

# THE WILLIAM D. RUCKELSHAUS CENTER

UNIVERSITY OF WASHINGTON

## Pathways to Higher Education Credentials and Funding for Apprenticeships Year One Integrated Summary Report



Prepared for the Washington State Legislature  
by the **William D. Ruckelshaus Center** with input from  
Education Northwest



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**DISCLAIMER**

*The following report was prepared by the William D. Ruckelshaus Center, a joint effort of the University of Washington and Washington State University whose mission is to act as an impartial resource for collaborative problem solving in the State of Washington and the Pacific Northwest. University leadership and the Center's Advisory Board support the preparation of this, and other reports produced under the Center's auspices. However, the key themes contained in this report are intended to reflect the opinions of the interviewed parties. Those themes and findings do not represent the views of the universities or Advisory Board members, nor do they represent the views of Project Team members.*

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## I. Introduction

Senate Bill (SB) 5764 (2022) directs the Washington Student Achievement Council (WSAC) to contract with the William D. Ruckelshaus Center (the Center) to carry out research, evaluation, consultation with interested parties (a collaborative process), and reporting to develop opportunities for apprentices to receive credit toward higher education degrees, as well as to make recommendations to the legislature on a sustainable funding model for apprenticeship. The legislation outlines a five-year process, beginning in 2022 and ending in 2027.

This report fulfills one of the Center's Year 1 deliverables in a five-year process. It provides an integrated summary of two reports: a situation assessment<sup>1</sup> by the Center to inform the upcoming collaborative process among the organizations identified in SB 5764, and a research report the Center contracted with the nonprofit applied research organization Education Northwest (EDNW) to produce. The situation assessment is designed to understand and document the perspectives of key parties, identify important issues and areas of agreement and disagreement, and make recommendations for a successful collaborative process. The research report surveys the scholarly literature, Washington State data, and information about other state apprenticeship systems. The reports can be found in appendices A and B.

The Center has structured this integrated summary to respond directly to the specific tasks outlined in the bill, using information from both reports. Together, the combined reports highlight both national and local trends, themes, and "hot topics" in apprenticeship to inform the upcoming collaborative process among interested parties while documenting recent conversations and innovations to expand opportunities for apprentices in Washington State.

This report does not provide recommendations. Instead, the Center will convene participants in a collaborative process to develop recommendations for the legislature in response to SB 5764. Upcoming reports will provide additional information, updates on the evolving situation, and recommendations developed through the collaborative process.

## II. Preliminary findings on SB 5764 tasks<sup>2</sup>

### A. Evaluate paths to credentials for apprentices

EDNW found in its research that apprentices can pursue many kinds of credentials. These include educational diplomas and certificates, registered apprenticeship certificates, occupational licenses, industry-recognized certificates, associate degrees, and bachelor's degrees. Credentials can have several characteristics that strengthen their value to individuals: industry recognized, stackable, portable, and accredited by a regional or national accrediting organization.

Apprentices can also earn interim credentials, occupational licenses, and personnel certifications issued by nongovernmental organizations, but these do not usually translate into higher education credits.

Colleges can offer for-credit courses for some or all the instruction, as well as for on-the-job training, aimed at earning a credential, in the following ways:

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<sup>1</sup> A Situation Assessment is a series of confidential interviews with representatives of key parties to elicit important issues and opportunities to address them, while gathering perspectives from stakeholders to help inform the design of a potential collaborative process.

<sup>2</sup> Each lettered header in this section is a specific task from SB 5764.

1. Award credit for the on-the-job apprenticeship training. This can involve a credit evaluation of a completed apprenticeship program, conducted by an organization such as the American Council on Education (ACE).
2. Use prior learning experiences to award credit for competencies (see below for more information about methods for recognizing prior learning). This is called *credit by certification*, such as through earning industry certification or licenses.
3. Create a degree pathway with for-credit courses leading to an associate or bachelor's degree. This degree apprenticeship would result in both an academic degree and certificate of completion for the apprenticeship. Institutions can recognize on-the-job learning and prior learning as part of that degree pathway, ultimately creating a competency-based degree program.

