Examples

iv. What do Washingtonians think?

v. Macro Trends

vi. Career Connected Learning System Examples

vii. Plan Development Process

viii. Industry Workshop Summaries
Suggested RFP Outline for Selecting CCW Regional Networks

Demonstrated history of and ability to fulfill the core responsibilities for a CCW regional network

- Trusted partner to regional business, labor, education, and government stakeholders (potentially demonstrated by letters of support from these stakeholders) and demonstrated ability to convene all relevant stakeholders
- Knowledge of existing CCL programs and gaps/opportunities in region
- Track record of supporting successful implementation of high-quality CCL programs
- Well-articulated plan for providing community navigation support to front-line counselors and educators in K-12 and CTC system

Commitment to equity

- Trusted partner of and ability to convene communities of color, low-income communities, students/parents, and disability community (potentially demonstrated by letters of support from these stakeholders)

Ability to convene a stakeholders to drive strategy and programs

Regional networks will be periodically re-evaluated to ensure they are producing necessary outcomes for their region
Suggested RFP Outline for Program Implementation Grants

A clear plan for developing and/or scaling a high-quality career connected learning program including:

- How program will achieve scale (e.g. multiple education partners working with multiple employers; credit agreements articulated across the state)
- Commitment of key education and industry partners (demonstrated by letters of support)
- Understanding of labor market need that program addresses
- Plan for how resources will be used (including staffing model and breakdown between partners)
- Clear articulating of roles and responsibilities between groups

Commitment to equity

- Plan for ensuring equitable access to proposed program (including disability community)
- Preference for programs design in alignment with Universal Design for Learning Principles¹

Desired outcomes and interim progress metrics

Programs will be periodically re-evaluated to ensure they are producing desired outcomes

¹ http://www.cast.org/our-work/about-udl.html#W9Zb4GlKgGw
WA can reach 60,000 students for Class of 2030 through endorsement of existing and creation of new CCL programs.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 5</th>
<th>Year 10</th>
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<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
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<tr>
<td>Total CL Seats</td>
<td>3,000</td>
<td>7,000</td>
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<tr>
<td>Existing CL-like seats (newly endorsed)</td>
<td>3,000</td>
<td>5,000</td>
<td>7,000</td>
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<tr>
<td>New CL seats (incl. new reg. apprenticeships)</td>
<td>--</td>
<td>2,000</td>
<td>4,000</td>
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<tr>
<td>New Career Preparation (excluding CTE/CTC coursework)</td>
<td>5,000</td>
<td>10,000</td>
<td>18,000</td>
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<tr>
<td>Cumulative High-Quality CCL Experiences (Prep and Launch)</td>
<td>8,000</td>
<td>25,000</td>
<td>53,000</td>
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<tr>
<td>Employers participating in Career Launch (assumes 20 CL per employer)</td>
<td>140</td>
<td>340</td>
<td>540</td>
</tr>
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</table>

Meets governor's goal for 100k experiences.
CCW system: Cohesive state and regional strategies; local expertise and innovation

Set state-wide strategy and define annual goals
Track and report system outcomes
Maintain quality control of Career Launch (CL) programming
Collect and disperse best practices
Financial resources for CL programming

Develop regional strategies to pursue growth of CCL programs
Convene key stakeholders to develop programs to meet needs
Serve as primary point-of-contact and navigator within the region
Consolidate regional data and report key learnings to state-level

Design programs (in partnership with regional networks)
Implement programs
Generate demand
Track and report outcomes
Deep-Dive: ~2x growth in WA registered apprenticeships 5 years

What is a registered apprenticeship?
- State-approved program that provides workers with skills required to meet employer needs, yielding a credential, training, and work experience.

Which occupations have registered apprenticeships opportunities?
- Top occupations (~60% of registrations) are Fire Fighters, Carpenters, Laborers, Electricians, Ironworkers, Drywall installers, Sprinkler fitters, Roofers, Tree trimmers.
- Registered apprenticeships are not limited to specific occupations with more being added each year (including within health care, and technology industries).

How do registered apprenticeships fit into the CCW framework?
- Registered apprenticeships are one example of high quality Career Launch programs.
- CCW supports the state registered apprenticeship program and L&I goal of doubling the number of registered apprenticeship opportunities in WA state over the next 10 years.

Source: Washington State Department of Labor and Industries

Registered apprentices (’000)

<table>
<thead>
<tr>
<th>Jul ’13</th>
<th>Jul ’14</th>
<th>Jul ’15</th>
<th>Jul ’16</th>
<th>Jul ’17</th>
<th>Nov ’17</th>
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<td>7.3</td>
<td>8.0</td>
<td>9.5</td>
<td>11.6</td>
<td>13.5</td>
<td>17.2</td>
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+134%
Deep dive: How the system works for young adults
Meet Sean, a medical assistant on his journey to become a registered nurse

Sean
Student from Spokane, WA

High school
- Attends a panel of healthcare professionals for a science class and finds it interesting
- Enjoys science because of the labs and hands-on learning but gets bored in other classes
- Attends MultiCare’s Nurse Camp and finds it energizing

Career Awareness
- Sean’s career counselor helps him find a local Medical Assistant reg. apprenticeship via online database

Career Exploration
- Joins RN Career Launch program
- In his first year, he continues to work as an MA 4 days/week
- In his 2nd-4th year, progressively takes on more RN roles at work, gaining skills and class credit

Enablers and Support
- Works 4 days/week at a hospital, applying the skills he’s learning in the classroom with patients and gaining credits
- Spends 1 day/week in the classroom building skills needed for work

Reg. Apprenticeship
- Completes Career Launch program with a certificate, significant credits toward an Associates Degree, 2 years work experience, and a job offer
- Works 1 day/week in the classroom building skills and has a headstart in credits given his A.A.As
- Completes his A.A.S.

Career Launch
- Starts his job as a Medical Assistant
- Sean enjoys his job but wants to take on a bigger role
- His union rep recommends looking into an RN Career Launch program through his employer

RN program
- Completes his B.S.N.
- Starts his job as a Registered Nurse
- Sean enjoys his job as a nurse and is considering working towards management positions over time
- Completes his A.A.S.
Deep dive: How the system works for young adults
Meet Carmen and her journey to becoming a Software Development Engineer

Carmen
Student from Renton, WA

Early education
Attends a career fair in middle school where she hears adults speak about their day-to-day jobs and companies

Career Exploration
Decides math is her favorite subject in school - she enjoys the satisfaction of figuring out a tough problem

Career Awareness

High school
Participates in a sponsored web development competition as extra credit for one of her classes

Enablers and Support
Takes a Computer Science class and finds it extremely interesting

Career Exploration
Carmen’s considers options for post high school education

Career Launch
Carmen’s career counselor recommends she consider a Career Launch program in tech

Beyond high-school
In her 1st year, Carmen spends ~4 days at her employer, working on entry-level tasks and building professional soft-skills

Career Launch
Carmen learns new coding languages in the classroom where she spends 1-2 days / week

Enablers and Support
Applies for and is accepted to a Career Launch program with a local tech employer

In her 2nd and 3rd year, Carmen spends 4-5 days at her employer, gaining hands on coding experience and credits towards her degree

Career Launch
Completes Career Launch program with a certificate, significant credits toward an Associates Degree, 3 years work experience, and a job offer

