# Adult Learner Advisory Committee Report



Oregon Higher Education Coordinating Commission
Oregon Workforce and Talent Development Board
Adult Learner Advisory Committee

Summer 2021

# Adult Learner Advisory Committee

#### **MEMBERS**

Terry Cross (Co-chair), Senior Advisor, National Indian Child Welfare Association

Shari Dunn (Co-chair), CEO/Principal, ITBOM LLC

Bridget Dazey, Executive Director, Clackamas Workforce Partnership

Stacey Derriq, Assistant Director, Adult Education, Southern Oregon University

Nancy Drummond, Director of Financial Aid, Warner Pacific University

David Fortney, Workforce Development Planner, Portland General Electric

Kristen Kulongoski, Manager, Adult Basic Skills and Career Pathways, Mt. Hood Community College

Briselda Molina, Academic and Career Advisor (former student), University of Oregon

Holly Nelsen, Executive Dean, Chemeketa Community College

Fred Pool, Director of Advanced Technologies Integration, Qorvo

Steve Simms, Director (retired), BOLI-Apprenticeship and Training Division

Ron Sutphin, President, United Bicycle Institute

## **EX-OFFICIO**

Cam Preus, Executive Director, Oregon Community College Association

Dana Richardson, Executive Director, Oregon Council of Presidents

Lori Silverman, Director of Marketing and Strategic Initiatives (former), Oregon Alliance of Independent Colleges and Universities

## **STAFF**

Patrick Crane/Donna Lewelling, Director, HECC Office of Community Colleges and Workforce Development

Karen Humelbaugh, Director, HECC Office of Workforce Investments

Juan Baez-Arevalo, Director, HECC Office of Student Access and Completion

Julia Steinberger, Systems Alignment Manager, HECC Office of Workforce Investments

Cat McGrew, CCWD Policy Analyst, HECC Office of Community Colleges and Workforce Development

Clay Martin, WTDB Initiatives Analyst, HECC Office of Workforce Investments

Bob Small, OSAC Senior Policy Advisor, HECC Office of Student Access and Completion

# Table of Contents

EXECUTIVE SUMMARY	
THE GOAL	
Тне Сомміттее	
REPORT STRUCTURE	
Adult learning Recommendations	
TRENDS THAT UNDERLIE THE TRAINING IMPERATIVE	3
ECONOMIC AND DEMOGRAPHIC TRENDS THAT DRIVE THE NEED FOR SKILLS	
THE PANDEMIC'S IMPACT ON THE ECONOMY AND WORKFORCE	
STATE OF ADULT LEARNING IN OREGON	5
CONDITIONS IN THE LATE 2010S	6
BARRIERS TO ENROLLMENT AND PERSISTENCE/RETENTION OF ADULT LEARNERS	
DEFINING THE OPPORTUNITY OF NON-DEGREE CREDENTIALS	14
WHAT ARE NON-DEGREE CREDENTIALS?	14
USING DATA TO ILLUSTRATE THE VARIATION IN NDC OUTCOMES	15
IDENTIFYING THE CHARACTERISTICS OF HIGH-VALUE NDCS	16
CREDIT FOR PRIOR LEARNING	18
CPL HISTORY AND NATIONAL PERSPECTIVES	19
Oregon's House Bill 4059	20
POLICIES, PROGRAMS, AND RECOMMENDATIONS TO SUPPORT ADULT LEARNERS	22
THE HECC'S EXPLORING EXPERIENCES RECOMMENDATIONS	22
NATIONAL SKILLS COALITION'S POLICIES TO SUPPORT QUALITY NDCS	22
CLASP/WICHE RECOMMENDATIONS ON PRIOR LEARNING ASSESSMENT (PLA) POLICY	
LUMINA FOUNDATION'S STATE POLICY AGENDA	
SUPPORTING TRANSFER STUDENT SUCCESS IN OREGON	
Task Force on Student Success for Underrepresented Students in Higher Education (HB 2590)	
EVIDENCE-BASED PROGRAMS THAT SUPPORT ACCESS & RETENTION	
CONCLUSIONS AND RECOMMENDATIONS	
The Productivity Challenge	
Adult Learning Recommendations as the Pandemic and Recession Relent	27

# **EXECUTIVE SUMMARY**

# THE GOAL

In November 2018, Oregon adopted a statewide Adult Attainment Goal to complement its 40-40-20 Education Goal. The new goal focuses on non-traditional aged students—aged 25 and over—without a postsecondary credential. Specifically, the goal calls for 300,000 additional adult Oregonians to earn a degree, certificate, or credential valued in the workforce, with the additional credentials to be earned between 2018-2030. And the goal calls on policymakers and educators to reduce attainment gaps among BIPOC, low-income, and rural Oregonians.

Establishment of the goal begged several implementation questions, including

- What is the current state of adult learning in Oregon?
- What are the key barriers facing degree and credential seekers, and how do those barriers differ for students of color or other underrepresented populations?
- Which degrees, certificates, or credentials are "valued in the workforce"? And what does "value" entail?
- How can programs connect adults to supports they need to reach attainment?

# THE COMMITTEE

In Summer 2019, the state convened an Adult Learner Advisory Committee (ALAC) to answer implementation questions and to:

- Develop strategies and disseminate best practices regarding how adults gain skills outside the traditional P-20 education pipeline
- Serve as an advisory group to connect and align multiple adult attainment efforts within the HECC
- Investigate and provide recommendations regarding the evolving definition of "credential of value"
- Evaluate the impact that Credit for Prior Learning standards may offer to benefit adult students
- Evaluate progress toward achievement of the Adult Attainment Goal

Members of the Higher Education Coordinating Commission (HECC) and the Workforce Talent and Development Board (WTDB) co-chaired the committee and were joined by representatives from business and industry, postsecondary education and training, labor, the HECC Equity Council, and others.

# REPORT STRUCTURE

The report has six sections. The first describes economic and demographic trends that underlie the need for additional training among adults, and the effects of the pandemic and recession on the economy and workforce. Next, we describe the state of adult learning in Oregon, including attainment

levels as of 2019 and barriers to enrollment, persistence, and retention faced by adult learners. The third section defines and describes non-degree credentials, a study of labor market outcomes for certificate holders, and a pilot project to define credentials of value. Fourth is a discussion of credit for prior learning (CPL), its history, and the state of CPL in Oregon. We then present recommendations and programs from a number of expert sources in this field, and finish with conclusions and recommendations specific to Oregon.

# ADULT LEARNING RECOMMENDATIONS

Drawing on the reports, evidence, and testimony provided since the Committee's initial convening, the ALAC 's recommendations for action include:

- Develop estimates of the cost of overcoming common barriers to educational attainment
- Seize the moment, early in an economic recovery, to accelerate progress in adult learning
- Develop outreach and enrollment plans for Oregonians with some college but no credential and who have low earnings
- Ensure adult learners fully leverage existing federal resources and tools
- Refine and implement the credentials-of-value identification and measurement infrastructure piloted by the HECC
- Engage employers and organize future credentials-of-value efforts by industries and regions
- Fund the CPL initiative
- Find opportunities to link funding to outcome payments

# TRENDS THAT UNDERLIE THE TRAINING IMPERATIVE

# ECONOMIC AND DEMOGRAPHIC TRENDS THAT DRIVE THE NEED FOR SKILLS

The nature of the argument for boosting skills has shifted some over the past 20 years. Seminal research in the *Race between Education and Technology* argued that skill development had fallen off the pace of technological progress and contributed to historically large college wage premia. Then, in 2013, Oxford engineers examined the susceptibility of occupations to automation and underscored the threat that computerization posed to routine work. Economists share some concerns about accelerating automation but do not anticipate the abrupt, jobless futures predicted by some technologists.

A recent focus on technological changes has overshadowed another trend that will shape the future of work: slow growth of the prime-age workforce (i.e., workers aged 25-54). Demographers have anticipated the aging of the U.S. population for decades, but the labor force and economic effects are becoming more apparent as Baby-boomers fully transition out of their prime working years.

One consequence is that even slow-growing occupations will have sizable numbers of job openings, in part because of exiting retirees. In Oregon, for example, economists predict automation will slow the growth of total jobs in production, office administration, and sales occupations, but hiring will continue: the three occupation groups compose only 17 percent of projected employment change during 2017-2027 but 32 percent of replacement job openings.

Nationally, the slow growth, or contraction, of the prime-age workforce in the face of projected employer demand for workers is a rising concern. Almost half of the U.S. population lives in a county where the prime-age workforce shrank during 2007-2017. Thanks in part to in-migration, the comparable number for Oregon is only 18 percent. And going forward, Oregon appears to be better positioned: demographers project Oregon's 25-54-year-old population will increase 21 percent during 2020-2040 compared to only 14 percent for the nation. Nine states anticipate no growth or declines.

Based on these national trends, an MIT Task Force believes policymakers should shift focus from job quantity (they see plenty of work to go around) to job quality. Oregon, with its growing prime-age population and projected job growth, should continue to address both.

# THE PANDEMIC'S IMPACT ON THE ECONOMY AND WORKFORCE

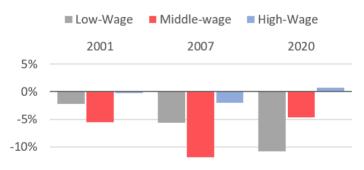
A global pandemic and recession are now overlaid on these long-established technological and demographic trends. The unprecedented March 2020 lockdown triggered abrupt job losses in sectors across the economy, extending from food services to non-emergency healthcare occupations. But as the economy reopened in June 2020, many industries figured out how to conduct business while socially distancing. The exception—because of circumstances outside of their control—was the leisure

<sup>&</sup>lt;sup>1</sup> The Weldon Cooper Center for Public Service (2018). Demographics Research Group, demographics.coopercenter.org

and hospitality industry, which includes restaurants, hotels, bars, theaters, and entertainment venues. The industry employs higher shares of women, people of color, young adults, and adults with no postsecondary experience. It also consists of many relatively low-wage occupations. Consequently, compared with the two most recent downturns, low-wage workers suffered the highest job losses on a percentage basis (see Exhibit 1).