Tesfai (2019) provides a useful schematic for classifying the ways community colleges support pathways to degrees through apprenticeships (figure 1).

**Figure 1. Pathways to credentials for apprentices**



Source: Adapted from Tesfai, L. (2019). *Creating Pathways to College Degrees through Apprenticeships*. Education Policy. In New America. <https://eric.ed.gov/?id=ED599746>.

Washington community and technical colleges (CTCs) provide a range of college-connected apprenticeships. Degree apprenticeships are less common; however, several examples exist, most notably the Multi-Occupational Trades (MOT) degrees offered by CTCs (figure 2). Also, so-called “upside-down” degrees at several four-year public institutions in Washington offer two years of credit toward a four-year degree to applicants who complete a state-registered apprenticeship and receive an eligible associate degree from a state CTC.

While 78 percent of state-registered apprentices were concurrently enrolled in a community college in Washington State, only around three percent of apprentices complete a postsecondary certificate, and about one percent complete an associate degree.

According to respondents the Center interviewed for its situation assessment, Washington State’s 34 CTCs each have their own policies for articulating credits for prior learning, thus no “one size fits all” policy exists yet that could work across the entire state. (This report uses “interviewees” and “respondents” interchangeably to refer to people who participated in the assessment.) The state’s apprenticeship system is likewise diverse and decentralized, with nearly 220 programs across industries and sectors that have different requirements for completion. Apprenticeship completion depends on years and hours served, while the higher education system is based on credits and quarters or semesters

completed, interviewees reported.

The state's higher education and apprenticeship systems intersect primarily around the provision of related supplemental instruction (RSI) for apprentices at CTCs. Each CTC negotiates contracts with apprenticeship sponsors to provide some combination of credit, space for instruction, and/or RSI. Many interviewees expressed dissatisfaction with the current arrangement, primarily related to funding. Some CTCs have agreements with specific apprenticeship programs to create degree pathways, most notably the MOT degree.

Several respondents said K-12 educators think of, and present, apprenticeship and higher education as separate systems, although that is not always the case. Interviewees noted that while relatively few counselors and educators talk about apprenticeships, those who do may not know, or do not highlight, the fact that apprenticeship can lead to both 2-year and 4-year degrees.

Among interviewees involved in academia and those in apprenticeship, a range of perspectives emerged about how and even whether credit should be given for apprenticeship RSI. In addition, the sheer numbers of apprenticeship programs and institutions of higher education can make credit articulation complicated, with each program and institution doing things differently.

Most RSI in Washington State is delivered outside of the CTC system by instructors hired by the apprenticeship training provider, according to respondents. They noted that because colleges do not provide the faculty in these cases, they find it hard to ensure sufficient standards for the things they must manage, such as academic rigor and course content. In addition, some interviewees said that institutional accreditation standards and federal requirements for student aid create barriers to making credits more transferable.

***Exploration of other credentials that will support transfer to baccalaureate degrees or other advanced credentials for apprentices***

The Center will provide additional reporting in Year 2 and beyond.

***Figure 2.***

Multi-Occupational Trade (MOT) degree: Allows journeyed, state-registered apprentices that complete up to a certain number of hours of OJT, as well as hours of related supplemental instruction, to obtain an associate degree by completing a certain number of extra general education credits.

Types of MOT degrees include:

- Associate of Applied Science (AAS): A two-year degree for students who want to start a career immediately after graduation. Does not transfer to a university.
- Associate of Applied Science-Transfer (AAS-T): A two-year, job-training degree to prepare students for immediate employment.

These MOT degrees, as well as Associate of Technical Arts (ATA) and Associate of Applied Technology (AAT) technical degrees, transfer to applied baccalaureate degrees at CTCs, universities that have an agreement with the CTC issuing the MOT degree, or to those four-year institutions with "upside down" degree programs.