Completes her A.A.S. in Computing and Software Development

Beyond high-school
Completes Career Launch program with a certificate, significant credits toward an Associates Degree, 3 years work experience, and a job offer

Starts her new job as a Software Development Engineer and is excited to recruit and mentor others through Career Launch programs
Career Connect Washington plan

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Career Connect Washington Policy Memo Summary (1 of 2)

Detailed Recommendations

**Priority 1: Statewide System Development**

- a) Formally authorize and endorse the Career Connected Learning vision including codifying clear definitions for Career Launch and Registered Youth Apprenticeship

- b) Authorize and fund a set of priority activities to be carried out by a Career Connect Washington Implementation Team under the guidance of the Governor’s Office including coordinating cross sector leadership and implementing a cohesive marketing and communications agenda

- c) Fund dedicated and seconded staff capacity to support Career Connect Washington Implementation Team efforts, including seconded agency staff

- d) Fund data capacity to support regular reporting, timely research and analysis

- e) Direct the Washington Student Achievement Council to identify and align existing supports to promote equitable participation in Career Connected Learning

**Priority 2: Funding to Education Partners for Student Enrollment in Career Launch**

- a) Support the K-12 system and the Office of the Superintendent of Public Instruction to increase and streamline funding for student participation including increasing CTE funding and strengthening dual-credit programs to ensure equitable access

- b) Support Community and Technical Colleges and other higher education institutions to address postsecondary funding challenges for young adults participating in programs post-high school including CTC enrollment, CL/RA tuition waivers and backfill, and work study for CCL

- c) Promote innovation in equivalency and credentialing within endorsed CL and RA programs
## Career Connect Washington Policy Memo Summary (2 of 2)

<table>
<thead>
<tr>
<th>Priority 3: Regional Leadership and Program Intermediaries</th>
<th>Detailed Recommendations</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• a) Support regional leadership to expand participation in Career Connected Learning including the funding of regional networks, career navigators, and equipment costs</td>
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<tr>
<td></td>
<td>• b) Direct support for innovative program design and expansion of Registered Youth Apprenticeship and endorsed Career Launch programs including providing grants for program design and expansion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aligned Career Connect Washington Policy Priorities</th>
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</thead>
<tbody>
<tr>
<td>• State Need Grant Expansion: Support expanded, sustainable, and reliable funding of SNG</td>
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<tr>
<td>• High School and Beyond Plan: Support proposals to promote a robust, technology-enabled, and dynamic (i.e. frequently revisited) HSBP that links to Career Connect Washington Plan</td>
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<tr>
<td>• Guided Pathways: Support for existing proposals to grow guided pathways and college to career advising in 2-year and 4-year institutions that link to Career Launch opportunities</td>
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<tr>
<td>• Support for New Market Airplane: Support for added workforce capability, aligned with the Career Connect Washington plan, proposed in the strategy to attract the new market airplane</td>
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<tr>
<td>• State Broadband Expansion: Rural communities need connectivity to participate in educational opportunities otherwise unavailable to them, including career connected learning</td>
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</table>
Career Connect Washington plan

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Career Launch: Health care registered apprenticeship

Programs that provide meaningful on-the-job experience and aligned classroom learning

Health Care: Medical Assistant Pathway
- Aiming for first cohort in 2019
- 12-18 month program, 2,000 paid OTJ hours
- Could serve multiple employers
- Developing in partnership with SEIU
- Medical assistant first of potentially several jobs to be developed as a registered apprenticeship in healthcare

Source: WA STEM Career Connected Learning Framework; Kaiser Permanente, SEIU

Additional examples detailed in appendix
Career Launch: Four-year university based engineering program

Programs that provide meaningful on-the-job experience and aligned classroom learning

WSU Internship Program

- SEL provides paid internship opportunities for about 80 WSU students per year
- Students work part-time during the school year, 12-15 hours a week, for at least 1 year
- Opportunities across the company: Computer Science, Software Engineering, Business, HR/Recruiting, HR/Health Clinic, Accounting/Marketing, Marketing/Comms, Project Management, Engineering

Source: WA STEM Career Connected Learning Framework; CorePlus Website
Career Launch: Youth and adult registered apprenticeship in building management

Programs that provide meaningful on-the-job experience and aligned classroom learning

Controls Specialist Registered Youth/Adult Apprenticeship

- 2,000 paid OJT hours
- Controls Specialist entry point can lead to several different career paths including engineering and management
- Partnership between MacDonald-Miller Facility Solutions, Siemens Corporation, West Sound STEM Network, and South Kitsap School District

Source: WA STEM Career Connected Learning Framework; MacDonald-Miller
Career Launch: K-12 & community college pathway to advanced manufacturing

Programs that provide **meaningful on-the-job experience** and aligned classroom learning

SEH Advanced Manufacturing Career Launch Pilot

- ~15 students by Winter 2018
- 2 year program, partnership between SEH America, Clark College, Evergreen Public Schools, ESD 112, SW WA STEM network
- Evolved from success with SEH internship program
- Currently serves one employer but potential to expand

Source: WA STEM Career Connected Learning Framework; ShinEtsu (SEH)
Career Launch: A six year work aligned technology career academy

Programs that provide **meaningful on-the-job experience** and aligned classroom learning

**Academy Model: PTECH or similar**

- Proven model in other states; pioneered by IBM but open source model
- 6-year program bridging high school and college level
- Effort led by WA State Hispanic Commission
- Planning group includes LWIT, Everett Community College, Everett Public School District, Columbia Basin College, PNNL, LIGO, Hanford, Pasco School District, Kennewick School District, Richland School District, Port of Seattle

Source: WA STEM Career Connected Learning Framework; P-Tech
Career Launch: A data analyst registered apprenticeship that crosses many types of employers

Programs that provide meaningful on-the-job experience and aligned classroom learning

Cross-Sector: Data Analyst

- In-development program to create new data analyst training program for career entry in multiple industries (e.g. health care, manufacturing, agriculture, etc.)
- 300-500 hours training with hands-on labs and capstone project
- Students receive registered apprenticeship and Data Analyst certifications
Career Launch: An aerospace and advance manufacturing youth apprenticeship

Programs that provide **meaningful on-the-job experience** and aligned classroom learning

### AJAC Youth Reg. Apprenticeship
- Youth reg. apprenticeship (16+) opportunities in aerospace and advanced manufacturing
- 38 employers involved across the state and 7 school districts
- 2000 hours of paid on-the-job training, earn 15 college credits, a journeyman’s card from Labor and Industries as a Production Technician, and 2 high school credits

“Employers and schools have the curriculum and on-the-job training set up for us to succeed, because that is what they are trying to do, so I am really excited about it.”