Furthermore, the U.S. Bureau of Labor Statistics (BLS) sees more trouble ahead, with longer term impacts on low-wage service and sales work. In February 2021, BLS reassessed its 2019-2029 projections, developed prepandemic, to account for observed changes in customer and firm behavior during the pandemic. The economists considered "moderate" and "strong" employment impacts (see Exhibit 2). The strong scenario assumes permanent changes to consumer and firm behavior to mitigate the spread of COVID-19 and potentially subsequent

Exhibit 1. Job loss by recession in Oregon, change from prerecession peak to trough



-Source: Bureau of Labor Statistics and Oregon Office of Economic Analysis

viruses. The moderate scenario assumes telework would be the primary economic effect, which would alter commuting, activity in downtowns, and spending in food and drinking establishments.

Both moderate and strong scenarios assume the public will demand better prevention, containment, and treatment of infectious diseases, which will lead to more hiring in scientific and medical fields. Additionally, the agency anticipates that an increase in telework will boost demand for information technology support services and cybersecurity.

Job losses, relative to pre-pandemic projections, are expected in accommodation, food services, art, and entertainment industries—all of which were significantly affected during the recession. BLS economists project that some restaurants and hotels will continue to use technologies that limit unnecessary contact with customers (e.g., check-in kiosks, phone-based meal orders). Telework will reduce activity in downtowns and impact associated business-related dining and entertainment.

The pandemic accelerated a trend toward online shopping, which BLS expects will reduce employment in the retail trade sector. The persistence of telework will reduce foot traffic around brick-and-mortar stores and lead to further consolidation of smaller retailers. Finally, a reduction in office building will more than offset an increase in residential building—creating a negative impact for the construction sector.

The bottom line: the pandemic recession was unusually "regressive" in its impact—disproportionately affecting the lower-wage workers in the leisure, hospitality, and tourism sectors. BLS anticipates those

<sup>&</sup>lt;sup>2</sup> Bureau of Labor Statistics (2021). *Employment projections in a pandemic environment*. https://www.bls.gov/opub/mlr/2021/article/employment-projections-in-a-pandemic-environment.htm

impacts will outlast the recession and create additional challenges for job seekers who enter the labor market with no postsecondary educational experience.

Moderate impact Strong impact Accommodation and food services Arts, entertainment, and recreation Retail trade Construction Transportation and warehousing Management of companies and enterprises Real estate and rental and leasing Utilities Administrative and support and waste management and remediation services Agriculture, forestry, fishing, and hunting Finance and insurance Government Mining, quarrying, and oil and gas extraction Other services (except public administration) Wholesale trade Healthcare and social assistance Manufacturing Educational services; state, local, and private Information Professional, scientific, and technical services -2 -12 -10 -8 -6 -4 Percent Source: Bureau of Labor Statistics.

Exhibit 2. Projected employment effects, 2019-2029, with "moderate" and "strong" COVID-19 effects

# STATE OF ADULT LEARNING IN OREGON

Political and business leaders in Oregon and the U.S. generally agree that their adult populations need additional postsecondary training to prepare for a future of more sophisticated work. In Oregon, baseline conditions vary considerably across the state—with almost two-thirds of Benton County's 25–64-year-olds holding a postsecondary degree or credential while in Morrow County fewer than 1 in 5 do.

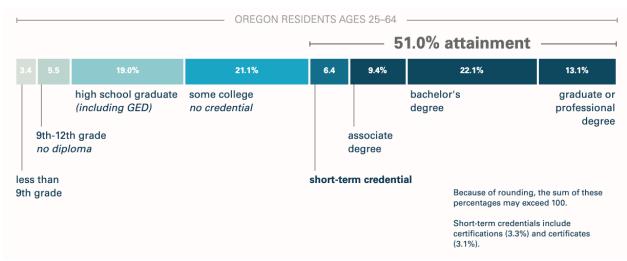
Numerous factors affect adult attainment rates, including the nature of the local economy and its demand for skills, the quality and affordability of higher education options, and community and cultural beliefs about the value and tradeoffs of pursuing additional training. The balance of this chapter discusses the condition of adult learning in Oregon circa 2019-2020, as well as opportunities and challenges to increasing adult attainment levels.

## **CONDITIONS IN THE LATE 2010S**

# ATTAINMENT FOR 25-64-YEAR-OLD OREGONIANS

The Lumina Foundation's *Stronger Nation* initiative provides the best interstate comparison of adult attainment levels in the U.S. Slightly more than half (51.0%) of Oregonians aged 25-64 hold a postsecondary degree or credential (see Exhibit 3), which is close to the national average (51.9%). Oregon has a higher share of adults with an associate degree or higher than the U.S. and a lower share that hold short-term credentials (certificates and certifications).

Exhibit 3. Educational attainment for Oregon residents aged 25-64

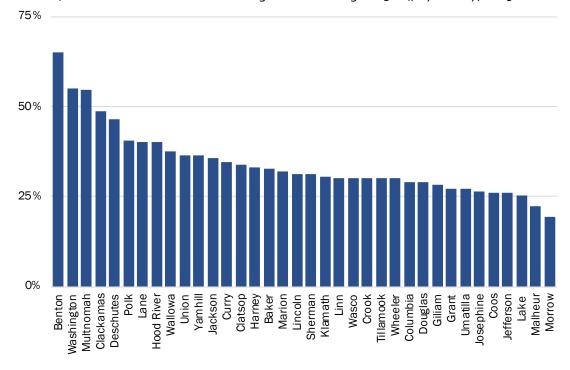


Source: Lumina Foundation Stronger Nation Report, Oregon.

Strong professional service, high-tech, and higher education industries drive the high adult attainment rates in Benton, Washington, and Multnomah counties (see Exhibit 4). A next tier, with adult attainment rates 40-50 percent, consists of five counties—Clackamas, Deschutes, Polk, Lane, and Hood River—that contain smaller metropolitan areas or are suburban. Twenty-eight (28) counties have adult attainment rates below 40 percent and generally have economies that are still tied to natural resources (e.g., wood products, agriculture) and food and beverage manufacturing.

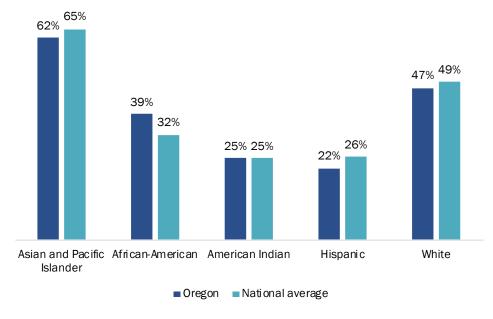
Interstate comparisons of attainment by race/ethnicity are available at degree level (associate+). On that metric, Asian/Pacific Islander, Hispanic, and White Oregonians have lower attainment rates than their U.S. racial ethnic peers (see Exhibit 5). Black Oregonians show higher attainment rates than other Black Americans. Attainment rates for Native American Oregonians are identical to their racial peers across the U.S.

Exhibit 4. Educational attainment for Oregon residents aged 25-64, by county, 2019



Data source: Lumina Foundation Stronger Nation Report, Oregon.

Exhibit 5. Educational attainment for Oregon residents aged 25-64 against national average, by race, 2019



Source: Lumina Foundation Stronger Nation Report, Oregon.

## OREGON'S ADULT LEARNERS WITH SOME COLLEGE, NO CREDENTIAL

National strategies to increase the share of adults with postsecondary credentials have focused on a variety of populations—a common one is adults who have some college credit but who have not earned a degree or credential. The motivation behind the strategy is straightforward: many adults carry some college credit and are closer to completion than those who have never enrolled. Moreover, these adults incurred costs—in time and resources—to obtain their credits. Enrollment of this population opens an opportunity to boost the returns on these original educational investments.

The HECC Office of Research and Data analyzed a comprehensive dataset that integrates educational records from more than 200 postsecondary institutions in Oregon, including:

- 17 community colleges
- 7 public universities
- 38 private degree-granting institutions
- 154 private career schools

The records include information on enrollment, credit completion, and degree/credential completion, as well as demographic information about the students.

The January 2020 HECC analysis considered students who:

- Are not high school students earning college credit
- Were last enrolled in a public institution between 2006-07 and 2017-18 or were last enrolled in a private career school between 2015-16 and 2017-18
- Earned at least three credits if they were enrolled in a public institution
- Have not earned a degree, a career certificate, or a transfer certificate at an Oregon public institution since 2006-07
- Have not earned a career certificate at a private career school since 2015-16

Based on the above data and definitions, the HECC found:

- 400,000 adults in Oregon held some college credits but no degree or credential. Eighty-one percent (81%) of those adults attended only public institutions, and three-quarters attended only one institution. (More years of data were available for public institutions.)
- Among those who attended public institutions, almost two-thirds (62%) attended school for more than a year and about one-third attended for two years or more.
- Non-completers were less likely to receive a Pell Grant, possibly because they had not filed for aid.
- Many who did not earn a credential are from historically underrepresented groups, and two thirds were aged 25 or older.
- One quarter of the adults with some college/no credential earned less than \$20,000 during 2018-Quarter 4 to 2019-Quarter 3.

The HECC's January 2020 analysis was an important early step in identifying a population that might benefit from an early to mid-career investment in education.