Upside-down degree: A four-year degree that grants two years of credit toward a bachelor's degree, which is awarded after the student's completion of two years of additional coursework. Applicants must have a technical associate degrees from a regionally accredited Washington community or technical college (an AAS, ATA, AAT, or AAS-T degree), complete English 101 with a GPA of 2.0 or higher, complete a minimum of 20 academic quarter hours of college-level credits with a GPA of 2.0 or higher in each course, and complete 32 credits or more of liberal arts coursework with a cumulative, college-level GPA of 2.5 or higher. This degree option is currently offered by Evergreen State College and Western Washington University. Eastern Washington University also has an upside-down degree for a Bachelor of Science in Applied Technology.

*Source: Interviewees and Evergreen State College and Western Washington University websites.*



***This evaluation may include options for instructional modality for apprentices and analysis of the opportunities and limitations for incorporating general education course requirements into degree pathways for apprentices***

Situation assessment interviewees said that in response to the Covid-19 pandemic, Washington's CTCs and four-year colleges quickly transitioned to online learning and many of them still have online, as well as blended online and in-person options. However, many of these options have been scaled back or eliminated as Covid has abated.

According to respondents, most CTC and four-year courses are taught in-person, during the day, and this presents a barrier for many apprentices interested in pursuing a concurrent degree. Most apprentices working full-time during the day find it difficult to attend daytime classes.

The Center did not gather data on which colleges are offering which instructional modes in Year 1. Additional data will be provided in Year 2.

The Center will report on opportunities and limitations for incorporating general education course requirements into degree pathways for apprentices in Year 2 and beyond.

***The evaluation may also include reviewing credit articulation within the college system, prior learning assessments, and competency-based models***

**Credit articulation within the college system**

Several assessment interviewees expressed interest in granting credit for apprentices for on-the-job training (OJT). Several respondents from higher education, on the other hand, felt that articulating OJT to academic credit would be difficult, if not impossible. However, several Washington higher education institutions currently grant credit toward degrees to journeyed apprentices (see Figure 2).

Most apprenticeship training is provided through an apprenticeship training agent, usually a journeyed instructor not affiliated with a CTC, and does not take place on a CTC campus, according to interviewees. Apprentices in these programs may not know of existing options for earning higher education credit. Several interviewees reported that apprentices may not know their RSI is earning them college credit. Similarly, some said, apprentices may not know that they are enrolled in a CTC and are eligible for the support services and benefits available to other CTC students. Multiple respondents emphasized that these support services and benefits could help apprentices if they knew about their availability.

Interviewees said having transferable college credit attached to apprenticeship coursework would give apprentices more options and pathways; by contrast, several interviewees felt strongly that terminal degrees, particularly terminal associate degrees, which do not transfer to four-year colleges, do not hold a great deal of value for either apprentices or employers. The overwhelming majority of apprentices do not pursue higher education degrees, according to many interviewees.

The Center may include additional information on credit articulation in the college system in future reports.

**Prior learning assessments**

EDNW research revealed several methods for valuing prior learning, including:

- *Standardized examination*, such as Advanced Placement, College Level Examination Program (CLEP), International Baccalaureate, or Defense Activity Test and Examination Services Subject Standardized Tests. The CLEP website claims that students can receive college credit at 2,900 colleges. At present, the courses that can be tested for are limited.
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- *Faculty-developed challenge exams*, which give students credit for a specific course by taking a comprehensive exam developed by campus faculty.
- *Portfolio-based and other individualized assessments*, which allow students to demonstrate their learning through a portfolio.
- *Evaluation of non-college programs*, allowing students to receive credit based on recommendations from the National College Credit Recommendation Service (NCCRS) and ACE. These organizations evaluate training offered by the military or employers. Alternatively, institutions can conduct their own review.

The Center may provide additional detail on prior learning assessments in future reports.

### **Competency-based models**

The regional higher education accreditation body, the Northwest Commission on Colleges and Universities (NWCCU), has a policy on Direct Assessment and Competency-Based Education that allows for provision of credit for experiential learning.<sup>3</sup>

According to one situation assessment interviewee, several post-graduate professional degree programs (medical school, veterinary medicine, and pharmacy) incorporate experiential, competency-based education as a component of instruction; however, this has not filtered down to the undergraduate level. Federal permission is required for competency-based education approaches, the interviewee continued. To get approval, the college or university must specify what comprises a clear and unambiguous demonstration of competence. There is a challenge in defining competence in some professions, according to the interviewee; any such definition needs to be both reasonable and defensible.