Student, AJAC Apprentice

Source: WA STEM Career Connected Learning Framework; AJAC
**Career Preparation:** Preparing for a career in aerospace manufacturing

*Education or work experiences to gain hands-on skills and knowledge*

**Manufacturing: Transferrable Skill Dvlp**
- Career and technical education program
- Two-year commitment:
  - Year 1: ~540 hours of basic transferrable skill sets (Core)
  - Year 2: ~540 hours of occupation-specific skill sets (Plus)
- Serves ~1,500 students per year

"Most of the time I have no idea why I’m learning something in math class, but I understand the math here because I have to apply it to my project. It just makes more sense to me."
Junior, Granite Falls

**Boeing Career Launch program in development**

Source: WA STEM Career Connected Learning Framework; CorePlus Website
Career Preparation: Preparing students to launch into the energy sector

Education or work experiences to gain hands-on skills and knowledge

Utilities Industry: Energy Pathways
• 1-month internship experience
• $2,000 stipend at end of internship
• 18 high school students participated this year
• Job shadowing across multiple functions
  – Alternative energy technologies
  – Energy efficiency
  – Maintenance & Operations

I originally wanted to do something engineering and I wasn't quite sure about energy...But after doing this, I'm definitely interested in something in the energy field.
-- Roka, Spokane Valley Tech

Source: WA STEM Career Connected Learning Framework; KREM Spokane; Spokane Valley Career & Technical Education Advisory Council
**Career Preparation:** Preparing students to launch through college connected tech internship

*Education or work experiences to gain hands-on skills and knowledge*

**Whitman Collaborative Internship Program**

- New pilot at 4-year, liberal arts college with local employer Key Technology
- Cohort of paid student interns across several functional areas of the Key Technology business
- Each student paired with employer mentor, and supported by a six-member Whitman faculty advisory group
- Cohort will present capstone project to entire Whitman campus community

Source: WA STEM Career Connected Learning Framework; KREM Spokane; Spokane Valley Career & Technical Education Advisory Council
**Career Preparation:** Preparing students to launch through college based project work in engineering, environmental science and computer science

*Education or work experiences to gain hands-on skills and knowledge*

**Seattle University Project Center**
- One academic year, 1,000 hour senior project
- Required for all graduating seniors in Civil and Environmental Engineering, Environmental Science, Computer Science, Electrical and Computer Engineering and Mechanical Engineering
- Student teams partner with sponsors from industry and Seattle U faculty and are responsible for project management, budgeting and scheduling

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Source: WA STEM Career Connected Learning Framework; SeattleU
Career Preparation: Preparing students to launch in medical field through college based summer internship

Education or work experiences to gain hands-on skills and knowledge

Gonzaga Biomedical Internship

- 10-12 summer internship opportunities per year for Gonzaga students
- Sponsored by the Swedish Medical Center Foundation through the Mayberg Educational Fund in partnership with Gonzaga
- Students gain research experience, and have weekly lectures and shadowing opportunities, and receive mentoring from physicians and other medical professionals

Source: WA STEM Career Connected Learning Framework; CorePlus Website
Career Preparation: Preparing students to launch through pre-apprenticeship in construction

Education or work experiences to **gain hands-on skills and knowledge**

ANEW Pre-Apprenticeship
- Program helps youth and adults gain the technical skills needed to be competitive for an apprenticeship opportunity
- 11 week, high-quality training that gives students an advantage while entering the construction trades
- Partner directly with several registered apprenticeship programs and expose students to their training facilities
- Focus on non-traditional candidates in construction trades

Source: WA STEM Career Connected Learning Framework; ANEW
Career Awareness and Exploration: Building early exposure to careers

Opportunities for early exposure to careers and career options

DiscoverU Worksite Tours
- Week-long postsecondary and career exploration for South King Co. students
- Programming builds awareness from Pre-K through high school
- ~50 employers involved in worksite tours including work simulation and panel with employees from across the employer

“I can create things that no other people have created yet…. Career-wise, I’m learning that I could actually be influential by finding ideas that could change a lot of things in this world.
-- Jasmine, Lindbergh High School

Source: WA STEM Career Connected Learning Framework; DiscoverU website
Career Awareness and Exploration: Building early exposure to biotechnology

Opportunities for early exposure to careers and career options

Project Biotech Summer Camp
- Week-long camps in Shoreline’s Biotechnology Lab for 8th-12th graders
- Three different camps offered: Biotechnology Essentials & Beyond; Biotechnology & Infectious Disease: “Tracking Pandemic Flu”; and Biotechnology & Cancer: “Causes, Cures and Careers”

“This camp has opened my eyes to the vastness and the wonder of what biology can do for society.”
- 2017 “Biotechnology & Infectious Disease” Camper
Career Awareness and Exploration: Building early exposure to STEM careers

**Opportunities for early exposure to careers and career options**

**STEM Like Me!**
- Career awareness for 7th graders
- Members of the community with careers in STEM volunteer to come into middle schools and work on projects with students

"I'm seeing everything that other people do that I could do someday"

Student Hannah Bunney

Source: WA STEM Career Connected Learning Framework; CorePlus Website
Career Awareness and Exploration: Building early exposure to careers

Opportunities for early exposure to careers and career options

Business AfterSchool

- Workshops providing on-site exploration and awareness of Spokane’s high-demand jobs
- Focused on middle and high school students
- ~15 workshops in 2017-18

“My advice to other students is to attend all of the workshops you can. They really helped me narrow down my choices for a career path and provided me with a lot of knowledge”

Student Millea Rosario

A G E N D A

Career Connect Washington plan

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Student voices on postsecondary pathways

Key takeaways

- Students understand need for education beyond high school but in a different way than parents
- High concern about debt and financial stability
- Hungry for options that they don’t get exposed to now
- Mixed messages about who to go to for information
- Overwhelming support for “Career Connected Learning” and “Career Launch”
- Most appealing aspects: opportunities for pay and credit, guaranteeing a good job
- Biggest concerns: time away from high school, concerns about access, too young

Maybe instead of having kids on a one-line path through high school, they should shadow many different occupations.
– Urban/Suburban Student

Honestly debt scares me. If I could just go to school and absorb as much knowledge as possible without debt I would!
– Student

This solves the famous complaint teachers get: “When am I going to use this in real life?”
– Rural Student

Source: CCW focus group
Similarly, parents concerned that current system is not preparing kids for careers

**Key takeaways from focus groups**

- Parents understand that education beyond high school is necessary today, but they worry that getting a college degree doesn’t guarantee a good job, and they worry about the high cost of college.
- Parents are hungry for information on options and feel that the current system does not provide enough information on pathways.
- Participants expressed that their children learn in a variety of ways – there shouldn’t be a one-size-all path to higher education and career.

It seems like they are pushing them all to college. But who is going to do the trades? Who is going to work on the cars? Kids need to know there’s not just the one path.

– Parent focus group participant

[Success is] if they’re a productive member of society. If they can earn a living wage enjoying what they do and they’re not in debt for education.

– Parent focus group participant

Source: CCW focus group
Counselors report lack of training and time to counsel students on all postsecondary options available

Key takeaways from focus groups

• Counselors do not feel adequately informed about postsecondary options beyond 4-year universities
• Counselors and other school staff do not have sufficient time to assist students in identifying and exploring postsecondary pathways
• Counselors do not know how much time students spend considering their postsecondary pathways
• Counselors report significant student barriers to devoting time to career exploration, especially after school hours (e.g. transportation, graduation requirements, lack of knowledge of opportunities all cited as barriers)

Our students need connections with their counselors which is impossible when secondary caseloads are 450+.
– Counseling focus group participant

Lack of staff time to dedicate to this type of learning. Students would participate if they were informed and adults could guide them through the process.
– Counseling focus group participant

Source: CCW focus group
More than seven in ten feel not enough is being done to expose students to on-the-job learning or trade school.

I am going to read you a list of types of educational experiences students can have after high school. I’d like you to tell me whether too much is being done, not enough is being done, or the right amount is being done to make these opportunities available in Washington state.