# BARRIERS TO ENROLLMENT AND PERSISTENCE/RETENTION OF ADULT LEARNERS

Postsecondary attainment rates are well below 50 percent for Oregon's BIPOC adults and economically disadvantaged White learners. Meaningful progress toward the Adult Attainment Goal will require markedly higher rates of enrollment, persistence, and completion among underrepresented communities. Historically, policymakers and institutions have recognized that the cost of education—in terms of both time and tuition—is an important barrier. However, recent research commissioned by the HECC and outlined below shows that the challenges go well beyond tuition costs and foregone earnings during attendance.

# EXPLORING EXPERIENCES OF ADULT LEARNERS FROM COMMUNITIES OF COLOR STUDY<sup>3</sup>

In 2018, the HECC received funding of the Lumina Foundation to fully explore how BIPOC adult learners—aged 25-64—experience postsecondary education in Oregon. The HECC engaged faculty researchers at Portland State University (PSU) and Southern Oregon University (SOU) to conduct focus groups and interviews with adult learners of color across the state. PSU and SOU faculty researchers:

- Connected with 111 adult learners of color, with a focus on Black, Latinx/Hispanic, Indigenous/Native American, and Pacific Islander/Native Hawaiian learners. Seventy-two (72) participated in individual interviews, and thirty-nine (39) attended one of ten focus groups.
- Distinguished between three categories of students: 1) currently enrolled, 2) previously enrolled but did not complete, and 3) never enrolled. Across these categories, the faculty researchers sought to understand respondents' experiences during college, reasons for not enrolling or persisting, and perceptions about college from family and friends. Additionally, faculty researchers asked for recommendations on how to improve experiences for BIPOC

adult learners and increase the likelihood of completion.

 Conducted a literature review on underrepresented adult learners and barriers to access and retention.

The study and literature review concluded that adult learners of color in Oregon face four key types of barriers to enrollment and retention<sup>4</sup>, with examples from the literature provided as sub-bullets:



<sup>&</sup>lt;sup>3</sup> Hunte, R., Mehrotra, G., Mosier, M., Skuratowicz, E., Sanders, K., Cherry, K., & Gooding, A. (2020). *Exploring Experiences of Postsecondary Education for Adult Learners from Communities of Color in Oregon*.

<sup>&</sup>lt;sup>4</sup> The report uses the language of retention (rather than persistence) to "denote the role institutions must play in creating conditions that support access and retention for underrepresented adult learners from communities of color in Oregon." ("Persistence is typically the term used to refer to individual students' experiences and behaviors, while retention describes institutional-level measurements of student persistence or departure.")

- Economic: Managing the costs of school, meeting basic needs, and navigating employment
  - Perceptions of being "priced out" of college<sup>5</sup>
  - Ability to pay for college and belief that college is worth the cost<sup>6</sup>
- Social and cultural: Lost relationships and unhelpful messages before college from family and high school
  - Conflicts between demands of multiple roles: student, family, community, employment<sup>7</sup>
  - Situations more likely for (potential) first-generation students (e.g., more likely to be female, lower income, married, with dependents; more likely to need to live off campus, continue working, and enroll part-time)<sup>8</sup>
- **Institutional**: Insufficient mentorship and guidance, difficulty navigating campus and academic life, a lack of community, and a lack of supports for students with children
  - College application processes (e.g., entrance exams, meeting academic qualifications, applying, enrolling)<sup>9</sup>
- **Structural and identity-based**: Experiences of racism on campus, a lack of representation and reflection of BIPOC as peers and faculty/staff, challenges with immigration status, and historical/contextual oppression and exclusion
  - Experiences of systemic racism in K12 schools (e.g., exclusion from Advanced Placement and college preparatory coursework, receiving limited information about college, low teacher expectations)<sup>10</sup>
  - Negative racial climate (e.g., discrimination in the classroom, fewer academic opportunities, alienation and separation from communities of color and/or White students)<sup>11</sup>

<sup>&</sup>lt;sup>5</sup> McDonough, P.M. & Calderone, S. (2006). The meaning of money: Perceptual differences between college counselors and low-income families about college costs and financial aid. *American Behavioral Scientist*, 49(12), 1703-1718.

<sup>&</sup>lt;sup>6</sup> Baker, D.J., Arroyo, A.T., Braxton, J.M., Gasman, M., & Francis, C.H. (2018). Expanding the student persistence puzzle to minority serving institutions: The residential historically Black college and university context. *Journal of College Student Retention: Research, Theory, and Practice,* 1-23.

Byas, S., Imaralu, D., Stark, M., & West, J. (2019). *HECC Capstone Project: Barriers to equitable attainment of college credentials: Final Report.* 

Labissiere, Y. & Mukerjee, A. (nd). Working paper: An analysis of factors impacting student retention. University Studies, Portland State University.

Xu, Y.J. & Webber, K.L. (2016). College student retention on a racially diverse campus: A theoretically guided reality check. *Journal of College Student Retention: Research, theory, and practice, 20*(1), 2-28.

<sup>&</sup>lt;sup>7</sup> Braxton, J.M., Hirschy, A.S., & McClendon, S.A. (2004). *Understanding and reducing college student departure. ASHE Higher Education Report*, 30(3). Wiley Periodicals.

Jackson, S.A. & Labissiere, Y. (2017). *PSU President's African American, African, and Black Student Success Task Force Report.* Terriquez, V. (2014). Trapped in the working class? Prospects for intergenerational (im)mobility of Latino Youth. *Sociological Inquiry*, 84(3), 382-411.

<sup>&</sup>lt;sup>8</sup> Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B.K., & Hayek, J.C. (2007). *Piecing together the student success puzzle: Research, propositions, and recommendations. ASHE Higher Education Report, 32*(5). Wiley Periodicals.

<sup>&</sup>lt;sup>9</sup> Klasik, D. (2012). The college application gauntlet: A systematic analysis of the steps to four-year college enrollment. *Research in Higher Education*, *53*, 506-549.

<sup>&</sup>lt;sup>10</sup> Fleming, J. (2012). Enhancing minority student retention and academic performance. Jossey-Bass Publishers.

Gaxiola Serrano, T.J. (2017). "Wait, what do you mean by college?" A Critical Race analysis of Latina/o students and their pathways to community college. *Community College Journal of Research and Practice*. 41(4-5), 239-252.

<sup>&</sup>lt;sup>11</sup> Fleming, J. (2012). Enhancing minority student retention and academic performance. Jossey-Bass Publishers.

Interviewees who had overcome barriers could point to supports and interventions that had helped along the way including scholarships, veterans' benefits, employer-paid tuition, and Work Study (economic); campus access prior to enrollment, family and friend support, and work/school alignment (social and cultural); satellite campuses, accelerated programs, culturally specific recruitment, and relatable faculty (institutional).

The faculty researchers distilled their findings into four key lessons:

- Adult learners of color are juggling many commitments: most are managing school in addition to work, parenting, and other responsibilities and causes of stress within a challenging socio-political economic environment
- The cost of education (and fear of costs, loans, and debt) are a central barrier to adult learners enrolling and staying in schools
- Reflections and representation in college (and messages before) that affirm identities and create a sense of belonging are critical to the success of adult learners of color
- Students, families, and communities of color need accurate, culturally responsive information about higher education

# CHILD CARE ACCESS FOR STUDENT PARENTS IN OREGON12

Child care is a primary barrier to enrollment and retention for adult learners with children in Oregon. The Ford Family Foundation recently commissioned a study of child care access for student parents in Oregon, conducted by the Institute for Women's Policy Research. Key findings include:

- The care landscape for student parent families: Oregon's child care supply is inadequate to meet the needs of Oregon's student parent families. About 20 percent of the current undergraduate student body are parents or guardians of dependent children; more than one third of those are single mothers. Costs are rising and the state's child care assistance program (Employment Related Day Care or ERDC) is limited in its support of student parents.
- Child care access for student parents yields benefits for families and the economy: Access to stable, affordable, and high-quality child care can make a positive difference for postsecondary completion, which generates positive returns both for families and for Oregon's economy. Parents who earn a degree are much less likely to live in poverty than if they only hold a high school diploma. And returns on investing in child care support for Oregon's single-mother students for the duration of their college enrollment would be \$5.14 for every dollar invested.
- Campus child care in Oregon: 12 public and private non-profit, degree-granting institutions in Oregon have campus-based child care services as of 2019, a decline from a high of 16 in 2010 (see Exhibit 6). Community colleges have experienced the steepest decline. Head Start partners with some institutions; some receive grants from the Campus Child Care Access Means Parents in School (CCAMPIS) federal program. Wait lists for care have a median length of 30 children, and infant/toddler care is in high demand. Some rural areas do not have available care. While

Izumi, B. & Faaleava, T. (2017). The PSU Task Force on Asian-American, Asian, and Pacific Islander Student Success.

Jackson, S.A. & Labissiere, Y. (2017). PSU President's African American, African, and Black Student Success Task Force Report.

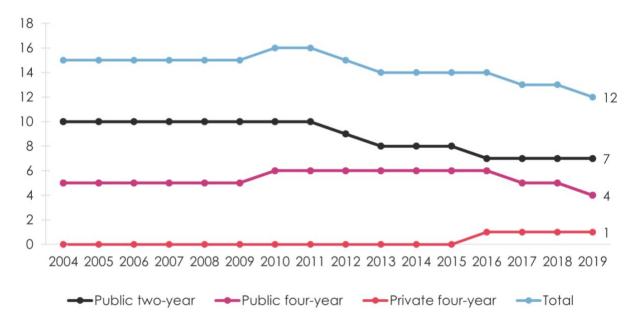
Xu, Y.J. & Webber, K.L. (2016). College student retention on a racially diverse campus: A theoretically guided reality check.