The Center may provide additional detail on competency-based models in future reports.

### **B. Examine national best practices in delivery and award of educational credentials to apprentices**

In its research, EDNW found that the integration of higher education and apprenticeship is a relatively new research topic in the U.S., so current research and best practices are limited. The literature suggests approaches and recommendations that focus on:

- collaboration between apprenticeship programs and educational institutions,
- clear definitions for student-apprentices,
- tracking of student-apprentices,
- creating clear career pathways, and
- ensuring equitable opportunities for participation.

For details, see the full Education Northwest research report in Appendix B.

***This exploration may include assessment of the governance structures and operational models for delivery of apprenticeship degree pathways, including operational considerations and costs associated with operational models***

The Center may provide additional information on other states' governance structures and operational models, including operational considerations and costs associated with operational models, in future reports.

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<sup>3</sup> See <https://nwccu.app.box.com/s/cjnwj3ms3c9hu7sv3iy007jkbov473dc>

### C. Apprentices' demand for degrees

#### ***For those in a state-registered apprenticeship program***

There is little research available on potential demand for degrees among U.S. apprentices. According to situation assessment interviewees, there is little demand for degrees among apprentices. Respondents cited several factors for this, including concern about taking on debt, lack of interest in formal education, bias against higher education in some apprenticeship programs, and limited marketing by apprenticeship programs of opportunities for credits or degrees that apprentices can pursue. Apprentices may also not want to take the time to pursue the additional classes they need to earn a degree when they already earn good wages.

The Center worked with EDNW to carry out a survey of apprentices. Insufficient data was collected in Year 1 to reach clear conclusions, but preliminary findings are in EDNW's full report in Appendix B.

#### ***For those who have completed a state-registered apprenticeship program***

The Center could find no data on demand for degrees for those who have completed a state-registered apprenticeship. In its research report, EDNW found that, since 2000, around 15 percent of apprentices have enrolled in a Washington CTC after completing their apprenticeship and, of those, about 13 percent completed a certificate or associate degree. Only around 1 percent of apprentices later enrolled in a Washington public university.

The Center will seek to gather additional data on demand for degrees for its Year 2 report.

### D. Review the current funding model for apprentices within the CTC system, with consideration of the use of state funds for apprenticeship, and national funding structures for apprenticeship programs that could be applied within Washington state

According to situation assessment respondents, funding for apprenticeship RSI in the CTC system is a divisive issue. People involved with CTCs and apprenticeship programs seem to lack knowledge about and understanding of each other's finances, resulting in mistrust. One interviewee described a lack of transparency about cost on both sides. Many interviewees cited two key issues tied to the mistrust: the removal of the full-time equivalence (FTE) allocation set-aside for apprenticeship by the legislature in 2012-2013 and the 50 percent tuition waiver for apprenticeship RSI.

#### ***WCG-A (Washington College Grant – Apprenticeship)***

Apprentices' utilization of the WCG-A (created in 2019) has been lower than anticipated, according to several assessment interviewees, primarily because of limited administrative capacity. To improve apprenticeship programs' access to WCG-A funds, WSAC contracted this year with the nonprofit Apprenticeship and Nontraditional Employment for Women (ANEW) to serve as a clearinghouse for the funds in the state for organizations not approved to manage them.

#### ***This funding model review may include institutional costs of developing, administering, delivering, hosting, instructing, and contracting RSI***

The Center may report on this as part of the collaborative process in future years.

The Center submits this report to provide a brief synopsis of its work in Year 1 on a broad, complex, evolving, and contentious set of topics. Please contact the Project Manager, Tye Ferrell ([tye.ferrell@wsu.edu](mailto:tye.ferrell@wsu.edu)), if you have questions or would like more information. Stay tuned for future reports as the work progresses.

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