- Exposing students to different types of on-the-job learning opportunities
  - Not Enough: 75%
  - Right Amount/DK/NA: 25%

- Trade school or apprenticeships
  - Not Enough: 70%
  - Right Amount/DK/NA: 30%

- *Certificate programs in fields like medicine, manufacturing and technology
  - Not Enough: 59%
  - Right Amount/DK/NA: 39%

- *Certificate programs
  - Not Enough: 42%
  - Right Amount/DK/NA: 56%

- Community college
  - Not Enough: 37%
  - Right Amount/DK/NA: 60%

- Four-year college or university
  - Not Enough: 30%
  - Right Amount/DK/NA: 52%
  - Too Much: 18%
These attitudes are largely shared across lines of party and ethnicity.

(% Saying Not Enough is Being Done)

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<th>Statement</th>
<th>All Voters</th>
<th>Party</th>
<th>Ethnicity</th>
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<tr>
<td></td>
<td></td>
<td>Democrats</td>
<td>Independents</td>
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<tr>
<td>Exposing students to different types of on-the-job learning opportunities</td>
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<td>70%</td>
<td>78%</td>
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<tr>
<td>Trade school or apprenticeships</td>
<td>70%</td>
<td>65%</td>
<td>72%</td>
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<tr>
<td>*Certificate programs in fields like medicine, manufacturing and technology</td>
<td>59%</td>
<td>57%</td>
<td>56%</td>
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<td>*Certificate programs</td>
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<td>43%</td>
<td>40%</td>
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<td>Community college</td>
<td>37%</td>
<td>42%</td>
<td>37%</td>
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<tr>
<td>Four-year college or university</td>
<td>30%</td>
<td>39%</td>
<td>27%</td>
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Q5. I am going to read you a list of types of educational experiences students can have after high school. I’d like you to tell me whether too much is being done, not enough is being done, or the right amount is being done to make these opportunities available in Washington state. *Split Sample
"Real world skills," exposure to careers, and avoiding debt are the most appealing aspects.

I am going to read you a list of elements of the kinds of Career Connected Learning programs proposed for high school students. These may be part of some students’ experience, but not necessarily all, as programs and student preferences vary. Please tell me how important you believe that element is: extremely important, very important, somewhat important, or not too important?

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<tbody>
<tr>
<td>Learning real-world skills</td>
<td>58%</td>
<td>36%</td>
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<td></td>
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<tr>
<td>Working alongside mentors in their chosen career field</td>
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<td>42%</td>
<td>15%</td>
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<td>Getting a head start on a two- or four-year degree</td>
<td>40%</td>
<td>39%</td>
<td>15%</td>
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<tr>
<td>Shadowing an employee in an industry of interest to</td>
<td>28%</td>
<td>50%</td>
<td>19%</td>
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<td>the job is like</td>
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<td>Getting on-the-job experience in a career field</td>
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<td>43%</td>
<td>26%</td>
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<td>Earning a credential beyond a high school diploma</td>
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<td>37%</td>
<td>30%</td>
<td>5%</td>
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<td>Ensuring high school classwork is relevant to a student’s chosen career</td>
<td>23%</td>
<td>33%</td>
<td>34%</td>
<td>7%</td>
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<tr>
<td>Earning money for on-the-job experiences</td>
<td>20%</td>
<td>36%</td>
<td>35%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Earning college credit while still in high school</td>
<td>20%</td>
<td>28%</td>
<td>40%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

Q10. I am going to read you a list of elements of the kinds of Career Connected Learning programs proposed for high school students. These may be part of some students’ experience, but not necessarily all, as programs and student preferences vary. Please tell me how important you believe that element is: extremely important, very important, somewhat important, or not too important? Split Sample
Career Connect Washington plan

Appendices

i. Additional Plan Details

ii. Policy Details

iii. Industry Career Connected Learning Examples

iv. What do Washingtonians think?

v. Macro Trends

vi. Career Connected Learning System Examples

vii. Plan Development Process

viii. Industry Workshop Summaries
Significant gap between supply and demand of skilled workers in Washington – and a large opportunity for Career Connect WA to fill it

**MANY EMPLOYERS SEEKING SKILLED LABOR**

740,000 job openings expected in WA in next five years; 70% will require postsecondary credentials

**FEW GRADUATES WITH RIGHT SKILL SET**

Only 40% of WA high school students earn a postsecondary credential

**OPPORTUNITY FOR CAREER CONNECTED LEARNING IN WASHINGTON:**

<table>
<thead>
<tr>
<th>TODAY</th>
<th>2030 GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>70%</td>
</tr>
<tr>
<td>of Washington state students do earn a postsecondary credential by age 26</td>
<td>of Washington state students will earn a postsecondary credential by age 26</td>
</tr>
</tbody>
</table>

Source: WA Roundtable: “The Path to 70% Credential Attainment”
Employers’ stated job requirements do not align with the credentials being earned by Washington youth, creating a gap in talent supply and demand.

~70% of high opportunity jobs require postsecondary ed...

...but only ~40% of Washington students are completing a degree post-high school...

... creating a labor market inefficiency and unfilled jobs

Washington high-opportunity online job postings reporting required credential 2017

Source: Burning Glass; WA Pathways Project; WA Roundtable: "The Path to 70% Credential Attainment"
Problem will escalate as job growth accelerates – 740K jobs will be added in Washington between 2016 and 2021

Projectoed job openings in WA State 2016-2021

- 2016 Jobs: 3,620K
- Roles Backfilled: 428K
- Job Openings 2016-21: 740K
- 2021 Jobs: 3,931K

Note: *Includes retirees, individuals leaving workforce, individuals leaving the state
Source: Bureau of Labor Statistics; WA Roundtable: “The Path to 70% Credential Attainment”
For young adults, the challenge begins well before applicants enter the job market, highlighting the importance of K12 education to build the pipeline.

Note: *Data collected projected for high school class of 2015
Source: WA Roundtable: “The Path to 70% Credential Attainment”
Many industries in Washington provide sustainable, accessible jobs today - but struggle to fill those jobs in a timely fashion.

385K+ postings for sustainable, accessible careers last year, across a variety of key Washington industries

Washington high-opportunity online job postings 2017

Magnitude of expected employment growth

385K

Other (e.g., Educational Services, Utilities)

Transportation and Warehousing

Finance and Insurance

Professional, Scientific, Technical Services

Retail Trade

Manufacturing

Information Technology

Health Care and Social Assistance

Focus of first deep dive workshops

… but many can take months to fill

/EXAMPLES

Manufacturing

• Mechanical Engineer (35-39 days)
• Production Supervisor (35-39 days)

Information Technology

• Software Developer / Eng. (40-44 days)
• Program Manager (40-44 days)

Healthcare

• Registered Nurse (35-39 days)
• Nursing Assistant (30-34 days)

Other

• Systems Analyst (45+ days)
• Maintenance Technician (35-39 days)

Note: Software Developer roles from Professional Services and Amazon postings included in IT. Retail and Healthcare postings skew toward high ‘churn’ roles and heavy re-postings. Source: Burning Glass, WA State ESD industry employment projections
From employers, we hear consistent concerns about meeting workforce and talent demands

Lack of qualified local talent

“It’s tough to find qualified candidates who have a combination of technical skills and understand what it means to be a good employee.”
Leader, Manufacturing

Competition between employers for limited pool

“Employers in WA often take a traditional approach to the talent pipeline, which is to create a position and hope people apply, rather than building a pipeline to fill this need internally. This leads to poaching between companies, because we are all looking at the same set of talent.”
Leader, Healthcare

Experienced workforce not being developed

“There’s a small existing set of people who have the level of experience we need for senior roles, so hiring senior level engineers is a challenge and requires additional investment.”
Leader, IT

Source: Industry leader interviews
Washington’s economy is growing 3%+ per year, but the youth unemployment rate remains >2X that of the state overall.