Journal of College Student Retention: Research, theory, and practice, 20(1), 2-28.

<sup>&</sup>lt;sup>12</sup> Contreras-Mendez, S., Cruse, L.R., & Holtzman, T. (2021). *Child Care Access for Student Parents in Oregon: Challenges and Opportunities for Improving Educational and Economic Success.* Institute for Women's Policy Research, Washington D.C.

there is widespread acknowledgement that the current supply of campus child care is not enough to meet students' needs, the funding needed to expand has not been available to this point.

Exhibit 6. Trend in the number of non-profit, degree-granting institutions in Oregon with on-campus child care centers, by institution type, 2004-2019



Source: Institute for Women's Policy Research analysis of data from the U.S. Department of Education, National Center for Education Statistics, 2004-19 Integrated Postsecondary Education Data System (IPEDS).

Note: No private, non-profit, associate degree-granting institutions reported providing campus child care in the time frame examined.

## The study included six recommendations:

- Expand state investments in key programs that have the potential to support student parent families' access to care, such as ERDC, the Support To Expectant Parents program, and the Oregon Student Child Care Grant.
- Remove work requirements for parents in education and training to receive assistance from ERDC and increase the share of ERDC funds that are used for contracts with campus- and community-based child care providers.
- Consider college students with children a high-need, priority population for services.
- Secure student incidental fee or student government funding and, to the extent possible, increase investment in campus child care centers and other ways to make child care more affordable for student parents.
- Consider alternative ways to help students secure care on campuses without campus child care centers, such as establishing referral systems to provide students with one-on-one assistance identifying open slots and applying for child care assistance.
- Collect and report data (at the institution level) on students with child care demands to
  understand their academic experiences and their child care needs, and to inform the design of
  support services that can help them succeed.

## OTHER NON-ACADEMIC BARRIERS: HOUSING, FOOD, AND TRANSPORTATION

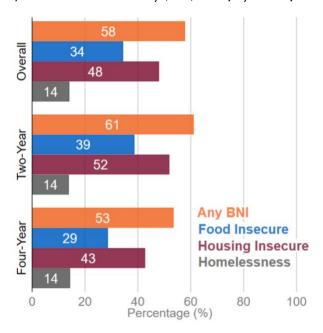
In addition to child care, many adult learners and potential learners experience unstable housing situations, food insecurity, and/or transportation challenges. Any one of these barriers can prevent a potential adult learner from accessing or enrolling in a program or from completing a program. For those enrolled, these barriers also have implications for academic performance and health outcomes.

The Wisconsin HOPE Lab's #RealCollege survey is "the nation's largest annual assessment of students' basic needs." While the survey isn't focused exclusively on adult learners, the findings provide information about what some adult learners are experiencing as they pursue postsecondary opportunities. Approximately 195,000 students enrolled in 130 two-year colleges and 72 four-year colleges and universities across the county participated in the 2020 survey, including three institutions in Oregon.

Over the years of its administration the #RealCollege survey has consistently found that more than half of students experience some form of basic needs insecurity. In fall 2020, 61 percent of two-year student respondents experienced some form of basic needs insecurity (39 percent food insecure, 52 percent housing insecure, 14 percent homeless) (see Exhibit 7). The Black/White gap in basic needs insecurity was 16 percentage points. More than half of students facing basic needs insecurity did not apply for supports because they did not know how.

The authors acknowledge public program eligibility is largely set at the federal level but suggest four opportunities for state policymakers to support students' basic needs:

Exhibit 7. Basic needs insecurity (BNI) rates, by sector, U.S.



Source: The Hope Center, #RealCollege 2021

- Maximize existing flexibility in public benefits programs
- Coordinate federal and state benefit programs
- Improve students' access to public benefits
- Introduce Hunger Free Campus legislation

Note: Food insecurity is based on the prior month; housing insecurity and homelessness on the prior year.

<sup>&</sup>lt;sup>13</sup> The Hope Center for College, Community, and Justice. (2021). #RealCollege 2021: Basic Needs Insecurity During the Ongoing Pandemic.

The National Postsecondary Student Aid Survey just added questions regarding food and housing insecurity but the data will not be available until 2022.

Transportation to campus / program sites is another barrier for many adult learners and potential learners. The challenges range from the costs of owning and maintaining a vehicle to the additional time required to use public transit, if the learner is in an area with public transit. The pandemic also raised many concerns about the safety of public transit, and many individuals are not yet comfortable riding public transit again.

# DEFINING THE OPPORTUNITY OF NON-DEGREE CREDENTIALS

The law of supply and demand implies that, as the share of adults with postsecondary credentials increases, the returns to education should fall below the high levels witnessed in the early 2000s. Consequently, learners and educators will need to pay even closer attention to the cost of programming and the effect on trainee earnings. That's true for all types of degrees and credentials.

The ALAC was charged with investigating the economic returns in one postsecondary product: non-degree credentials (NDCs). Working with WTDB staff and following guidance of the National Skills Coalition, the ALAC developed an analytic method to identify a subset of the credentials that have exhibited strong economic returns. Eventually, an analytic method and criteria could be applied to degrees as well as NDCs.

# WHAT ARE NON-DEGREE CREDENTIALS?

National efforts to increase the share of adults with postsecondary experience often focus on NDCs. They typically have shorter durations than associate or bachelor's degree and more often allow a balance between training and paid work. NDCs come in four key categories:<sup>14</sup>

- Certificates are credentials awarded by an educational institution and tied to a program of study, including coursework and exams.
- Apprenticeship certificates are earned through work-based learning and are tied to industry trades. Registered apprenticeship certificates are tied to national standards.
- Industry certifications are awarded by a certification body and are tied to the demonstration of knowledge, skills, and abilities to perform an occupation or exhibit a skill.
- Licenses are credentials that allow a holder to practice in a specified field.

The 2016 Adult Training and Education Survey (ATES) found that 27 percent of adults held an NDC—with 18 percent holding a license, 8 percent holding a certificate, and 6 percent holding a certification.<sup>15</sup>

- Postsecondary certificate holders earn 30 percent more in the labor market than individuals with a high school diploma alone.
- Strata-Gallup Education Consumer Survey reports a 50 percent wage premium for certificate or certification holders (\$45,000 versus \$30,000)

Adult Learner Advisory Committee Report

<sup>&</sup>lt;sup>14</sup> Duke-Benfield, A.E., Wilson, B., Kaleba, K., & Leventoff, J. (2019). *Expanding Opportunities: Defining quality non-degree credentials for states*. National Skills Coalition. 6.

<sup>15</sup> Ibid, 3.

 Graduates of apprenticeship programs earn more than \$300,000 in additional lifetime wages and benefits relative to non-participants.

However, while NDCs add value on average, not all NDCs offer strong returns on investment. Consequently, Oregon and other states are focused on developing quality assurance processes to identify and support programming that produces the best learner outcomes.



# USING DATA TO ILLUSTRATE THE VARIATION IN NDC OUTCOMES

Georgetown University's Center on Education and the Workforce (CEW) used longitudinal, learner-level records to explore earnings outcomes associated with one kind of NDC: certificates awarded by Oregon's community colleges.<sup>16</sup>

Using completion data from the HECC, enrollment and demographic data from the Oregon community college system, matched quarterly unemployment insurance wage records (including number of hours worked) from the Oregon Employment Department, and data from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), CEW looked at individual certificate holders' earnings four years before first enrollment compared with earnings four years after last certificate completion.

The community college and IPEDS data covered the 2006-07 to 2014-15 academic years and the wage record data covered 2001 to 2015. Only workers covered by the unemployment insurance program are included in the labor market analysis, and "certificate holders" are workers who received a certificate from an Oregon community college but did not earn an associate or other degree during the study's time frame.

# CEW's key findings include:

- Certificate completion at a community college, on average, was associated with a 19 percent increase in earnings (see Exhibit 8).
- Certificate holders aged 29 or younger increased their earnings significantly—up to a doubling—upon entering the labor force.
- Older certificate holders experienced sharp earnings declines followed by a gradual recovery to previous levels of earnings and employment rates.
- Certificate holders who received Pell Grants saw \$9,600 earnings gains on average compared with \$500 earnings gains for certificate holders who did not receive Pell Grants (Pell Grant recipients also tended to be younger)

<sup>&</sup>lt;sup>16</sup> Carnevale, A. P., Ridley, N., and Fasules, M.L. (2018). *Certificates in Oregon: A Model for Workers to Jump-Start or Reboot Careers*. Center on Education and Workforce, Georgetown University. Washington DC.

- Certificates in health-related fields of study generated the greatest relative earnings gains (nearly \$10,600), while those in business offered the highest earnings post-completion (\$40,000).
- Men in the study out-earned women, but women experienced much stronger earnings growth. Women who started out with relatively less work experience and lower earnings experienced strong earnings growth after they finished a certificate program.

Median annual earnings (2015\$) \$30,300 \$25,500 \$25,800 \$25,300 \$24,900 \$21,600 4 vears 2 years Enrollment Completion 1 year 2 years 3 years 3 years 4 years prior prior prior prior post post post post

Exhibit 8. Median annual earnings before and after certificate completion

Source: Georgetown University Center on Education and the Workforce analysis of the Oregon Higher Education Coordinating Commission (HECC). 2007-2011 certificate data matched with wage record data.

## IDENTIFYING THE CHARACTERISTICS OF HIGH-VALUE NDCs

## NATIONAL SKILLS COALITION: QUALITY NDCs AND STATE POLICY

The National Skills Coalition has collaborated with states to develop methods to identify high-value NDCs in their state and regional geographies. A well-designed method can point to NDCs that deserve additional consideration by learners and funding from state and local governments.