**Washington’s economic (GDP) growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2.9%</td>
</tr>
<tr>
<td>2013</td>
<td>2.4%</td>
</tr>
<tr>
<td>2014</td>
<td>3.2%</td>
</tr>
<tr>
<td>2015</td>
<td>3.7%</td>
</tr>
<tr>
<td>2016</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

3.3% CAGR 2012-2016

**Washington’s youth unemployment**

Reference point: Youth unemployment in Switzerland is the same as overall unemployment at ~4%.

Note: Unemployment rates do not include individuals who are not in the labor force (e.g., students). Unemployment rates are annual (not seasonally adjusted).

Many Washington residents experience unemployment well above the national average – some regions by 2x

### Unemployment by Region, February 2018 (not seasonally adjusted)

<table>
<thead>
<tr>
<th>Region</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central</td>
<td>8.2%</td>
</tr>
<tr>
<td>South Central</td>
<td>8.2%</td>
</tr>
<tr>
<td>Eastern</td>
<td>6.4%</td>
</tr>
<tr>
<td>Southeast</td>
<td>6.2%</td>
</tr>
<tr>
<td>Spokane</td>
<td>6.1%</td>
</tr>
<tr>
<td>Pacific</td>
<td>5.5%</td>
</tr>
<tr>
<td>West Puget Sound</td>
<td>5.5%</td>
</tr>
<tr>
<td>South Puget Sound</td>
<td>6.4%</td>
</tr>
<tr>
<td>Northwest</td>
<td>5.5%</td>
</tr>
<tr>
<td>Southwest</td>
<td>5.8%</td>
</tr>
<tr>
<td>North Puget Sound</td>
<td>3.6%</td>
</tr>
<tr>
<td>Central Puget Sound</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

**Statewide unemployment (5.3%)**

**National unemployment (4.4%)**

Reference: Washington unemployment rate for February 2018 is 4.7%, seasonally adjusted.

Unemployment is a serious issue across Washington state, particularly in central and/or rural regions.

Source: ESD Labor Market and Performance Analysis Branch; ESD Monthly Employment Report; Office of Financial Management Forecasting and Research; FRED Economic Data; WA STEM / WA Pathways Project
Our economy has a lot to gain from career connected learning

Lower unemployment rates

- 40K additional young adults will join the ranks of college graduates yearly, who are ~20% more likely to be employed than high school graduates

Sustained economic growth

- ~$6B in Washington GDP value from unfilled jobs lost annually, which will be filled as 40K new qualified job seekers are added to the employer pipeline yearly

Greater equity

- Reaching 70% of young adults statewide will improve educational access across races, genders, geographies, and income levels (e.g., only 14% of Washington university students are non-White today vs. ~40% of OSPI students)

Societal benefits

- Increased education will drive down incarceration and poverty
  - High school grads are 3.5x less likely to be arrested
  - With a post-high school degree, 30% of the lowest quintile of earners have an opportunity to earn more

Larger tax base

- With an increase in employment rates across WA, a greater tax base will be available yearly to contribute through sales and property taxes

Source: Brookings Institute; The Hamilton Project; WA Stern; WA Roundtable; OSPI; WSAC; Stanford Graduate School of Education; Huffington Post
And although Washington is a leader in career-connected learning, there are opportunities to improve outcomes overall

<table>
<thead>
<tr>
<th>There is much to be excited about in Washington…</th>
<th>… but we have opportunities to improve</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variety of programs</strong></td>
<td><strong>Vision</strong>: Our stakeholders are not aligned on (or collectively working toward) a shared, well-understood, long-term vision</td>
</tr>
<tr>
<td>• Dozens of individual programs serving a wide range of needs</td>
<td></td>
</tr>
<tr>
<td><strong>Many youth served</strong></td>
<td><strong>Scale</strong>: There are aspects of the current career-connected learning ecosystem preventing us from reaching more students / families / employers</td>
</tr>
<tr>
<td>• Thousands of individuals served by programs today</td>
<td></td>
</tr>
<tr>
<td><strong>Engaged, motivated stakeholders</strong></td>
<td><strong>Coordination</strong>: We lack coordination across programs, at regional and state level, to make career-connected learning more effective in Washington</td>
</tr>
<tr>
<td>• Multiple organizations and individuals excited to contribute</td>
<td></td>
</tr>
<tr>
<td><strong>Funding progress</strong></td>
<td><strong>Perception</strong>: There are cultural barriers preventing further adoption of career-connected learning</td>
</tr>
<tr>
<td>• Legislation, RFP processes already in place</td>
<td></td>
</tr>
</tbody>
</table>
Participation in postsecondary experiential and career-connected learning correlate to higher graduation and employment rates, job engagement

More experiential and career-connected learning experiences lead to improved academic and career success

Oregon State University:

- 6-year graduation rates are higher among students who participate in a experiential learning experiences

Mount Holyoke

- Students who participate in at least one internship are more likely to be employed six months after graduation
- Participation in multiple internships is associated with even higher employment rates

Deep dive: Measuring post-graduation work engagement

<table>
<thead>
<tr>
<th>Experiences leading to highest engagement</th>
<th>Increased odds of being engaged at work</th>
<th>% of students reporting experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had at least one professor who made them excited about learning</td>
<td>2.0x higher</td>
<td>63%</td>
</tr>
<tr>
<td>Worked on a project that took a semester or more to complete</td>
<td>1.8x higher</td>
<td>29%</td>
</tr>
<tr>
<td>Had an internship or job that allowed them to apply what they were learning in the classroom</td>
<td>2.0x higher</td>
<td>29%</td>
</tr>
<tr>
<td>Had professors who cared about them as a person</td>
<td>1.9x higher</td>
<td>27%</td>
</tr>
<tr>
<td>Had a mentor who encouraged them to pursue their goals and dreams</td>
<td>2.2x higher</td>
<td>22%</td>
</tr>
<tr>
<td>Was extremely active in extracurricular activities and organizations</td>
<td>1.8x higher</td>
<td>20%</td>
</tr>
</tbody>
</table>

Only 29% of students reported a career-connected internship

Source: Oregon State University Office of Institutional Research, NACE Center for Career Development and Talent Acquisition, Gallup; 1. Experiential learning defined as undergraduate research, service learning, internships, and study abroad
Career Connect Washington plan

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v. Macro Trends

vi. Career Connected Learning System Examples
vii. Plan Development Process
viii. Industry Workshop Summaries
A full-potential example: Swiss apprenticeship model has equalized unemployment rates for youth and general population (~3.1%)

~70% of students start apprenticeship at age 15

Career fairs and recruitment start in 7th grade

Fully permeable system fosters further education

Source: Graphic: SFS Group; Data: Die Lage auf dem Arbeitsmarkt – Swiss government September 2017 report
What learnings: While Washington will set up a system that is unique and unlike any other state, we can learn from what has worked in other states

- A single point of accountability helps streamline problem-solving and expedite progress.

- A multi-actor board with influential senior leadership ensures stakeholders are represented and have real input on the path forward for the career-connected learning system.

- The governing body doesn’t need to do all the work but should be accountable for delegating to the appropriate strategic leads and ensuring the work gets done and is effective for the system.

- Organization structures that exist at the start may merge, change, or go away over time to drive efficiencies and lead to better outcomes.

- Standardized systems and processes enable more programming and greater participation but regional implementation is critical to scale, tailoring programming to the unique needs of sectors in that region.

- Many actors and organizations are required to make the system work but not everyone can lead the system- success will require significant coordination and managing incentives to keep groups active in the creation, implementation and improvement of career-connected learning experiences.
Career Connect Washington plan

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Context for our efforts: The Business and Philanthropy Leadership Committee for the system design meets monthly

<table>
<thead>
<tr>
<th>March</th>
<th>April</th>
<th>May</th>
<th>Jun</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

Industry Workshops Round 1
(ITA, Healthcare, Adv Manufacturing)

Industry Workshops Round 2
(Agriculture, Utilities, Construction, Life Sciences, Aerospace)

Governor’s Dinner
- Outline the opportunity
- Discuss motivations and aspirations
- Align on approach through Oct

Business / Philanthropy Meeting #1
- Describe opportunity in Washington
- Lay out landscape of CCL today
- Discuss draft 10-year vision

Business / Philanthropy Meeting #2
- Define near-term ambition
- Discuss options to achieve vision and ambition
- Lay out initial metrics to measure our success in first several years

Business / Philanthropy Meeting #3
- Define the key elements of the strategic plan
- Lay out actions for legislation, governance, and funding of the system
- Define needed actions by key actors

Business / Philanthropy Meeting #4
- Discuss policy priorities identified
- Review system design and funding
- Discuss focus group research

Business / Philanthropy Meeting #5
- Process update
- Recap outcomes from industry workshops
- Governance model discussion

Business / Philanthropy Meeting #6
- Review draft plan for Oct 25 meeting
- Present initial draft of success metrics
- Detail roles of regional networks and program intermediaries

Governor Meeting
- Present case for change and plan outline
- Detail next steps for post Oct 25
- Governor, industry, education, agencies, media present
Success for this effort is thanks to a close partnership between business, labor, government, and education stakeholders across the state.
Career Connect Washington plan

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Industry Engagement: We’ve engaged ten high-growth industries in our efforts

- Healthcare
- Utilities
- Maritime*
- IT
- Life Sciences
- Agriculture
- Advanced Manufacturing
- Construction
- Aerospace
- Education*

82 Companies
140 Attendees

In Partnership with Labor, Education, Regional Networks and Government

* Workshops and next steps in development
Key themes emerged across industries

- **Communication is critical:** The biggest challenge most companies have is communicating the opportunities that they have to youth in Washington, especially when in competition with a growing tech industry.

- **The majority of education and training programs are home-grown and single partnership:** Little leverage from existing programs or joint efforts achieved, and few avenues exist today to share information or sign up for joint programs. In addition, students experience application fatigue. Industry associations, CoEs, and others have the potential to play role of program intermediaries.

- **Career Launch requires a mindset shift for many industries:** Highly educated workforces have “bachelor-or-bust” mentalities, may require training to work with people from diverse backgrounds.

- **Positive ROI is essential:** Calculations vary by industry, but a big benefit for many is reducing relocation expenses and filling open positions (ex: AGC Biologics calculations).

- **Entry-level employees often lack ‘work-ready’ soft skills:** Employees grounded in theory from school, but often have issues with attention to detail and following instructions without oversight.

- **Career Launch should develop both technical skills and soft skills:** Opportunity to educate and mentor youth beyond technical skills by teaching soft skills such as professionalism, how to work with others, and provide guidance on career progression.
Employers across industries have similar asks for support from the system

Help connecting to regional resources and partnership

Career Connect Washington is committed to supporting the development of Regional Networks that can convene employers, philanthropists, educators, labor leaders, and government officials to advance workforce development priorities through Career-Connected Learning

Help funding curriculum development

Career Connect Washington’s program development funding will be used to support employers and program intermediaries in the development of curriculum and program design for Career Launch initiatives

Help advertising and promoting career pathways in their industries

Career Connect Washington’s communications efforts will help industries to highlight the exciting careers available in their sectors
Utilities workshop example: Industry-identified opportunities to scale

Opportunity to share and collaborate across types of Career-Connected Learning

- Grant PUD registered apprenticeships
- Seattle City Light registered apprenticeships
- Avista Energy Pathways
- Seattle City Light HS and College internships
- Wagstaff high school internships (manufacturing 4-week pathways program in development)
- Grant PUD classroom curriculum and job shadowing
- Snohomish PUD virtual field trips
- Seattle City Light elementary school environmental programs
- Wagstaff scholarships
- Wagstaff Life Skills curriculum
There’s a lot happening in our state across targeted industries, and a huge opportunity to capture best practices and improve coordination to enable scale.

<table>
<thead>
<tr>
<th>WORKSHOP PARTICIPANT EXAMPLES ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthcare</strong></td>
</tr>
<tr>
<td>Career Launch</td>
</tr>
<tr>
<td>Healthcare Consortium / SEIU training fund reg. apprenticeships*</td>
</tr>
<tr>
<td>Career Prep</td>
</tr>
<tr>
<td>HOSA CTC Programs</td>
</tr>
<tr>
<td>Career Awareness and Exploration</td>
</tr>
<tr>
<td>Heath Science CTE</td>
</tr>
<tr>
<td>EWU Health Science Career Day</td>
</tr>
</tbody>
</table>

Note: *Programs in development; Illustrative; Programs from workshop attendees only
Workshop participants are eager to work together to build off of existing programs at each type of the staircase to reach more students.

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>INNOVATIVE PROGRAMS TO SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>WACMAC Medical Registered Assistant Apprenticeship (Career Launch)</td>
</tr>
<tr>
<td>IT</td>
<td>Apprenti (Career Launch)</td>
</tr>
<tr>
<td>Advanced Manufacturing</td>
<td>SEH IWL Internship (Career Preparation)</td>
</tr>
<tr>
<td>Utilities</td>
<td>Energy Pathways (Avista) (Career Preparation)</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>In decision making; ideas at all three types</td>
</tr>
<tr>
<td>Construction</td>
<td>Pre-Apprenticeship Afterschool Programs (modeled after Heavy Highway program) (Career Preparation)</td>
</tr>
<tr>
<td>Maritime</td>
<td>Workshop Upcoming</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4H and FFA (Career Awareness and Exploration)</td>
</tr>
<tr>
<td>Aerospace</td>
<td>CorePlus Marketing (Career Preparation)</td>
</tr>
<tr>
<td>Education</td>
<td>Details forthcoming</td>
</tr>
</tbody>
</table>
Where gaps were identified, workshop participants committed to working together to develop programs to address common needs and to design for scale.