The Coalition recommends that—to earn a "high value" designation—the credential should meet three required criteria and ideally a fourth optional criterion.

- 1. Substantial job opportunities (required). The credential should be tied to an occupation or skill with strong or "substantial" employment opportunities. States select the threshold for substantial opportunities and should consider variations across geographies and access to the occupation for members of different races and ethnicities.
- 2. Transparent evidence of the competencies mastered by credential holders (required). The credential earner should acquire competencies that employers need employees to have, and a process must be in place (e.g., an exam or project) through which the learner demonstrates the competency.

- 3. Evidence of employment and earnings outcomes of individuals after obtaining the credential (required). The credential must work in practice, demonstrated by post-training earnings gains calculated using matched administrative data. The NSC recommends that states update data annually to capture changes in economic and labor market conditions.
- 4. Stackability to additional education or training (recommended). Ideally, a high-value credential can work in relationship with other credentials that build additional skills and even higher earning potential. Examples of such stackability include, but are not limited to, articulation agreements, direct transfer agreements, credit for prior learning, career pathways, and data demonstrating that a credential leads to continued education.

A "quality non-degree credential" is one that provides individuals with the means to equitably achieve their informed employment and educational goals. There must be valid, reliable, and transparent evidence that the credential satisfies the criteria that constitute quality.

National Skills Coalition

## OREGON'S CREDENTIALS THAT WORK PILOT ANALYSIS

During mid- to late 2020, HECC and WTDB staff applied the NSC framework to pre-pandemic (2017) data to identify quality NDCs and certain 2-year degrees, under a pilot analysis called Credentials that Work. The exercise included all community college certificate programs and applied associate degrees (AAS). Analysts grouped credential programs by Classification of Instructional Program (CIP) codes and created crosswalks to the Standard Occupational Classification (SOC) code for the ultimate occupation associated with each credential resulting from the POS.

The analysts encountered several data and methodology challenges, including how to:

- allocate relative weights to (that is, prioritize) the various criteria
- treat individual credentials that point to multiple occupations
- treat collections of credentials that point to the same occupation
- recognize that wages earned through an occupation may require multiple credentials
- incorporate credentials that deliver essential employability skills, which do not tie to an occupation

The analysts pressed through these challenges, identified 1,710 credential/occupation types, and developed an indexed point scheme aligned with the NSC criteria. The pilot index awarded points in five categories and then applied a relative factor weight to each category. Points were calculated as follows:

- Occupational wage has a score calculated by dividing median wage for the relevant occupation associated with the credential by Oregon's Self-Sufficiency Wage (i.e., \$31.57/hour).<sup>17</sup> Points for the category ranged from 0 to about 2.5.
- Occupational demand uses the Oregon Employment Department's Demand Factor Rating for an occupation divided by 20, which is the highest rating possible. In essence, each occupation was compared to the occupation in the highest demand, with a resulting score of 0 to 1.0. The

<sup>&</sup>lt;sup>17</sup> Self-Sufficiency Standard for Oregon. (2017). *Portland metro area for single parent with one pre-school- and one elementary-school-age child.* 

- natural result for occupational demand was multiplied by 3 to achieve the relative factor weights described below.
- **Bonus** points are awarded if a credential was aligned with the education level required for an occupation. If a credential was of a level considered "competitive education" for the occupation, it was awarded three points. If the credential was considered "entry-level education," it was awarded two points, and so on.
- Competency-based is a point awarded if the credential is tied to mastery of skills, knowledge, and abilities. Analysts assumed all credentials in the pilot population were competency-based because all evaluated credentials were HECC-approved and, for each, colleges had to demonstrate that the program had an advisory committee with business and industry representation and other partners and that outcomes are aligned with workforce and business and industry needs and priorities.
- **Stackability** are points awarded if the credential leads to others. The sufficiency of one credential (with defined required competencies) to provide a substantive set of skills for a specific occupation to serve as the foundational step and/or as a subsequent, more-substantive training or education effort that deepens and broadens knowledge, improves higher-order reasoning, and enables entry into a more advanced or complex job/role.
- Portability was a final element that is still under development.

The resulting relative factor weights were as follows:

Wage	Demand	Bonus	Competency- Based	Stackability	Portability
2.5	3	3	1	2	TBD

Almost all 1,710 credential/occupation types received a score; 79 were dropped because of missing data. Weighted scores ranged from 0 to 13.4, and 931 credentials passed the Self-Sufficiency Wage threshold. Only 66 credentials earned an 80 percent score or above in the occupational demand category. A preliminary list of credentials/programs of value is listed in the Appendix.

The pilot successfully overcame many of the initial data assembly and methodological challenges of a prioritization exercise. The HECC will re-engage stakeholders to review the findings, adjust the calculation methods, and apply the new method to updated data.

# CREDIT FOR PRIOR LEARNING

Providing credit for college-level knowledge and skills—gained outside of academic settings—is a critical element of system redesign to support the adult attainment goal. Oregon enacted House Bill 4059 in 2012 with the goals of increasing the number and type of academic credit accepted for prior learning and number of students that receive the credit. National observers point to HB 4059 as a model of how to elevate credit for prior learning (CPL) policy and practice. But Oregon and the nation are still in the development stages of the effort.

# CPL HISTORY AND NATIONAL PERSPECTIVES<sup>18</sup>

CPL has roots in the post-World War II era as policymakers sought ways to provide academic credit for experience gained through military service. In the 1960s and 1970s, the model extended to high school students enrolled in Advanced Placement (AP) or International Baccalaureate (IB) programming. And most recently, education reformers have explored extending CPL to a wider array of experiences including formal corporate or non-profit training; knowledge gained through volunteer work, social justice projects, and civic engagements; or through self-study. The range of relevant experiences is broad, which makes CPL policy and programming complex.

CPL awards are still relatively rare. The Council for Adult and Experiential Learning (CAEL) and the Western Interstate Council for Higher Education (WICHE) reviewed programming at 72 institutions and found that only one in 10 adult students earned CPL credit. Forty percent of the institutions had CPL take-up rates below three percent, and participation rates by Black and low-income students lagged those of others. Researchers encountered multiple barriers, including a broad lack of awareness of CPL credit opportunities among students and faculty.



Credit-awarding institutions rely on Prior Learning Assessments (PLA) to document the relevant knowledge and skills. PLAs generally take one of four forms:

- Standardized tests. Students earn credit by meeting or exceeding threshold scores on an examination. Common tests include numerous AP or IB exams, the College-Level Examination Program (CLEP), and DANTES Subject Standardized Tests.
- **Faculty-developed challenge exams**. Students earn credit by passing specific tests developed by campus faculty.
- **Portfolio-based assessments**. Students prepare a portfolio or otherwise demonstrate knowledge and skills from experiences outside of the classroom.
- Evaluations of non-college programs. The National College Credit Recommendation Service (NCCRS) and the American Council on Education (ACE) conduct evaluations of training provided by companies and the military.

Beyond developing and implementing assessments, experts have identified seven key issues states should address when advancing CPL policy:

<sup>&</sup>lt;sup>18</sup> Garcia, Rosa and Sarah Leibrandt. (2020). *The Current State of Prior Learning Policies*. Center for Law and Social Policy and Western Interstate Commission for Higher Education.

- Transparency. States should ensure policies and practices in awarding credit are formally adopted by governing boards of universities, community colleges, and other independent institutions.
- **Cost and affordability**. States should evaluate the cost of providing PLAs and determine how those are shared with students and/or potentially offset by grants or scholarships.
- **Methods and types of PLAs accepted**. States should codify which types of PLAs—standardized exams, portfolios, etc.—will and will not be used.
- **Credit applicability and limitations**. States should be clear about how CPL credits can be applied to specific degrees and majors.
- **Transcription of credits**. States should ensure that institutions have methods in place to record the type of credit earned and the type of assessment used to demonstrate the knowledge, experience, and skills.
- Access. States should ensure that students from traditionally underrepresented communities have equal awareness about and access to CPL programming.
- **Evaluation**. The state should have a process in place to evaluate implementation progress of CPL.

# OREGON'S HOUSE BILL 4059

Passed in 2012, HB 4059 sought to increase the number and types of credits for prior learning and increase the number of students earning those credits. Additionally, the bill directed the HECC to develop transparent policies on and practices around CPL awards, improve CPL practice across all institutions of higher education, create tools to develop faculty and staff knowledge in awarding CPL, develop articulation agreements when patterns of academic credit pathways are evident, and develop outcome measures to track progress on CPL policy goals. National observers point to HB 4059 as a model for launching a transparent CPL platform.

The legislation created a CPL Advisory Committee with membership drawn from community colleges, public universities, independent non-profit institutions, for-profit educational institutions, labor, and business leaders. Members of the committee had demonstrated interest in CPL policy and programming.

#### PROGRESS AND KEY ACCOMPLISHMENTS

In 2020, the HECC reported progress and key accomplishments of the first several years of implementation, including:

- CPL pilot. In 2014, 11 community colleges and three other public and private institutions collaborated to identify the costs associated with implementing CPL standards and identify the professional development and training needs of faculty and staff. The pilot served as the foundational work of the CPL Committee during its first five years.
- **Development of statewide standards.** The HECC issued its first set of standards in 2013 informed by input from institutions, staff, faculty, and students. The agency updated the standards in 2017 and distributed them to institutions and professional membership organizations.
- Environmental scans. HECC staff supported scans to collect data on CPL across the state. The findings underscored the complexity, confusion, challenges, and barriers perceived by institutional members.

- **Technical assistance.** HECC staff provided numerous presentations on CPL policy and practice at student, staff, and administrator events.
- Improved understanding of CPL data and collection. HECC staff and the CPL Committee collaborated with public and private institutions as they implemented programming and awarded credits. Community colleges continue to encounter challenges in coding, entering, and submitting CPL data.