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>INNOVATIVE PROGRAMS TO SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>Healthcare Consortium/SEIU training fund reg. apprenticeships</td>
</tr>
<tr>
<td>IT</td>
<td>Tech Academy (P-TECH or similar)</td>
</tr>
<tr>
<td>Advanced Manufacturing</td>
<td>SEH Advanced Manufacturing Career Launch</td>
</tr>
<tr>
<td>Utilities</td>
<td>Regional partnership for recruiting and training apprentices</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>AGC Biologics Career Launch</td>
</tr>
<tr>
<td>Construction</td>
<td>Career Awareness and Exploration Campaign; CorePlus Construction</td>
</tr>
<tr>
<td>Maritime</td>
<td>Workshop Upcoming</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Joint communications and pipeline development effort</td>
</tr>
<tr>
<td>Aerospace</td>
<td>Aircraft Maintenance Technician Career Launch program</td>
</tr>
<tr>
<td>Education</td>
<td>Details forthcoming</td>
</tr>
</tbody>
</table>
Healthcare
IT
Advanced Manufacturing
Utilities
Life Sciences
Aerospace
Construction
Agriculture
[Placeholder] Maritime
Healthcare: Key takeaways from workshop

• **Substantial interest exists** in this group of employers, labor partners, intermediaries, and other stakeholders—collaboration among all is critical

• Desire to **build on existing solutions and resources**, not start from scratch and to **move quickly**

• Important to **think about potential career paths**—not just jobs—when designing career connected learning opportunities (e.g., opportunities for Medical Assistants to gain qualifications to become an RN)

• Important that career connected learning experiences **develop both clinical skills and soft skills**

• **Mentors are key** to any successful training program – and it will take resources to develop strong mentors

• Clear need to **develop talent pipelines early**, beginning with career awareness and exploration

• We should engage both with **K-12 and young adults beyond high school**

• **Regional networks are a good avenue and convener** for multi-actor groups addressing these issues, as are industry associations such as WACMHC and WSHA
**IT: Key takeaways from workshop**

- This work is **exciting, necessary, and very challenging**

- Scaling Career Launch will require **greater investment in developing people**, rather than expecting skilled talent upon hire

- Evaluating **ROI on a long-term horizon is a challenge** for IT/Tech employers, given speed and rapid evolution of the sector

- Clear need to **mitigate risk for employers** – hard for employers (especially small companies) to absorb a 3-year investment, desire for clear milestones to monitor against, etc.

- Strong desire for a **well-defined playbook** to lower the barriers to adoption of a Career Launch experience – including competencies, structure, funding, and roles

- **Interest in an intermediary** to own playbook, standards, and operationalization of experiences – at least in the near-term

- Feeling that there is a chicken-and-egg problem – it feels **difficult to take the first steps without proof or success stories**, but need employers to invest and create proof points to start the flywheel
Advanced Manufacturing: Pain points and existing programs

Challenges faced by employers

• Youth are **unaware of attractive career opportunities** in manufacturing

• Attracting youth requires **investment and buy-in from parents, educators, and counselors**

• **Societal emphasis** on jobs that require a 4-year degree and **stigma** around those that do not

• Regulation **limits options for bringing youth under 18** to into job sites and work environments

• **Gaps in foundational STEM skills** and ‘work-ready’ **soft skills/professionalism** for new employees

• Challenges with **setting realistic expectations** for entry-level talent (i.e., skilled work/seniority is earned over time)

• **High turnover / difficulty retaining talent**

• Lots of groups doing different things makes it difficult to navigate – **interest in a ‘one-stop-shop’**

Actions taken to overcome challenges

• **Engaging with K-12 teachers and counsellors** (e.g. individual networking, teacher externships)

• “**Flipped internships**” where an employer comes to a high school to help students with basic skills development

• **Student worksite tours** to create awareness and interest

• **Internships that include mentorship** allow students to explore and fully understand their options

• **Partnerships with CTCs** to customize curriculum/training

• **Pre-apprenticeships** are a strong pipeline - would be great to have a one-stop-shop for them

• Many offer **tuition reimbursement** to their employees

• Variety of **CTE and related high school offerings** (e.g., CorePlus, skills centers, capstone projects)

• Variety of **training programs** (e.g., Vigor has a 6-month training program at Harbor Island Training Center)
### Highlights

- **Generated excitement and interest from students:** 50% exploring apprenticeship craft, 30% interested in engineering, and 15% interested in technician roles
- **Exposure across industry and job roles** (including office support functions)
- **Choice-based** for students to pick jobs that interest them
- **Inclusion of CTE credit** to allow for contribution to 24-credit diploma requirements
- **Excitement and engagement** of Avista employees to participate
- **Full company engagement:** Collaboration between union and non-union employees to teach students
- **Included employee training** on how to work with youth

### Key learnings

- **Program could be transferred to other employers—curriculum has been built and was shared**
- **Avista’s relationship with educators, which was built through their participation in regional networks, allowed them to build program in a very short time frame**
- **Earlier exposure for students at the high school level resulted in great interest and engagement**
- **Program was able to leverage existing programs and training facilities**
Utilities workshop example: Industry-identified opportunities to scale

Opportunity to share and collaborate across types of Career-Connected Learning

Career Launch
- Grant PUD registered apprenticeships
- Seattle City Light registered apprenticeships

Career Preparation
- Avista Energy Pathways
- Seattle City Light HS and College internships
- Wagstaff high school internships (manufacturing 4-week pathways program in development)

Career Awareness and Exploration
- Grant PUD classroom curriculum and job shadowing
- Snohomish PUD virtual field trips
- Seattle City Light elementary school environmental programs

Enablers and Support
- Wagstaff scholarships
- Wagstaff Life Skills curriculum

Life-long learning and work
Utilities: Proposed areas for collaboration

• **Collect and document** other existing CCL Utility Sector programs across the state that we missed today

• Convene through appropriate industry association or by region to **expand existing career connected programs for each type of program:**
  
  - **Career Awareness and Exploration:** share virtual fieldtrips across school districts through regional networks; develop common curriculum for environmental awareness and CTE courses; share existing and co-develop new marketing material to attract students into internship opportunities (ex: SCL internship video)

  - **Career Preparation:** Establish protocol / best practices for partnering with high schools and providing CTE credits; share BEAM curriculum across regions; develop industry-wide high school and college internship curriculum (using or leveraging Energy Pathways for hard and soft-skill development)

  - **Career Launch:** Work to increase registered apprenticeships and other career launch programs

• **Engage CEWD as an industry association partner**
Life Sciences workshop example: Industry-identified opportunities to scale

Life-long learning and work

Career Launch
- AGC program in development
- Seattle Genetics Fellowship
- PNRI Work Study
- Shoreline programs
- CellNetix certification programs
- High School Internships
  - UW Medical School, Novo Nordisk, Fred Hutch, Adaptive, Just
- College internships
  - Seattle Genetics, AGC, Fred Hutch, Just
  - PLTW capstone projects
- Edmonds District CTE programs
- Shoreline Project Biotech summer camp
- Juno awareness building with Shoreline
- Novo Nordisk partnership with UW
- Project Lead the Way K12 curriculum

Industry enablers & supports:
- Tuition reimbursement programs

Opportunity to share and collaborate across types of Career-Connected Learning

Additional examples detailed in appendix
Life Sciences: The workshop identified common needs across employers