## **CPL AND ADULT LEARNERS**

Adoption of the adult learning goal in 2018 created an opportunity for Oregon's CPL initiative. The call for 300,000 additional adult Oregonians to earn a new degree, certificate, or credential valued in the

workforce requires a wholesale delivery redesign. The HECC sees CPL as a valuable aspect of that redesign for two reasons: 1) the age of the targeted adult population increases the likelihood of having education or experience that may be relevant to the credential being sought and 2) the credentials are intended to be workforce-focused and should add value for employees and employers. The potential of CPL programming to support the Adult Attainment Goal led to CPL's inclusion in the ALAC's charge.



## THE STATE OF CPL DATA

The HECC's 2020 Report to the Legislature underscored the ongoing challenges that institutions face in coding and entering CPL awards. During 2013-2020, only nine community colleges attempted to submit data for military, AP/IB, and other (e.g., based on portfolios, challenge exams, on-the-job training) CPL credits. Data consistency and completeness were mixed across the participating institutions. The nine institutions with submissions reported 69,220 CPL credits since 2013. Over this period, Clackamas Community College's awards for military service through the ACE evaluation dominated the activity.

Newer types of CPL awards—demonstrated through challenge exams, portfolio reviews, industry certifications, licensing, and on-the-job training—increased from 631 to 1,705 during 2013-2019 and then fell to 1,286 in 2020. Clackamas Community College and Southwestern Oregon Community College were responsible for most of the reported activity of one CPL assessment method: challenge exams. The two institutions represented 75 percent of the participating students and 83 percent of earned credits from successful challenge exams during 2013-2020.

# THE HECC'S RECOMMENDATIONS FOR ACTION

The legislative report outlines several recommendations for action, including improving colleges' shared understanding and application of CPL codes, developing reference material to identify CPL opportunities that exist within quality credentials, assessing college and university compliance with 2017 CPL Standards, and surveying perceptions of institution's progress on CPL implementation.

# POLICIES, PROGRAMS, AND RECOMMENDATIONS TO SUPPORT ADULT LEARNERS

This section provides recommendations and successful examples from experts in the field about supporting adult learners in Oregon.

# THE HECC'S EXPLORING EXPERIENCES RECOMMENDATIONS<sup>19</sup>

- Create structural and institutional supports that address complex student needs, such as childcare, healthcare, affordable housing, and accessible mental health resources
- Make college affordable and economically accessible
- Recruit and retain faculty/staff of color and role models that reflect the student population
- Provide advising, mentorship, and guidance (before and during college) that is holistic, informative, and culturally responsive / reflective

# NATIONAL SKILLS COALITION'S POLICIES TO SUPPORT QUALITY NDCs<sup>20</sup>

## CODIFY OR REGULATE QUALITY NDC CRITERIA

- Select the programs and policies the criteria will be used to support
- Determine the entities within the state that are responsible for developing the criteria
- Codify the quality NDC definition

## SUPPORT ENROLLMENT, RETENTION, AND COMPLETION

- Expand state financial aid and training funds
- Expand non-tuition supportive services
- Expand career counseling capacity
- Support the development of industry partnerships
- Expand apprenticeships and other work-based learning models
- Support stackable credentials
- Invest in integrated education and training (IET) programs

<sup>&</sup>lt;sup>19</sup> Hunte, R., Mehrotra, G., Mosier, M., Skuratowicz, E., Sanders, K., Cherry, K., & Gooding, A. (2020). *Exploring Experiences of Postsecondary Education for Adult Learners from Communities of Color in Oregon*.

<sup>&</sup>lt;sup>20</sup> Duke-Benfield, A.E., Wilson, B., Kaleba, K., & Leventoff, J. (2019). *Expanding Opportunities: Defining quality non-degree credentials for states.* National Skills Coalition.

# IMPROVE DATA, DETERMINE QUALITY, AND MEASURE CREDENTIAL ATTAINMENT

- Collect broad data about all postsecondary programs
- Collect and use demographic data
- Match education and employment data across state lines
- Develop and/or use a state longitudinal data system
- Produce a consumer information tool

# CLASP/WICHE RECOMMENDATIONS ON PRIOR LEARNING ASSESSMENT (PLA) POLICY<sup>21</sup>

The most effective PLA policies will address four key areas, according to CLASP/WICHE:

## **TRANSPARENT**

- Institutions should make campus policies clear and transparent to institutional staff and students.
- Institutions should ensure that all students understand the opportunities available to them through PLA.
- Institutions should conduct policy and program evaluations regularly using quantitative and qualitative data to better understand how students are notified about PLA opportunities and which notification methods work the best for increasing access to PLA.
- Institutions and states should ensure that the new federal regulation requiring institutions to publicize PLA policies increases awareness among students through evaluation and review.

#### **AFFORDABLE**

- Federal and state financial aid policies might consider allowing PLA costs to be covered by aid.
- Institutions and states should re-examine the business case for PLA. Students who earn PLA are more likely to enroll in additional classes. Institutions might consider covering some of the costs of PLA as a "lost leader".

# **INCLUSIVE**

- States that mandate acceptance of credit based on recommendations for military training should consider also mandating acceptance of credit for corporate training because the learning is evaluated by the same process.
- States, systems, and institutions should consider expanding other acceptable forms of learning credit in their PLA policy, including learning from a variety of contexts: social-

<sup>&</sup>lt;sup>21</sup> Garcia, R. & Leibrandt, S. (2020). *The Current State of Prior Learning Policies*. Center for Law and Social Policy and Western Interstate Commission for Higher Education.

justice work-based learning experiences, registered apprenticeships, civic engagement, service learning, and others.

#### REFLECTIVE

- States and institutions should review existing PLA policies for issues related to equity to ensure that the wording and implementation of policies are equitable.
- Institutions should conduct evaluations to understand what take-up rates look like at institutions that use multiple vehicles to provide information about prior learning as compared to take-up rates at institutions that don't publicize PLA as widely.
- States should conduct analyses to compare PLA take-up rates across institutions.

# LUMINA FOUNDATION'S STATE POLICY AGENDA<sup>22</sup>

The Lumina Foundation encourages all states to consider and adopt this comprehensive agenda to build a better system for learning beyond high school:

- Set an ambitious goal
- Invest in talent development
- Prioritize student outcomes
- Create an affordability benchmark and target resources to low-income students
- Expand alternative, lower-priced credential paths

# SUPPORTING TRANSFER STUDENT SUCCESS IN OREGON<sup>23</sup>

This research highlighted policies and practices that could help strengthen transfer outcomes for Oregonians. A statewide focus on the following priorities would help ensure increasing rates of success for Oregon's growing transfer student population:

- Investing in credit transfer and degree-audit technology tools which are useful to registrars, advisors, and students
- Investing in more supports for transfer students (i.e., advisors, training, transfer-specific financial aid and programming)
- Developing and maintaining partnerships across the state to maintain existing transfer agreements that are working, develop new agreements, and strengthen the state transfer agreements
- Leveraging Oregon's longitudinal data system to help stakeholders better understand how to support successful transfer outcomes and develop plans for scaling successful efforts

<sup>&</sup>lt;sup>22</sup> The Lumina Foundation. (2017). Lumina State Policy Agenda.

<sup>&</sup>lt;sup>23</sup> https://www.tfff.org/sites/default/files/TFFF\_OregonTransferReporto2212020.pdf

# TASK FORCE ON STUDENT SUCCESS FOR UNDERREPRESENTED STUDENTS IN HIGHER EDUCATION (HB 2590)<sup>24</sup>

This just-passed bill directs a task force to develop student success policy and funding proposals focusing on increasing likelihood of student success in higher education for students from populations that are underrepresented in higher education enrollment.

# EVIDENCE-BASED PROGRAMS THAT SUPPORT ACCESS & RETENTION

- Pathways to Opportunity: Oregon's 17 community colleges, Department of Human Services, Partners for a Hunger Free Oregon, state agencies, and other anti-poverty groups are partnering to transform policies and programs. This nationally recognized initiative closes opportunity gaps and increases economic mobility across the state by expanding access to federal, state, and local resources available to low-income students so more individuals can attend and complete college to move into careers.<sup>25</sup>
- Oregon's Community College Career Pathways: Launched in 2004, Oregon's Career Pathways Initiative began with five colleges and eventually scaled to all 17 community colleges. The Career Pathway Certificates of Completion (CPCC) ensure flexible educational and skill building options for unemployed and underemployed workers, career changers, part-time students who need to work, and students who desire a short-term credential to jump-start their careers in an entry-level occupation.<sup>26</sup>
- Oregon's Community College STEP (SNAP Training and Employment Program, or SNAP 50/50) Consortia: A collaboration of Oregon community colleges and Oregon Department of Human Services, the program creates new, expanded, or enhanced services that can increase college access and success for SNAP recipients and lead to living wage careers. Proven strategies and a model that increase equity and close opportunity gaps for students of color, women, immigrants, adult education, and underserved students.<sup>27</sup>
- PUENTE Project: A national award-winning program that for more than 30 years has improved the college-going rate of tens of thousands of California's educationally underrepresented students. Its mission is to increase the number of educationally disadvantaged students who enroll in four-year colleges and universities, earn college degrees and return to the community as mentors and leaders to future generations. The program is interdisciplinary in approach, with culturally relevant writing, counseling and mentoring components. PUENTE staff train middle school, high school, and community college instructors and counselors to implement a program of rigorous instruction, focused academic counseling, and mentoring by members of the community.<sup>28</sup>
- Call Centers (Des Moines area): The Des Moines Area Community College created a call center—making phone calls to students who apply but do not register, register but do not

<sup>&</sup>lt;sup>24</sup> https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2590/Enrolled

<sup>&</sup>lt;sup>25</sup> https://olis.oregonlegislature.gov/liz/2021R1/Downloads/PublicTestimonyDocument/3199

<sup>&</sup>lt;sup>26</sup> https://www.oregon.gov/highered/institutions-programs/ccwd/Pages/career-pathways.aspx

<sup>&</sup>lt;sup>27</sup> https://www.nga.org/wp-content/uploads/2018/05/m-Oregon-SNAP-50-50-Breakout.pdf

<sup>28</sup> https://www.thepuenteproject.org/about

show up for class, show up for class initially but then stop attending, and so on—and kept track of the persistence rates of students they reached. Between the groups who received a voice mail and those spoken to by phone, student persistence was 2-15 percentage points higher depending on exactly what triggered the call (not registering, etc.). Even the 2-percentage point impact yields a very large effectiveness-cost ratio because the program is so inexpensive.<sup>29</sup>

- Oregon Adult-Ready Self-Assessment: The main purpose of the assessment is to assess postsecondary educations and training providers' current readiness to serve adult learners, collect best practices for serving adult learners, and identify opportunities to improve adult-centered services and supports. The Adult Ready Self-Assessment is an adaption of Washington's College and Career Compass Institutional Self-Assessment, incorporating input from adult learners collected through a series of focus groups.<sup>30</sup> The HECC will use the Adult-Ready Self-Assessment results to create an inventory of existing policies and practices at participating campuses, facilitate future learning exchanges among participating institutions, identify best practices for support and expansion, and create policies and propose investments that support adult learners.
- Oregon Adult Learner Outreach Toolkit: A toolkit of marketing resources to help Oregon postsecondary education institutions and partners to engage adult learners of color in their postsecondary education and workforce training goals. The toolkit includes a set of messages and document that may be effective with adult learners from communities of color and other Oregonians interested in starting or restarting in a postsecondary education or training program. The goal of this toolkit is to help institutions and partners improve outreach to Oregonians from underrepresented communities of color with research-informed messaging focused on decreasing barriers to enrollment and completion, changing narratives that discourage access, and improving strategies for retention. The toolkit includes a set of messages, a 2-page handout, and multiple social media images and messages.<sup>31</sup>

# **CONCLUSIONS AND RECOMMENDATIONS**

# THE PRODUCTIVITY CHALLENGE

Oregon has among the most ambitious education and training goals in the United States. Rapidly increasing college wage premia signaled a skill shortage in the late 20<sup>th</sup> Century and demographic trends—especially an aging population—continue to drive a demand for skills. The demand for skills puts pressure on community colleges—in Oregon and elsewhere—that understaffed systems were ill-prepared for. Coming into the 21<sup>st</sup> Century, colleges focused more on access than completion.

As Oregon and the nation decided to accelerate skill building, two broad challenges emerged: 1) attracting and retaining historically underrepresented students—many of whom are the first in their families to attend college, and 2) re-engineering a college experience to guide those students to

<sup>&</sup>lt;sup>29</sup> https://files.eric.ed.gov/fulltext/ED515051.pdf

<sup>&</sup>lt;sup>30</sup> https://www.oregon.gov/highered/research/Documents/Reports/HECC-Adult-Learner-report-2020.pdf

<sup>&</sup>lt;sup>31</sup> https://www.oregon.gov/highered/policy-collaboration/Pages/Adult-Learner-Outreach.aspx

opportunities with high economic returns in the job market. This, in turn, required providing a higher level of service to learners who, on average, were less able to afford college to begin with. Significantly improving the *productivity* of the college experience is the only way to make that work at scale.

And the ALAC must consider additional challenges associated with the age of their target population. Non-traditional aged students are different than younger learners in important ways. First, they are more likely to have formed families and face additional, sometimes substantial, cost of attendance. Second, they have fewer years left in their careers to earn an economic return on their educational investment. So, on average, costs of education can be higher, and benefits can be lower. The benefit-cost challenge brings additional design challenges.

Most of the policies, programs, and recommendations reviewed by the ALAC are designed to improve productivity—that is, they are designed to improve learners' earnings by more than they increase the cost of programming. The state has charged the ALAC to identify the role of two specific policies—high -quality credentials and credit for prior learning—but the list of recommended productivity-enhancing features is longer and includes:

- Expanding state financial aid and training funds and non-tuition supportive services
- Hiring counselors to introduce career paths and ensure learners are taking appropriate coursework and following a least-cost path to completion
- Hiring educators and staff who reflect the racial/ethnic and lived-experience diversity of adult learners to improve retention and completion
- Designing stackable credentials so learners can enter, exit, and return to training under timeframes that align better with family obligations and existing job responsibilities
- Expanding career counseling capacity
- Assembling data to inform the design work and hold the system accountable for outcomes

# ADULT LEARNING RECOMMENDATIONS AS THE PANDEMIC AND RECESSION RELENT

The Adult Education and Training Goal was set near the end of the longest economic expansion in U.S. history, which is a challenging time to recruit trainees. The expansion ended abruptly with an unprecedented lockdown and recession. Challenges with remote learning and college funding slowed progress on many fronts.

The nature of the pandemic recession, with its disproportionate effects on the leisure and hospitality sector and its relatively low-wage workforce, has only increased the importance of meeting the Adult Attainment Goal. Tens of thousands of Oregonians were displaced, and a large share of the unemployed do not hold a postsecondary credential.

The robust federal fiscal response to the recession provides Oregon with a unique opportunity to accelerate progress on the Adult Attainment Goal. The state will receive \$2.6 billion in flexible American Rescue Plan Act (ARPA) support, and priorities around the use of that aid are still developing. Few policy areas are as well-aligned with the letter and spirit of the federal act as job training.

Drawing on the reports, evidence, and testimony provided since the Committee's initial convening, the ALAC 's recommendations for action include:

- Develop estimates of the cost of overcoming common barriers to educational attainment. The HECC adopted the Goal in 2018 and soon after a pandemic interrupted implementation efforts. Delivering 300,000 additional credentials of value, above and beyond what was previously envisioned, will not happen without additional resources. The reports reviewed call for numerous interventions that require a higher level of service and come at additional cost (e.g., pathway and career counselors, culturally aligned faculty and staff, curriculum, childcare subsidies, services to support SNAP recipients, and pathway redesign). Additionally, the non-traditional target population will need more tuition support. Potentially offsetting costs would be a shorter duration of attendance due to well-designed NDCs and more efficient course taking informed by counselors. Estimates should recognize that the state likely has multiple avenues to reach the goal and should avoid costing out a rigid, one-sized-fits-all delivery framework.
- Seize the moment, early in an economic recovery, to accelerate progress in adult learning. The number of jobs in Oregon isn't projected to return to pre-pandemic levels until the first quarter of 2023, and jobs in the disproportionately impacted sectors—leisure, hospitality, and retail—will not hit 2019 levels for several years. Compared with recent recessions, job losses were concentrated in low-wage occupations, and unemployment rates have been elevated for women, people of color, the young, and those with less than a college degree. Meanwhile, employers have rapidly changed work processes, advancing automation in many areas. Many of the old jobs aren't coming back and thousands of Oregonians will need to connect into those that are emerging. The upcoming biennium, with its budget bolstered by federal aid, provides a once-in-a-generation opportunity to accelerate adult attainment. The state should commit a meaningful share of its flexible ARPA resources to advance policy and programming that support adult attainment and to fund tens of thousands of training positions through the end of 2024.
- Develop outreach and enrollment plans for Oregonians with some college but no credential and who have low earnings. The state should systematically recruit learners from the roughly 100,000 Oregonians who have some college credit but no credential and who earn less than \$20,000 annually. Individuals in the pool will change over time as people make job transitions, but the pool's size will remain large and should serve as a key recruiting focus through the decade.
- resources will be required to meet the training goal, and Oregon's Congressional delegation should be aware of the role the federal government can play in meeting the Goal. Securing additional, permanent federal resources will take time, so in the meantime, educators and other stakeholders should ensure that adult learners are accessing all forms of federal assistance available to them. That starts by ensuring that learners submit the Free Application for Federal Student Aid (FAFSA) but extends into a complex array of supports, including income supports, childcare subsidies, food supports, and tax credits. So, in addition to pathway and career counselors, many adult learners will need benefit navigators.
- Refine and implement the credentials-of-value identification and measurement infrastructure piloted by the HECC. The quality NDC analytic work was a key accomplishment of the ALAC. The pilot uncovered a range of challenges from basic data assembly to the methods used to make credential-occupation matches. In addition, the exercise involves a subjective and consequential weighting of the individual quality criteria. The state should anticipate that the method for identifying quality NDCs will continuously

- evolve. Data quality will improve, and the HECC will draw valuable lessons from its own work and that of others.
- Engage employers and organize future credentials-of-value efforts by industries and regions. Once the quality-NDC identification methods mature, the work eventually should be organized by industry and region. The work to date relies heavily on two, key inputs: historic wage data and occupational projections produced by federal and state economists. Resulting findings are "directionally correct"—that is, they probably do a good job of sorting occupations in a low/high wage, low/high demand quadrant. But at that point, reviews by employers become critical. A one-sized-fits-all, state-level roster of quality NDCs will need to evolve into several rosters organized by industry and region and informed by local employers.
- Fund the CPL initiative. National observers point to Oregon's HB 4059 as a best practice in establishing transparency and accountability in the CPL area. But the initiative is lightly resourced, and the results show it. Eight years after the passage of the bill, only nine community colleges were capable of reporting CPL outcomes and, among the reporters, data quality was mixed at best. The reporting that was available showed meaningful activity in new-generation CPL—awarded through challenge exams and portfolio reviews—at only two institutions. In 2012, Oregon lawmakers identified CPL as a useful tool in meeting the state's ambitious attainment goals, and nationally, the approach is still viewed as important in recognizing work-relevant, non-academic experience. Absent dedicated resources—to support the development of new PLAs, provide professional development to faculty, and generally organize institutional reporting systems—Oregon's relatively slow progress in the area will persist.
- Find opportunities to link funding to outcome payments. The two initiatives that fall directly under the ALAC's purview—credentials of value and CPL—are tailormade for outcome-based payments. Setting the initial payment level and review schedule would take additional analysis and considerable input from institutions and other stakeholders. If designed and implemented well, Oregon should expect significant progress on both initiatives, which in turn would support the Adult Attainment Goal.