<table>
<thead>
<tr>
<th>ROLES</th>
<th>CANDIDATE ATTRIBUTES</th>
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</thead>
<tbody>
<tr>
<td>• Project Managers</td>
<td>• Attention to detail</td>
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<tr>
<td>• QA/QC associates</td>
<td>• Applied experience</td>
</tr>
<tr>
<td>• Bioinformatics / data scientists</td>
<td>• Soft-skills such as professionalism,</td>
</tr>
<tr>
<td>• Lab technicians</td>
<td>reliability, and hard work</td>
</tr>
<tr>
<td>• Regulatory Affairs Associates</td>
<td>• Desire to build a career in the field</td>
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<td>• Manufacturing technicians</td>
<td>of candidacy</td>
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<td>• Warehouse technicians</td>
<td>• Diversity</td>
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<td>• Ties to the state</td>
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Life Sciences: Proposed next steps

Next Steps

• Circulate information about existing programs and build inventory of opportunities for students
• Reconvene to discuss how to take an industry-wide approach to career-connected learning and build a roadmap to fill jobs from local talent
  - Step 1: Identify collective Career Awareness/Exploration activity
  - Step 2: Identify Career Prep model that can be expanded and applied across companies
  - Step 3: Build and pilot Career Launch model

Opportunities Identified

• Host biotech teacher meetings at companies on a rotating basis
• Contribute to bus fees for Life Science tours to expose students to facilities
Aerospace workshop example: Industry-identified opportunities to scale

Opportunity to share and collaborate across types of Career-Connected Learning

- **Career Launch**
  - AJAC

- **Career Preparation**
  - CorePlus CTE Curriculum
    - AeroTech Women in Aerospace programming
    - MTorres Lego League
    - Museum of Flight education programming

- **Career Awareness and Exploration**
  - Hosting teachers on externships (i.e. Machinist Inc.)

Life-long learning and work
Aerospace: Workshop wrap-up

Key actions identified:

- Ensure Career Connect WA efforts are aligned to existing industry activities including CORE plus curriculum development and marketing efforts to increase awareness and exploration of aerospace careers
- Enhance career launch programs to ensure that graduating students have the skills needed to fill the roles the industry needs

Next steps:

- **Alignment:** identify point-person for legislative requests and solicit input from working group, develop umbrella organization to streamline efforts, eliminate redundancy, increase best practices, and work with stakeholders to strategize, communicate and implement
- **Messaging:** Include aerospace messaging in CCW communication efforts in support of and in line with CorePlus marketing strategy
- **Student engagement:** Capture information on existing programs and harness the opportunities for replicating best concepts
- **Career Launch:** Conduct ongoing meetings to hear directly from industry about current needs, as well as what’s working/not working from our efforts. Explore piloting aircraft maintenance technicians Career Launch program.
Construction workshop example: Industry-identified opportunities to scale

Opportunity to share and collaborate across types of Career-Connected Learning to “hit every student”

Career Launch

- Registered apprenticeships
- Youth and adult registered apprenticeship in development through MacDonald-Miller

Career Preparation

- Pre-apprenticeship programs with Lakeside Industries, NW AGC, and PNW Iron Workers
- CTE programs in K12

Career Awareness and Exploration

- ACE Mentorship program for 4-year and trades (in pilot phase)
- Hands-on trade shows and field trips
- Speaking events at K12 schools

Enablers and Support

- COE navigation website
- Teacher externships at IMCO, Lakeside Industries
Construction: Key pain points identified

- **Attracting Youth:** Combating stigma of “second-choice career”; generating *awareness* of career paths and benefits in construction and providing clarity into the different roles and responsibilities of each job type; enabling *easy navigation* of opportunities to learn, intern, and enroll in pre-apprenticeship and registered apprenticeship programs

- **Filling immediate and eminent job openings:** Job openings across the board (particularly for carpenters, iron workers, operators, and laborers). Estimated 30K annual openings for roles requiring formal education in Washington over the next 5 years, with 6K a year from industry growth and rest from competition and retirements from aging workforce (avg. age of 58 in industry)

- **Professional readiness and soft skills:** Recruiting individuals with strong work-ethic and are on-time, follow instructions, and are consistent

- **Coordination to scale existing programs:** Activity across each component of career-connected learning, but limited scale and coordination between employers
Construction: Proposed next steps

• Reconvene to discuss what it will take to set up the industry for success and “hit every school” with career-connected learning opportunities in construction
  - Identify programs for each type of CCL to scale and necessary supporting infrastructure
  - Additional focus on opportunities that can reach youth and instill work ethic and offer mentorship for development of professional skills

• Share and disseminate existing tools and program curriculum such as the COE’s navigation tool and Lakeside Industries curriculum; identify additional programs across state and disseminate best practices

• Develop key messages for marketing campaign
Construction: Proposed Youth/Adult Registered Apprenticeship pathways from MacDonald-Miller
Agriculture workshop example: Industry-identified opportunities to scale

Is there a Career-Launch program that could be developed for a high-demand position that includes multiple host organizations?

- YV-Tech programs in automation and drones
- Internships at Super Apple, Mt. Adams Orchards, Tree Top
- Field Trips (Matson Fruit, Super Apple)
- Speaking events at Perry Tech, YV-Tech
- Career Fairs at universities
- Scholarships (Super Apple)
- On-site GED programs (Super Apple)

Opportunity to share and collaborate across types of Career-Connected Learning to “hit every student”
# Agriculture: Key pain points identified

## IMAGE / STIGMA
- Association of entire industry with few jobs
- Limited awareness of job opportunities and associated skills in field; little visibility into career progression / career paths
- View as “jobs” rather than “careers”
- Community and parents often frame success as “escaping agriculture”

## PROFESSIONAL SKILLS
- Challenging to get people to arrive on-time and on-schedule
- Hard transitions to upskill in order to keep up with technological advancements (ex: Forklift)

## TECHNICAL ROLES
- Open positions in:
  - food safety quality and sanitation
  - refrigeration technicians
  - computer operators
  - line supervisors
  - robot maintenance technician
  - stampers/sizers
  - fabricators
Agriculture: Proposed next steps

- Leverage work from YDC foundation to develop career pathways for key positions and the skills necessary
  - Identify individuals who have progressed through these pathways and document story for communications efforts

- Identify support necessary to enable progression along career pathways (i.e. specialized certifications or education programs, GED classes, math skills training, transportation/childcare, etc.)

- Work with regional partners to map existing support programs and highlight gaps

- Design a collaborative approach to attracting and training talent for the hard-to-fill technical jobs (a la clearing house of opportunities)
  - Unified programming for career awareness and exploration, career prep programs, and career launch
    ▶ Ex: Common application and “first round” interviews
  - Is there a Career Launch program for a hard-to-fill role that employers could collaborate on?

- Articulate support needed from CCW and state system
Agriculture: Potential Solutions

- Clearing house of opportunities
- Develop food safety and sanitation program at YV-Tech / integrate curriculum in high schools
- Field trips to WSDOA labs, showcasing sales and other interesting roles/ career paths in agriculture
- Apply lean manufacturing concepts to warehouse and train employees in new way of working
- Develop career pathways and identify necessary skills (leveraging YDC foundation)
- Increase field trip funding
- Host teacher externships to show potential careers for students and begin to combat stigma
- Utilize 4H and FFA networks
- Engage parents through PSA to combat stigma and highlight opportunities and benefits of careers in agriculture
- Do more to recognize value of agriculture employees in community (affirm career choices, recognize importance of work and various roles and individual contributions)
- Develop a communications campaign to highlight cool careers, the role of technology and science, individuals that have progressed through the industry from entry-level positions, and benefits from careers in ag.
- Enhance messaging at existing venues such as the state fair