# Appendix: Credentials that Work (preliminary)

On the following page is a list of programs (identified by Classification of Instructional Programs, or CIP, code) identified as programs or credentials of value in the Credentials that Work pilot analysis. The CIP code associated with each community college program is cross-walked to the Standard Occupational Classification (SOC) code for the ultimate occupation associated with the credential resulting from the program of study.

Programs often include multiple credentials at various levels (e.g., 1-year certificate, Career Pathways Certificate of Completion, associate degree, and others). Because all of these credentials fall under the same CIP code, they cross-walk to the same SOC code(s) and are associated with the same occupation(s). The methodology considers the typical level of education needed to obtain a job in that particular occupation.

CIF		SOC				
	- COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVIC					
	Computer and Information Sciences, General	Computer Occupations, All Other				
	Cyber/Computer Forensics and Counterterrorism	compacer occupations, 7 in other				
	Data Processing and Data Processing Technology/Technician					
12 -	2 – CULINARY, ENTERTAINMENT, AND PERSONAL SERVICES					
	Baking and Pastry Arts/Baker/Pastry Chef	Chefs and Head Cooks				
	Cooking and Related Culinary Arts, General					
	Culinary Arts/Chef Training					
13 -	· EDUCATION					
	Health and Physical Education/Fitness, General	Fitness Trainers and Aerobics Instructors				
	Physical Education Teaching and Coaching					
	Physical Fitness Technician					
15 -	- ENGINEERING/ENGINEERING-RELATED TECHNOLOGIES/TECHNIC	IANS				
	Civil Engineering Technology/Technician Construction Engineering	Civil Engineering Technicians				
	Technology/Technician					
	Construction Engineering Technology/Technician	Construction Managers				
	CAD/CADD Drafting and/or Design Technology/Technician	Electrical and Electronics Drafters				
	Drafting and Design Technology/Technician, General					
	Computer Technology/Computer Systems Technology	Electrical and Electronics Engineering				
	Electrical, Electronic and Communications Engineering	Technicians				
	Technology/Technician					
	Surveying Technology/Surveying	Surveying and Mapping Technicians				
	Welding Engineering Technology/Technician	Welders, Cutters, Solderers, and Brazers				
43 -	- HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND					
	Fire Prevention and Safety Technology/Technician	Firefighters				
	Fire Science/Fire-fighting					
	Fire Prevention and Safety Technology/Technician	Fire Inspectors and Investigators				
	Fire Science/Fire-fighting	S Special Control of the Control of				
	Fire Science/Fire-fighting	Forest Fire Inspectors and Prevention				
		Specialists				
	Criminal Justice/Police Science	Specialists Police and Sheriff's Patrol Officers				
44 -	Criminal Justice/Police Science - PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS	·				
44 -		·				
٠	- PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS	Police and Sheriff's Patrol Officers				
٠	- PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS Human Services, General	Police and Sheriff's Patrol Officers				
٠	- PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS Human Services, General - CONSTRUCTION TRADES	Police and Sheriff's Patrol Officers  Social and Human Service Assistants				
46 -	- PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS Human Services, General - CONSTRUCTION TRADES Carpentry/Carpenter	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters				
46 -	Human Services, General CONSTRUCTION TRADES Carpentry/Carpenter Building/Home/Construction Inspection/Inspector Electrical and Power Transmission Installation/Installer, General	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors				
46 -	- PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS Human Services, General - CONSTRUCTION TRADES Carpentry/Carpenter Building/Home/Construction Inspection/Inspector	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers				
46 -	Human Services, General CONSTRUCTION TRADES Carpentry/Carpenter Building/Home/Construction Inspection/Inspector Electrical and Power Transmission Installation/Installer, General Building/Construction Site Management/Manager	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades				
46 -	Human Services, General CONSTRUCTION TRADES Carpentry/Carpenter Building/Home/Construction Inspection/Inspector Electrical and Power Transmission Installation/Installer, General Building/Construction Site Management/Manager Building/Home/Construction Inspection/Inspector	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades				
46 -	Human Services, General  CONSTRUCTION TRADES  Carpentry/Carpenter  Building/Home/Construction Inspection/Inspector  Electrical and Power Transmission Installation/Installer, General  Building/Construction Site Management/Manager  Building/Home/Construction Inspection/Inspector  Carpentry/Carpenter  Construction Trades, General	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades				
46 -	Human Services, General  CONSTRUCTION TRADES  Carpentry/Carpenter  Building/Home/Construction Inspection/Inspector  Electrical and Power Transmission Installation/Installer, General  Building/Construction Site Management/Manager  Building/Home/Construction Inspection/Inspector  Carpentry/Carpenter  Construction Trades, General  Pipefitting/Pipefitter and Sprinkler Fitter	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades				
46 -	Human Services, General  CONSTRUCTION TRADES  Carpentry/Carpenter  Building/Home/Construction Inspection/Inspector  Electrical and Power Transmission Installation/Installer, General  Building/Construction Site Management/Manager  Building/Home/Construction Inspection/Inspector  Carpentry/Carpenter  Construction Trades, General  Pipefitting/Pipefitter and Sprinkler Fitter  Electrical and Power Transmission Installation/Installer, General	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades and Extraction Workers				
46 -	Human Services, General  CONSTRUCTION TRADES  Carpentry/Carpenter  Building/Home/Construction Inspection/Inspector  Electrical and Power Transmission Installation/Installer, General  Building/Construction Site Management/Manager  Building/Home/Construction Inspection/Inspector  Carpentry/Carpenter  Construction Trades, General  Pipefitting/Pipefitter and Sprinkler Fitter	Police and Sheriff's Patrol Officers  Social and Human Service Assistants  Carpenters  Construction and Building Inspectors  Electrical Power-Line Installers and Repairers  First-Line Supervisors of Construction Trades and Extraction Workers  First-Line Supervisors of Mechanics,				

_		T
	Alternative Fuel Vehicle Technology/Technician	Automotive Service Technicians and
•	Automobile/Automotive Mechanics Technology/Technician	Mechanics
	Diesel Mechanics Technology/Technician	Bus and Truck Mechanics and Diesel Engine Specialists
	Heating, Air Conditioning, Ventilation and Refrigeration	Heating, Air Conditioning, and Refrigeration
	Maintenance Technology/Technician	Mechanics and Installers
	Industrial Mechanics and Maintenance Technology	Industrial Machinery Mechanics
	Industrial Mechanics and Maintenance Technology	Millwrights
48	PRECISION PRODUCTION	
	Machine Shop Technology/Assistant	Machinists
	Machine Tool Technology/Machinist	
	Welding Technology/Welder	Welders, Cutters, Solderers, and Brazers
49	- TRANSPORTATION AND MATERIALS MOVING	Weiders, editers, solderers, and bruzers
	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	Heavy and Tractor-Trailer Truck Drivers
51	- HEALTH PROFESSIONS AND RELATED PROGRAMS	Treavy and Traceof Trailer Track Brivers
J1	Dental Assisting/Assistant	Dental Assistants
•		
	Medical Office Management/Administration	First-Line Supervisors of Office and
	Linear and Duration I Manation at News Training	Administrative Support Workers
	Licensed Practical/Vocational Nurse Training	Licensed Practical and Licensed Vocational
•	Practical Nursing, Vocational Nursing and Nursing Assistants, Other	Nurses
	Massage Therapy/Therapeutic Massage	Massage Therapists
	Anesthesiologist Assistant	Medical Assistants
	Medical Administrative/Executive Assistant and Medical	
	Secretary	
	Medical/Clinical Assistant	
	Medical Insurance Coding Specialist/Coder	
	Medical Office Assistant/Specialist	
	Medical Reception/Receptionist	
	Medical Administrative/Executive Assistant and Medical	Medical Secretaries
	Secretary	
	Medical Insurance Specialist/Medical Biller	
	Medical Office Assistant/Specialist	
	Health Aide	Nursing Assistants
	Nursing Assistant/Aide and Patient Care Assistant/Aide	<b>3</b> 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	Practical Nursing, Vocational Nursing and Nursing Assistants,	
	Other	
52	– BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT	SERVICES
	Accounting Technology/Technician and Bookkeeping	Bookkeeping, Accounting, and Auditing Clerks
	Business Administration and Management, General	Construction Managers
	Business/Commerce, General	
	Operations Management and Supervision	
<b>.</b>	Administrative Assistant and Secretarial Science, General	Executive Secretaries and Executive
		Administrative Assistants
<u> </u>	Office Management and Supervision	First-Line Supervisors of Office and
	office Management and Supervision	Administrative Support Workers
<u></u>	Hospitality Administration/Management, General	Food Service Managers
	Restaurant/Food Services Management	1 Journal Managers
H	Retailing and Retail Operations	Sales Representatives, Services, All Other
<u> </u>	netaiing and netail Operations	Jaies Nepresentatives, Services, All Other